STUDENTS' REASONS FOR ATTENDING OR NOT ATTENDING AN AVAILABLE TECHNICAL HIGH SCHOOL

An Abstract of a Dissertation by
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June 1982
Drake University
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The problem. The purpose of this study was to determine why high school seniors did or did not choose to attend a technical high school on a full or part-time basis.

Procedure. The study centered around students' concerns for programs, sports, other extracurricular, transportation, friends' influence, family influence, counselor influence, race, the shared-time concept, and level of satisfaction with school selected. These concerns were correlated with census data and observations were made of the concentrations of frequencies.

Findings. None of the correlation coefficients were large enough to be significant at the desired level, thus all hypotheses were held tenable. Upon examining the degree of correlations, eleven of the eighteen coefficients were low or negligible. However, the direction of the coefficients appeared to be usable information. The observations reflected a greater variety of concentration of concerns for neighborhood students than for the technical students. The technical students rated their top four concerns for school selection in the following order: program, other extracurricular, advice or pressure from family, and transportation to and from school. The neighborhood students rated their top four concerns for school selection in the following order: transportation, program, other extracurricular, and advice or pressure from friends.

Conclusions. The directions of the statistical correlations of the students' concerns and secondary census data should lend guidance to those planning and organizing options. The concentrations of the responses indicated similar priorities for the technical and neighborhood students. The shared-time concept seemed to be an option the students had high interest in, especially if transportation was provided. A large percentage of the students were satisfied with their selection of school, but the reasons for those selections indicated that students might have selected the shared-time option if transportation was provided.

Recommendations. The study indicated that the current full-time vocational-technical school program should be continued. In addition, the shared-time vocational-technical program option is a viable alternative or addition. Both programs require flexibility in scheduling transportation, extracurricular activities, etc.
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OR NOT ATTENDING AN AVAILABLE
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A Dissertation
Presented to
The School of Graduate Studies
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Ben E. Norman
June 1982
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Chapter 1

INTRODUCTION

The full utilization of facilities for educational and economic reasons is of prime concern to education. This is especially true during this era of declining enrollments and increased accountability. A technical facility not fully utilized becomes a concern. Presently, almost all students attending Des Moines Technical High School are full-time students. However, district policy allows those who are not full-time students to attend this technical center. They could attend on a space-available-basis and keep their enrollment status at a neighborhood center. There is a need to see why more students do not wish to attend the technical high school on a full-time basis or to attend the technical high school on a shared-time basis. An Educational Resources Information Center (ERIC) search concerning why or why not students attend technical high schools yielded no useful information. This prompted the researcher to pursue this research topic.

Improving the physical surroundings of vocational and technical centers has been one method used to erase the stigma of "trade school," "labor," and "programs for dropouts."¹ Educators have also done some title changing to encourage more students to avail themselves of vocational, technical, or presently popular career education programs.

These are not all the same concept but are attempts to achieve the same end. That end is to get more people aware of and prepared for the great variety of opportunities in the world of work. Shared time is the concept of having students attend a school other than their own neighborhood school for a specific reason but keeping their home school as their official school of enrollment. The shared time concept enables more students to become aware of vocational opportunities. This is a departure from the historic approach of using vocational training for the non-college bound, dropout, or non-academically talented.1 One often hears the data from national agencies that indicate only 15 to 18 percent of the young people who begin school continue to a baccalaureate degree.2

The following five points seem to express the necessity and the economics of the need for vocational education:

1. Vocational and technical education are essential parts of the modern curriculum for public education; 2. public education is responsible for the vocational education of high school youth, out-of-school youth, and adults; 3. minimum enrollments for vocational education programs are 500 while optimum programs can be reached with enrollments of 1,300; 4. large cities of 200,000 or more normally have sufficient tax and student bases to provide comprehensive vocational education programs, while suburban and rural districts do not unless they join together; 5. vocational and technical education programs are sound educational investments planned to serve the needs of the people and of business and industry; and they deserve the full support of people concerned with the modernization of

1Sioux Falls Independent School District, Description and Summary of First Year Exemplary Programs, U.S., Educational Resources Information Center, ERIC Document ED 056 146, 1971.

educational programs throughout the nation.¹

Statement of the Problem

The Des Moines Independent Community School District has many programs available to students. Certain vocational and high-interest programs are located in a technical high school in which students may enroll. Most of the students who attend this school are enrolled full-time even though part-time enrollment is available. Of particular concern is why less than 15 percent of the city's high school students enroll in the diverse programs offered at the technical high school.

This study has attempted to determine why high school seniors did or did not choose to attend the technical high school on a full or part-time basis. The findings should offer some indication of what could be done to achieve greater participation in these programs.

Null Hypotheses

1. There is no significant relationship between the amount of agreement to a statement concerning programs as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

2. There is no significant relationship between the amount of agreement to a statement concerning programs as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

3. There is no significant relationship between the amount of agreement to a statement concerning sports programs as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

4. There is no significant relationship between the amount of agreement to a statement concerning sports programs as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

5. There is no significant relationship between the amount of agreement to a statement concerning extracurricular activities other than sports as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

6. There is no significant relationship between the amount of agreement to a statement concerning extracurricular activities other than sports as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

7. There is no significant relationship between the amount of agreement to a statement concerning peer influence as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

8. There is no significant relationship between the amount of agreement to a statement concerning peer influence as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

9. There is no significant relationship between the amount of agreement to a statement concerning family influence as being an impor-
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10. There is no significant relationship between the amount of agreement to a statement concerning family influence as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

11. There is no significant relationship between the amount of agreement to a statement concerning counseling influence as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

12. There is no significant relationship between the amount of agreement to a statement concerning counseling influence as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

13. The means of transportation available will not vary among the neighborhoods to a significant degree.

14. There is no significant relationship between the amount of agreement to a statement concerning transportation to and from a technical center and private vehicle usage of the attendance area of the neighborhood schools.

15. There is no significant relationship between the amount of agreement to a statement concerning transportation to and from the neighborhood school and private vehicle usage of the attendance area of the neighborhood schools.

16. There is no significant relationship between the amount of agreement to a statement concerning transportation to and from a technical center and the total means of transportation available in the attendance area of the neighborhood schools.
17. There is no significant relationship between the amount of agreement to a statement concerning transportation to and from the neighborhood school and the total means of transportation available in the attendance area of the neighborhood schools.

18. There is no significant relationship between the amount of agreement to a statement concerning racial make-up of the technical center by technical students and the segregation rank of the attendance area of the neighborhood schools.

19. There is no significant relationship between the amount of agreement to a statement concerning racial make-up of the technical center by the neighborhood school students and the segregation rank of the attendance area of the neighborhood schools.

Limitations

The basic finding would appear to be beneficial only to school situations with similar characteristics. This is an area that has not had very much exposure, thus literature is limited. The nature of the study tends to localize the results but the process is replicable.

Organization of the Study

The study was organized in the following manner:

Chapter 1 - Introduction
Chapter 2 - Review of the Literature
Chapter 3 - Methodology
Chapter 4 - Presentation of the Data
Chapter 5 - Summary, Conclusions, and Recommendations
Definition of Terms

Career Education is the total effort of public education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate those values into their personal value systems, and to implement those values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.¹

Vocation is the primary work role at any given point in time.² Vocational Education represents a body of substantive knowledge designed to provide students with specific vocational skills necessary for entry into the occupational society.³

Magnet school is a term which resulted from desegregation court orders to establish schools to draw students to establish racial balance.⁴

Shared time is the concept of having students attend a school other than their own neighborhood school for a specific reason but keeping their home school as their place of enrollment.

¹Kenneth B. Hoyt and others, Career Education: What It Is and How To Do It (Salt Lake City: Olympus Publishing Company, 1974).

²Kenneth B. Hoyt, Career Education for Gifted and Talented Students (Salt Lake City: Olympus Publishing Company, 1974).


Chapter 2

REVIEW OF LITERATURE

The review of literature was a difficult process for this study. Three Educational Resources Information Center (ERIC) searches, using many different descriptors, yielded limited pertinent literature. Popular educational issues of the 1960's and 1970's such as desegregation, special education, sexual equality and declining enrollment complicated the search for information on vocational and technical education. Literature on vocational and technical education usually was linked to ways in which the above popular educational issues could be accommodated. Consequently, small pieces of information from many different sources were used.

In 1976, the Committee on Vocational Education and Research and Development (COVERD) pointed out the need for research and change in vocational education. The committee expressed its disenchantment with vocational education's research and development in the mid 1970's. COVERD went further in stating that "perhaps the foremost concern for the committee was the failure of vocational education research and development to deal with the significant issues and for not providing

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evidence of impact on students.¹

Gordon Swanson stated in 1978 that: "Knowledge about Vocational Education as well as academic education is deficient. Inquiry has the lowest priority on the agenda. It is appalling to realize that there are, perhaps, fewer persons engaged full-time in educational research than in any of society's other major endeavors. Meanwhile, the social costs continue to rise."²

Kenneth Hoyt cites a 1979 survey by the National School Boards Association which shows superintendents and board members naming career education as the area most deserving increased attention in their school districts. The study further ranked career and vocational education as top contenders as programs most likely to get the greatest interest and financial support within the next five years.³

In sum, research conducted during the 1960's and early 1970's tended to be overly simplistic in nature with few efforts at substantive programmatic research efforts being carried out.⁴ The need for research seemed to be evident both as a priority of educators and to fill a void of research and development.

The remaining review of literature was structured to include the following subdivisions:

1. Existing shared programs compatible with this study.
2. Other examples of shared programs.
3. Literature supporting the "Reasons" studied.
4. Why shared programs.

³Tursman, pp. 31-33.
⁴Wentling, p. 60.
5. Concluding statements.

The preceeding and following review dwells on vocational and technical education. In no way is it to be interpreted to put vocational education ahead of liberal education or liberal education ahead of vocational education. Paul Woodring discussed the problems of this dilemma and emphasized the need for balance and cooperation between the two for the betterment of each.¹ The shared concept obviously requires a high level of understanding and cooperation between the two.

Existing Shared Programs Compatible with this Study

The Boston, Massachusetts Public High Schools have a variety of programs for the delivery of vocational-technical opportunities for their students. Their newest is the $37 million dollar Hubert H. Humphrey Occupational Resource Center. This center is a city-wide non-residential training center offering all high school students an opportunity to explore career options and develop marketable skills in a number of occupational areas. Students combine academic study at their assigned high school with exploratory or occupational training programs at the center. Students have a half-day academic program at their assigned high schools and a half-day program at the Humphrey Center.²

This center has been eight years in development and through a phone conversation, a determination was made that the program was

¹Paul Woodring, "Vocational Education: How Much, What Kind, and When?" Phi Delta Kappan, LX (May, 1979), 644-646.
²Boston Public Schools, A Guide for Parents and Students (Boston: Boston Public Schools, 1980).
developed for two main reasons. One reason was to fill the gap for those who did not take advantage of other full-time vocational technical programs available. The second reason was one of economics, not every high school could afford to offer the necessary variety of programs.¹

St. Louis, Missouri's O'Fallon School developed a shared-time concept in 1969 to achieve racial balance.² The shared concept worked well as an instructional tool, but did not achieve the racial balance desired and the concept was dropped. The dropping was due to the desegregation failure, not the success of the shared-time concept according to the administration.³

The State of Connecticut has a very extensive vocational-technical program. It is very prestigious and has a waiting list for students to get into these schools on a full-time basis.⁴ A study to find greater student access was done for Connecticut by Peat, Marwick, and Mitchell Company in 1975. Five options were developed for study. Four of the five options involved some form of the shared-time concept. The recommended option was a half and half shared-time program for the

¹Statement by Deborah McCarthy, City-Wide Educational Coalition staff member, phone conversation, Boston, Massachusetts, August 18, 1981.


³Statement by Douglas Leech, Adm. Asst., O'Fallon School, phone conversation, St. Louis, Missouri, August 18, 1981.

metro programs. This has only been partially implemented due to the large amount of public pressure to leave the programs as they are.

Dallas, Texas used the "magnet" school concept as a result of desegregation court orders. Students were given the option of attending full-time or part-time for this career training. If they chose part-time, they would receive their academic courses at their home high school. The magnet programs that were opened after 1976 did not provide academic course offerings, and as a result, only part-time students were accepted. Beginning with the 1979-80 school year, all part-time enrollment was phased out in compliance with a desegregation court order. In 1978-79, Dallas' magnet high schools' enrollments consisted of 1,949 full-time and 1,553 part-time students.

The Skyline High School is a regular comprehensive school in Dallas and was one of its magnet centers. It offered the basic curriculum of the other Dallas schools, scheduled regular activities such as football and student government, and set student assignment boundaries.

Part of Skyline is the Career Development Center. The center is an extension of all Dallas high schools. Students attended the center on a part-time basis to take daily three hour blocks of career education programs or may transfer to the center full-time by becoming a Skyline High School student. A shuttle bus service from each Dallas high school

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2Statement by Angelo Tedesco, phone conversation.


was provided by the district free of charge to students attending the Career Development Center.¹

In a letter, Weldon Griffith, Manager of the Skyline Center, stated that, "We favor the part-time option and hope that it will be restored in the new court order that is to be handed down during this school year (1980-1981)."²

Technical High School in Omaha, Nebraska has had a part-time student program since 1972. The number of students participating went from a high 250 plus to a fairly steady average of 60 students and is limited to eleventh and twelfth grade students. They may enroll for up to four periods which is a half day in their program. Transportation is furnished. John Crookham, Assistant Principal, summed up the program's success by stating, "All in all we have found the part-time enrollment to be beneficial to all parties involved."³

Des Moines, Iowa, considered optional delivery systems for the technical high school during this study. The methods included the shared-time concept. A copy of the options is presented in Appendix A.

Other Examples of Shared Programs

Vocational-technical sharing in this country, other than the intra-district sharing that has just been presented, exists among Secondary Area Vocational-Technical Center and local school districts,

¹Dallas Independent Schools, It's Your Move to Career Opportunities.

²Weldon R. Griffith, Manager, Skyline Career Development Center, phone conversation, Dallas, Texas, July 24, 1981.

local districts sharing with neighboring districts, local districts and community colleges, and local districts and colleges.

In Iowa, the Iowa Association of School Boards (IASB) identified numerous examples of sharing. This sharing was between local districts and area community colleges.\textsuperscript{1} The IASB Rural Education Study Committee recommends numerous ways to share to keep the rural education program viable.\textsuperscript{2} Area school and local school district cooperation in Iowa is at a plateau. There is large participation at the small rural school level but not in the large population areas. With 84\% of Iowa schools having fewer than four vocational offerings, a future for sharing exists.\textsuperscript{3}

Mercer County Area Vocational Technical School of Trenton, New Jersey is an example of local districts using an area vocational technical center. Their program is a "Shared Time" occupational center for the county's eleventh and twelfth grade students. The transportation is the responsibility of the home school district.\textsuperscript{4}

Texas and Colorado enacted legislation to promote shared services.\textsuperscript{5} Nebraska developed a guide to provide information regarding the

\textsuperscript{1}Iowa Association of School Boards, Survey of Sharing of School Personnel and Cooperative Education Programs (Des Moines: IASB Press, 1981).

\textsuperscript{2}Iowa Association of School Boards, Rural Education Study Committee Report (Des Moines: IASB Press, 1978).


\textsuperscript{4}Mercer County Area Vocational Technical School, Guidance Counselor's Handbook (Trenton: Mercer County Area Vocational Technical School, 1977).

\textsuperscript{5}Johnny L. Veselha, The Delivery of Educational Services, U.S., Educational Resources Information Center, ERIC Document ED 193 002, 1980.
formation of a vocational cooperative whereby neighboring school
districts may share vocational programs at a central location or at
several sites.\(^1\)

In Pennsylvania, community college and vocational-technical
school articulation efforts to promote sharing and its benefits are evi-
dent.\(^2\) Another Pennsylvania study of sharing in vocational-technical
schools felt that the potential had been barely tapped. The study
stated that the most prevalent type of sharing was half day comprehen-
sive school and half day vocational-technical school.\(^3\)

In New York State, the Boards of Cooperative Educational
Services (BOCES) was established to provide shared services. It was
successful at the small district level, but something was still needed
for the big districts.\(^4\) In New York City, a task force studied the
vocational utilization among other educational issues. Their recommen-
dations on the sharing issue were:\(^5\)

**Issue: Should Shared Instruction Programs be extended?**

\(^1\)Evelyn Lavaty, Planning a Vocational Program Through
Inter-District Cooperation, U.S., Educational Resources Information

\(^2\)Byron Meyers and others, Community College/Vocational-Technical
School Articulation, U.S., Educational Resources Information Center,

\(^3\)Angelo C. Gillie, Sr. and others, Cooperation and Facilities
Sharing in Pennsylvania Vocational Education, U.S. Educational Resources
Information Center, ERIC Document ED 096 448, 1974.

\(^4\)Austin D. Swanson and others, A Study of Regional Services and
School District Organization in New York State, U.S., Educational
Resources Information Center, ERIC Document ED 159 804, 1978.

\(^5\)New York City Board of Education, A Final Report to the
Chancellor, U.S., Educational Resources Information Center, ERIC
Recommendations:

a) The Task Force agrees that while there may be some measure of inconvenience or perhaps hardship in travelling from a home school to a vocational high school, the program has proved worthy of the effort. Approximately 1,200 students in Academic and Comprehensive High Schools, who would otherwise have had no access to desired training, are now profiting from the shared instruction program. Access to academic and comprehensive classes, or post-secondary off-campus experiences should be increased.

b) The Task Force recommends that appropriate linkages be encouraged and established between Vocational and Comprehensive High Schools and sending schools, within reasonable distances, wherever possible. Proximity should be a consideration in planning for the sharing of facilities.

c) Shared use of facilities provides maximal utilization of the limited facilities available. Since shop facilities contain sophisticated and expensive equipment, they should be made available to as many students as possible. Visiting teams observed that some shops were in use for only part of the day. They recommended that full-time use of this underutilized space and equipment be considered as a means of serving many additional students. They recommended that such full-time use extend beyond the school day.

In Wisconsin, a proposal to establish articulation between secondary schools and colleges was developed. The following quote states their feeling: "Overlapping curricula and facilities among secondary schools and colleges has led to a demand for better institutional cooperation and coordination of occupational programs."

Literature Supporting the "Reasons" Studied

The "Reasons" which the students of this Des Moines, Iowa study were asked to respond to were program, sports participation, other extracurricular, transportation, peer pressure, family pressure,

counselor pressure, and racial make-up.

The questions were related to these areas and concerned with their effect on the decision to attend a local vocational-technical center. The literature for these areas for vocational-technical education was very diverse. Thus, the review does not sequence as well as one would hope it would.

The 1973-74 National Assessment of Educational Progress looked at student career decisions and to whom the students turned to for advice. Parents ranked highest with peers and counselors ranking next. Teachers and other adults ranked in the third category.¹

A study of the Career Development reflected that students' first two occupational choices were discussed with parent, relative, or guardian by an average of 86.7 percent of the students. This ranked first. The third rank, with an average of 43.8 percent, was talking with a counselor or teacher about how goals, interests, and abilities relate to jobs.²

A New York City study pointed out inadequate guidance as a reason for not entering vocational school.³

A Vocational Guidance Quarterly article reported that high school students ranked their parents ahead of teachers and counselors as important career planning resources.⁴

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¹Wentling, p. 226.


³New York City Board of Education, Report to the Chancellor.

A 1977 evaluation of Vocational Education research and development programs found that many students did not feel they had sufficient opportunity to receive assistance from their counselors. They would have liked increased contacts.  

According to J.M. Slater, occupational considerations have a cognitive and affective domain. The affective domain incorporates parents, teachers, counselors, and others.  

A Pennsylvania Area Vocational-Technical school which provided a program for full-time twelfth graders found that since an adequate enrollment was necessary to program success, a concerted effort was made to assist eleventh graders in making the transition from home school to the vocational school. Interviews with twelfth year seniors showed that "missing your friends at the home school" was a common complaint. Peer pressure to remain with friends is apparently quite intense at that grade level.  

John Goodlad, as cited in a Phi Delta Kappan article, asked secondary students their choice of the one best thing about their school. They ranked "my friends" first with 34.9 percent and "sports" second with 13.4 percent. The "variety of class offerings" ranked sixth with 5.7 percent. "Little or no race prejudice or conflict" ranked

eighth at 4.8 percent. "Extracurricular activities other than sports" ranked tenth with 2.6 percent.¹

O'Fallon School in St. Louis surveyed their shared time students and found the following: transportation was not a problem, extracurricular was a problem, students were willing to attend on the half and half basis, teachers rated the half and half system favorably and counseling was a weakness.²

Peat, Marwick, and Mitchell's study for Connecticut considered areas of concern for shared programs. A ranking was done using categories of most important, very important, important, and least important. School sports and extracurricular activities were rated important and travel was rated in the least important category.³

George Gallup's 1978 report showed that some 50 percent of parents with children currently enrolled in school regarded the extracurricular activity programs as very important in the education of their children. An additional 40 percent said fairly important. Only one parent in eight said activities were not too important or not at all important. In the spring of 1975, about three in four students described themselves as somewhat or very active in extracurricular programs. Nearly one third of the students considered activity programs more important than course work in their educational pursuits. No fewer than two thirds of the sponsors of extracurricular programs suggested


²St. Louis School District, A Plan to Increase Vocational...

³Peat, Marwick, Mitchell and Co., Selected Alternatives for Serving...
that the objectives were important to their school.¹

The 1978 Gallup Poll of Public Attitudes Toward Public Education ranked "black/white student relations" third and "too few or not the right kind of courses offered" ranked fifth.²

Curtis R. Finch stated, "The success of any curriculum or instructional innovation is, in a large part, affected by user acceptance and adoption."³

When looking at social effect on career selection, it was observed that educational system organization, environmental conditions and events, the neighborhood and the community influenced career decisions.⁴

Why Shared Programs?

One needs to provide options, break away from the lock step, develop alternatives for and give students a new sense of responsibility for their education.⁵

Accessibility to training alternatives has an effect on career decision making.⁶ A New York study pointed out that excellent programs

¹Ronald E. Gholson, "Extracurricular Activities: Different Perceptions But Strong Support," Phi Delta Kappan, LXI (September, 1979), 67-68.


³Wentling, p. 366.

⁴Wentling, pp. 259-282.


⁶Wentling, pp. 259-282
existed but entry and transfer procedures locked students in or out. They penalized the late bloomers. Approximately 50 percent of the New York applicants to vocational schools were denied entry for various reasons.¹ Gene Buttom, Executive Director of the American Vocational Association (AVA), stated that access to vocational education programs in New York City alone was denied to 15,000 people in 1980.²

When administrators were asked if they felt that "opportunities for vocational education should be provided in high school," 91 percent in 1957 agreed, and in 1975, 93 percent agreed. When these same administrators were asked if "Vocational Education should be part of the education of all pupils," 48 percent in 1957 agreed, and in 1975, 63 percent agreed.³

When the class of 1972 was asked upon graduation about their attitudes toward high school, they ranked the statement, "School should have placed more emphasis on vocational and technical programs" highest with 26 percent. The second highest statement with 25.1 percent was, "School did not offer enough practical work experience." The class of 1972 was asked the same questions in 1976 and the ranking was the same but the percentages were 24.8 and 24.5 respectively. The class of 1980 ranked the questions the same as the class of 1972 with percentages of 28.7 and 25.6 respectively. During this time frame it should be noted that the question, "Should school have placed more emphasis on academic

¹New York City Board of Education, Report to the Chancellor.

²Tursman, pp. 31-33.

subjects" went from 10 percent in 1972 to 16.7 percent in 1976 to 20.3 percent in 1980. When high school seniors were asked, "Suppose you could do just what you'd like and nothing stood in your way. Would you want to attend a technical or vocational school?" The 1980 seniors responded 28.6 percent in the affirmative.1

Daniel B. Taylor presented the following concerns of education at the beginning of the new decade: declining enrollments, increasing inflation, taxpayer resistance to expenditures, citizen demands for increased efficiency, an aging population, and rapidly changing demands for new skills and abilities throughout life.2 These concerns were also exemplified by comments already mentioned. In Iowa, Harold Dilts' study revealed that enrollment projections would limit expansion of vocational programs.3 Wisconsin also looked to avoid duplication.4 In rural Texas and Colorado, sharing is seen as a way to avoid the high cost of equipment, material, and personnel.5 Pennsylvania looks at sharing to avoid duplication and get greater use of facilities.6

In 1976, William Van Til discussed the "Nine Crucial Issues in Education." The fifth issue was, "How can secondary education best draw upon present and prospective school facilities and buildings and the

3Dilts, A Study of Current and Potential Cooperation in...
4Catania, Articulation...A Proposal for Action.
5Veselha, The Delivery of Educational Services.
6Meyers and others, Community College/Vocational-Technical School.
life and institutions of communities and then maximally use the total environment and setting for learning experiences." The seventh issue dealt with organization. It stated, "How can secondary education best create, test, and use enriching and effective ways of organization for the better education of youth." This author presented J. Lloyd Trump's concept of asking secondary schools to offer a rich array of organizational alternatives. The major challenge is to get the right mixture of order, flexibility, and diversity.¹

When or Why are Alternatives Used?

Vernon Smith stated that alternatives are needed when resources cannot be provided within every school in the district. The National Association of School Principals in 1973 developed a resolution to promote alternative programs and appropriate options. North Central Association (NCA) in 1975 developed policies and standards for optional schools. NCA went on to state that in the foreseeable future many different types of schools existing side by side would be designed to meet different sets of learning and living needs of youth. Standard schools would be the major institution but not the only institution. NCA felt that the options should strengthen American education and predicted that American education would continue to move toward pluralistic opportunities for learning.²

Henry Bickell pointed out that there was a steady growth of


college students in occupational programs at four year institutions. This could carry over to the high schools as have other trends. In California, 60 percent of the bachelor programs and 85 percent of the master programs were in occupational fields. This author also stated that women in the labor market would affect the demand for training and less demand for unskilled jobs meant more demand for skilled training.\(^1\) This concept was supported by Stanley Elan's 1978 observation that higher education was increasingly vocational in character and that vocations required increasing specialization.\(^2\)

**Concluding Statements**

Along the idealistic point of view the following are a few comments from John Dewey as quoted by Richard Becker.

Democracy is, "Where there is a wide distribution of opportunities. Dewey asserted that the two approaches (liberal and practical education) must be integrated into a useful, practical, activity-based education infused with intellectual and aesthetic content. Since real discipline comes from taking part in constructive work, all students should share in some occupations that exact personal responsibilities.\(^3\)

Historically underserved populations need access to vocational programs and activities and availability through expanded geographic and instructional centers for vocational education.\(^4\) Also needed is expanded working partnerships among institutions providing occupational

\(^1\)Bickell, A Framework for Developing Alternative Scenarios...


\(^3\) Richard J. Becker, "What Are the Objectives of Vocational Education?" Phi Delta Kappan, LXI (April, 1980), 534-536.

\(^4\)William F. Pierce, "Vocational Education: Key to Productivity," The School Administrator, May, 1972, p. 32.
training at all levels.¹ The vocational education experience should be provided for all learners and should not be stigmatized as the exclusive preserve of special groups.²

There is no time quite like the present (1980) for vocational education and general education to look for every opportunity to find new ways and strategies to improve education effectiveness.³ When reducing staffs and closing buildings is taking place, an excellent opportunity exists to introduce programs. Support from the community increases if at the same time some programs are cut, others are added.⁴

¹Magisos and Moore, Evaluation of Vocational Education R and D Programs.


³Taylor, p. 20-21.

Chapter 3

METHODOLOGY

The purpose of this chapter is to present the methodology for this study. Areas to be covered are: method of data collection, development of the instrument, selection of the sample, administration of the questionnaire, and the methods of analysis used on the data collected.

Data Collection

The method of survey research was employed to collect student responses for this study. In addition, the secondary analysis of the United States Census data was employed to provide data to correlate with selected student responses. The method of survey research was selected for the advantages of its wide acceptance as a data gathering technique, the ease of standardization for this study, the questions that could be incorporated, and because it is an economical means of securing the responses for this study.1 The census data were selected for their utility, reliability, availability, and economy. The use of these data provides correlates for the data collected in the survey.

The recognized disadvantages of survey research are over-

standardization and the potential for being somewhat artificial or superficial. These issues were taken into account in the development and administration of the questionnaire.

Instrument

The questionnaire was developed in cooperation with high school principals, central administrative personnel, high school students, and professors at Drake University. The variety of individuals was employed to avoid the possible bias of relying on limited authority. These involvements also helped to create at least face validity for the instrument.

The instrument was designed to elicit the responses necessary for the study. A yes or no mode of response was selected to force respondent decisions. An opportunity for the respondent to state the degree of concern was provided through selection of their most important and least important concerns. The contingency question format was employed to determine interest in an option under specified conditions.

The questionnaire was pretested on twenty twelfth-grade students, who were not a part of the study population, in an effort to determine the effectiveness, clarity, and level of understandability of the questionnaire. The instrument was modified to correct difficulties

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1Babbie, pp. 345-351.
2Babbie, pp. 9, 13.
3Babbie, pp. 132, 398.
4Babbie, pp. 318-320.
and was pretested a second time using the same procedure. The pre-
testing permitted a finalizing of wording, layout, and other concerns of
the instrument. It also resulted in a method of introduction and orient-
tation to be used by those who would be administering the questionnaire.
The result was an instrument (Appendix B) that was designed to minimize
the disadvantages of the survey research method and collect reliable
response data for this study.

Sample

Permission was obtained from Des Moines Independent Community
School District personnel to administer the questionnaires to seniors in
each of the Des Moines' High Schools. The questionnaires were adminis-
tered to a sample of 600 students; 100 from each of the six high schools
in the district.

The respondents were stratified to assure reasonable represen-
tativeness of the respondents from each high school. The stratifica-
tion of the school district by geographic location of the high schools
was designed to increase representativeness of social class, ethnic
groups, and so forth. Ethnic origin stratification was also aided by
the alphabetic grade level procedure used by Des Moines for homeroom
assignment. This procedure assigns an entire grade level from one
alphabetized list. The "A's" are assigned in alphabetic order, then
the "B's", and so forth until the entire group of students in the class
is assigned. Voluntary transfer students in the neighborhood high
schools were excluded to avoid the introduction of a biasing

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1Babbie, pp. 184-187.
2Babbie, p. 182.
potential of being from a different neighborhood. To further insure a representative homogenous cluster from each high school, special nonalphabetic homerooms such as special education, student government, and drill team were excluded to avoid a possible special group bias. The remaining regular homerooms, where the population was determined by the alphabet procedure and grade level, were considered appropriate to the demands of the research design.

The next procedure was to select homerooms that would produce the number of respondents desired. This selection was done in cooperation with the high school principal. Selection procedures considered teacher reputation for being thorough and cooperative with requests from the administration. Also, the selection considered racial make-up, sexual balance, and obtaining a spread through the alphabet.

The precautions taken to stratify and cluster the sample should help to insure the representativeness of the responses. Recognizing the latitude and flexibility of guidelines in sample selection, it is felt that this study's procedure gave appropriate weight to the various elements critical to acquiring a sample that is reasonably representative of the population.¹

Administering the Instrument

Cooperating homeroom teachers were given instructions prior to the day on which the questionnaires were to be administered. The questionnaires were administered Tuesday, Wednesday, and Thursday mornings during the homeroom period in each of the six schools. Monday and Fridays were avoided since they tend to be times of high activity.

¹Babbie, pp. 190-192.
and student absence.

The spring of the year, between spring break and the start of senior activities, was used to collect the data. It was thought that this was a time when most seniors would be giving thought to what they had done in high school, what they should have accomplished, and what they were going to do after they completed their high school education. It seemed to be an ideal time.

The Des Moines Independent School District was selected for a number of reasons. First, for the purposes of this study, it was desirable to have a Technical school with limited shared-time use. Des Moines' Technical school allows shared-time for neighborhood school students, but very few students utilize the shared-time policy. Second, it was desirable to have a school district large enough to have sufficient population to support a technical program. Des Moines is a metropolitan area with a 200,000 plus population which is sufficient. Third, Des Moines is considered to be a test market area and thus considered quite typical in it's values thereby lending some potential for generalizability. Fourth, there was easy access to representative student populations in the six high schools. Finally, the population surveyed was easily made aware of the concerns of the survey.

It was assumed for the purpose of this study that:

1. The selection and care in administering the instrument would provide reasonably representative responses from the respondents.

2. Combinations of census tracts, when distributed among the neighborhood school, fall very close to the school boundaries. The slight deviations that exist should have minor effect.

3. The utilization of census data for secondary analysis adds to the ability to replicate the study.
Methods of Data Analysis

Three methods of data analysis were chosen for use in this study: Spearman's Rank Correlation Coefficient, Chi Square, and analysis by observation. Spearman's rank Correlation Coefficient (rho) was used to demonstrate associations between student responses and selected census data. The variables involved in each of the tests can be ranked into ordinal series for the purposes of measurement of association. Rho is widely accepted, well known, and fits the requirements of this study since the involved variables are measured on ordinal scales.

The following formula was used:

Spearman's Rank Order Correlation Coefficient

\[ R_s = 1 - \frac{6 \sum D^2}{N (N^2 - 1)} \]

Where:

- \( \sum \) means sum of
- \( D \) difference between ranks
- \( N \) number of ranks

In the application of this formula, \( N \) equals 5, which requires a correlation coefficient of +/- .900 to be significant at the .05 level for a two-tailed test. The data were analyzed for direction even if the magnitude of the coefficients of the correlations was not significant. The value of a measure of significance for rho is subject to question because, "There is no generally accepted formula for estimating the

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2 Babbie, p. 474.
Although there is no good estimate of the standard error of rho, there is evidence to believe that it is a reasonably reliable statistic. As in this study, rho is ordinarily computed only for small samples. Under these circumstances, rho is used to test the hypothesis of zero relationships. Thus, rho was used to determine the magnitude for rejection of the hypothesis. Schmidt's rough guide for the degree of correlation in Table 1 was utilized for

Table 1

<table>
<thead>
<tr>
<th>r</th>
<th>Degree of Correlation (Rough Guide)</th>
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<tbody>
<tr>
<td>1.00</td>
<td>Perfect</td>
</tr>
<tr>
<td>0.98</td>
<td></td>
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<tr>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>0.85</td>
<td>High</td>
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<tr>
<td>0.80</td>
<td></td>
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<tr>
<td>0.70</td>
<td>Moderate</td>
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<tr>
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<td></td>
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<tr>
<td>0.50</td>
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<td>0.40</td>
<td>Low</td>
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<td>0.30</td>
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<tr>
<td>0.20</td>
<td>Negligible</td>
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<tr>
<td>0.10</td>
<td></td>
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</tbody>
</table>


2Guilford and Fruchter, pp. 281-285.
observational analysis of the revealed magnitude. The revealed direction was also subject to observational analysis.

The census tract data used were subjected to Shevky-Bell's Social Area Analysis to determine social class and segregation for each high school area (Appendix E). These indices were compiled directly from census tract data. They reduce census data to a usable format which describes the conditions of a census tract. Shevky-Bell's Indices are easily calculated and are considered reliable. The indices and scores were matched to the high school boundaries that are established by the Des Moines School District. Tracts were separated by high school neighborhoods and the Shevky-Bell scores were averaged for each high school neighborhood. The average score was then ranked. These rankings were then correlated with the rank survey responses for the neighborhoods and the technical school.

To summarize, Shevky-Bell's "Social Index" was correlated with the reasons given by seniors for not attending or for attending an available technical high school. These data were used to examine hypotheses one through twelve. The Shevky-Bell's "Segregation Index" was used for testing hypotheses eighteen and nineteen in the same manner.

A second use of census data was as a measure of the neighborhood "means of transportation." This measure was grouped by high school neighborhoods, as were the Shevky-Bell data, and then indexed to the total population of the high school neighborhoods. The indices were then ranked to permit comparison with the appropriate question responses. This procedure was used for the correlations for hypotheses fourteen through seventeen.
Chi Square was used as a measure of significance for the "means of transportation" census data (Appendix E). The data were grouped by high school neighborhoods in the same manner as previously mentioned in the discussion of rho. Chi Square was used because of its appropriateness, its wide acceptance as a test of significance due to its versatility and ease of calculation and interpretation. This procedure provided a second look at the transportation issue. This test was presented in the evaluation of the significance of data relating to the thirteenth hypothesis.

The formula used was:

\[
\chi^2 = \sum \frac{(fo - fe)^2}{fe}
\]

Where:
- \(\sum\) means the sum of
- \(fo\) means the observed frequency
- \(fe\) means the expected frequency

In the application of this formula to the data for this study, there are 24 degrees of Freedom, which require a Chi Square of 36.415 or larger to be significant at the .01 level.

Observational analysis is a third method of data analysis that was used. It was utilized as a secondary method for analysis of data that had already been analyzed statistically. This was done because of the previously mentioned concern for the value of the measure of significance when there is a small number of ranks. This method was also considered reasonable for analysis of data that had not received statistical analysis. Observation is a recognized norm of science and is

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1Guilford and Fruchter, pp. 195-213.
appropriate for the stratified cluster sample procedure used in this study.\(^1\) The analysis permits the observation of concentrations of frequencies in the survey responses and secondary data. Observations were made in the following areas:

1. What was the nature of the concentrations of frequencies for why students attended their neighborhood school or the technical school.
2. What was the direction of the coefficients.
3. What was the nature of the concentration of frequencies in the cells of the means of transportation data in the Chi Square correlations.
4. What was the nature of the concentrations of frequencies for the responses that students considered most important.
5. What was the nature of the concentrations of frequencies for the responses that students considered least important.
6. What was the nature of the concentrations of frequencies in the shared-time concept with and without transportation provided.
7. What was the nature of the concentration of frequencies in level of satisfaction with the home high school.

Observational analysis was used to evaluate data analyzed statistically as well as data that were not analyzed statistically. This method of analysis supported the other methods of study in presenting a picture of the responses secured.

**Summary**

This chapter presented the methodology of this study from the choice of the survey research method through the methods of analysis of the data collected. Each of these steps was discussed to provide an understanding of what follows in Chapter 4 which discusses the analysis of the data.

\(^1\)Babbie, pp. 238-239.
Chapter 4

PRESENTATION OF THE DATA

The purpose of this study was to determine why high school seniors did or did not choose to attend a technical high school. Nineteen hypotheses were designed to show specific dimensions of the choices. This chapter will incorporate figures and tables to illustrate the data collected and analyzed. The material will be presented in the following order:

1. The statement of each Hypothesis and the pattern and direction of their coefficients.
2. The nature of the concentration of frequencies in the cells of the means of transportation data.
3. The nature of the concentrations of frequencies for why students attended their neighborhood school or the technical school.
4. The nature of the concentrations of frequencies for the responses that students considered most important.
5. The nature of the concentrations of frequencies for the responses that students considered least important.
6. The nature of the concentrations of frequencies in the shared-time concept with and without transportation provided.
7. The nature of the concentration of frequencies in the level of satisfaction with the home high school.

Hypothesis One

There is no significant relationship between the amount of agreement to a statement concerning programs as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the importance of program for technical high school seniors. Thus, the hypothesis had meaning for the
purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does concern for program for technical students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the .675 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was positive and the magnitude was considered large

\[
rho = .675 \quad \text{Sig.} > .05
\]

Figure 1

Technical School Seniors' Concern for Program Correlated with Social Rank of Their Neighborhood
(Line is an approximation)
enough to indicate a moderate relationship between neighborhood social rank and technical school seniors' concern for program. The pattern and positive direction of the plotted points in Figure 1 further illustrate this observation. These observations support the contention that the higher the neighborhood social rank, the higher the concern for program by the technical students.

**Hypothesis Two**

There is no significant relationship between the amount of agreement to a statement concerning programs as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the importance of program for neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does the concern for program for neighborhood school students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the neighborhood high school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/-.900 or greater coefficient to be significant at the .05 level. Thus, the .800 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this
hypothesis, rho was positive and the magnitude was considered large enough to indicate a high relationship between neighborhood social rank and neighborhood school seniors' concern for program. The pattern and positive direction of the plotted points in Figure 2 further illustrate

\[ \rho = 0.800 \quad \text{Sig.} > 0.05 \]

![Graph showing the relationship between social rank and importance of program](image)

Importance of Program

Figure 2

Neighborhood School Seniors' Concern for Program Correlated with Social Rank of Their Neighborhood
(Line is an approximation)

this observation. These observations support the contention that the higher the neighborhood social rank, the higher the concern for program by the neighborhood high school students.

**Hypothesis Three**

There is no significant relationship between the amount of agreement to a statement concerning sports programs as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.
The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the importance of the sports program for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does concern

\[ \rho = .400 \quad \text{Sig.} > .05 \]

for the sports program for technical students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.400 coefficient for this hypothesis does...
not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was negative and the magnitude was considered large enough to indicate a low relationship between neighborhood social rank and technical school seniors' concern for the sports program. The pattern and negative direction of the plotted points in Figure 3 further illustrate this observation. These observations tend to support the contention that the higher the neighborhood social rank, the lower the concern for the sports program by the technical students.

**Hypothesis Four**

There is no significant relationship between the amount of agreement to a statement concerning sports programs as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the importance of the sports program for the neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does concern for the sports program for neighborhood school students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the neighborhood high school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant.
at the .05 level. Thus, the .300 rho for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was positive and the magnitude was considered large enough to indicate a low relationship between neighborhood social rank and neighborhood school seniors' concern for the sports program. The pattern and positive direction of the plotted points in Figure 4 further illustrate this observation. These observations tend to support the contention that the higher the neighborhood social rank, the higher the concern for the sports program by the neighborhood school students.
Hypothesis Five

There is no significant relationship between the amount of agreement to a statement concerning extracurricular activities other than sports as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the importance of extracurricular activities other than sports for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does concern for extracurricular activities other than sports for technical students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the

\[ \rho = -0.625 \quad \text{Sig.} > 0.05 \]

![Figure 5](image)

Technical School Seniors' Concern for Extracurricular Other than Sports Correlated with Social Rank of Their Neighborhood (Line is an approximation)
technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for the hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.625 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was negative and the magnitude was considered large enough to indicate a moderate relationship between neighborhood social rank and technical school seniors' concern for extracurricular activities other than sports. The pattern and negative direction of the plotted points in Figure 5 further illustrate this observation. These observations support the contention that the higher the neighborhood social rank, the lower the concern for extracurricular activities other than sports by the technical students.

**Hypothesis Six**

There is no significant relationship between the amount of agreement to a statement concerning extracurricular activities other than sports as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the importance of extracurricular activities other than sports for neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does concern for extracurricular activities other than
sports for neighborhood students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the neighborhood high school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/-.900 or greater coefficient to be significant at the .05 level. Thus, the -.125 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was negative in direction, but the negligible magnitude indicated little relationship between neighborhood social rank and

![Graph](image)

Figure 6

Neighborhood School Seniors' Concern for Extracurricular Other than Sports Correlated with Social Rank of Their Neighborhood (Line is an approximation)
neighborhood school seniors' concern for extracurricular activities other than sports. The diverse pattern and lack of obvious direction of the plotted points in Figure 6 further illustrate this observation. These observations support the contention that there was little relationship except for direction. The directional relationships suggests that the higher the neighborhood social rank, the lower the concern for extracurricular activities other than sports by the neighborhood school students.

**Hypothesis Seven**

There is no significant relationship between the amount of agreement to a statement concerning peer influence as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

\[
rho = -0.675 \quad \text{Sig.} > 0.05
\]

![Graph showing Influence of Peers](image)

**Figure 7**

Technical School Seniors' Concern for Peer Influence Correlated with Social Rank of Their Neighborhood (Line is an approximation)
The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the influence of peers' advice for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does influence of peers' advice for technical student. The presence or absence of this relationship may provide insight into why the students made their decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.675 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was negative and the magnitude was considered large enough to indicate a moderate relationship between neighborhood social rank and the influence of peer advice for technical school seniors. The pattern and negative direction of the plotted points in Figure 7 further illustrate this observation. These observations support the contention that the higher the neighborhood social rank, the lower the influence of peer advice for the technical students.

Hypothesis Eight

There is no significant relationship between the amount of agreement to a statement concerning peer influence as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.
The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the influence of peers' advice for neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does influence of peers' advice for neighborhood school students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the neighborhood high school rather than the technical school.

\[ \rho = -0.600 \quad \text{Sig.} > .05 \]

![Graph showing the relationship between social rank and influence of peers.](image)

Influence of Peers

Figure 8

Neighborhood School Seniors' Concern for Peer Influence Correlated with Social Rank of Their Neighborhood (Line is an approximation)

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this
coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.600 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was negative and the magnitude was considered large enough to indicate a moderate relationship between neighborhood social rank and the influence of peer advice for neighborhood school seniors. The pattern and negative direction of the plotted points in Figure 8 further illustrate this observation. These observations support the contention that the higher the neighborhood social rank, the lower the influence of peer advice for the neighborhood school students.

Hypothesis Nine

There is no significant relationship between the amount of agreement to a statement concerning family influence as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the influence of family advice for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does influence of family advice for technical students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this
coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus the .100 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was positive in direction, but the negligible magnitude indicated little relationship between neighborhood social rank and the influence of family advice for technical school seniors. The diverse pattern and lack of obvious direction of the plotted points in Figure 9 further illustrate this observation. These observations support the contention that there was little relationship except for direction. The
directional relationship suggests that the higher the neighborhood social rank, the higher the influence of family advice for the technical students.

**Hypothesis Ten**

There is no significant relationship between the amount of agreement to a statement concerning family influence as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the influence of family advice for neighborhood high school seniors. Thus, the hypothesis had meaning for

\[
\rho = 0.600 \quad \text{Sig.} > 0.05
\]

![Diagram showing relationship between social rank and influence of family](image)

**Figure 10**

Neighborhood School Seniors' Concern for Family Influence Correlated with Social Rank of Their Neighborhood (Line is an approximation)
the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does influence of family advice for neighborhood school students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the neighborhood high school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the .600 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was positive and the magnitude was considered large enough to indicate a moderate relationship between neighborhood social rank and the influence of family advice for neighborhood school seniors. The pattern and positive direction of the plotted points in Figure 10 further illustrate this observation. These observations support the contention that the higher the neighborhood social rank, the higher the influence of family advice for the neighborhood school students.

**Hypothesis Eleven**

There is no significant relationship between the amount of agreement to a statement concerning counseling influence as being an important reason for attending a technical center and the social rank of the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the influence of counseling advice
for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does influence of counseling advice for technical students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant.

\[ \rho = .300 \quad \text{Sig.} > .05 \]

![Graph showing the relationship between social rank and influence of counseling.](image)

Figure 11

Technical School Seniors' Concern for Counseling Influence Correlated with Social Rank of Their Neighborhood (Line is an approximation)
at the .05 level. Thus, the .300 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was positive and the magnitude was large enough to indicate a low relationship between neighborhood social rank and the influence of counseling advice for technical school students. The pattern and positive direction of the plotted points in Figure 11 further illustrate this observation. These observations tend to support the contention that the higher the neighborhood social rank, the higher the influence of counseling advice for the technical students.

Hypothesis Twelve

There is no significant relationship between the amount of agreement to a statement concerning counseling influence as being an important reason for attending a neighborhood school and the social rank of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood social rank and the influence of counseling advice for neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as social rank differs so does influence of counseling advice for neighborhood school students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the neighborhood high school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this
coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus the .425 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction and pattern may still be worthy of observation. For this hypothesis, rho was positive and the magnitude was considered large enough to indicate a low relationship between neighborhood social rank and the influence of counseling advice for neighborhood school seniors. The pattern and negative direction of the plotted points in Figure 12 further illustrate this observation. These observations tend to support the contention that the higher the neighborhood social rank, the higher
the influence of counseling advice for the neighborhood school students.

**Hypothesis Thirteen**

The means of transportation available will not vary among the neighborhoods to a significant degree.

The purpose of this hypothesis was to analyze the various means of transportation available to the neighborhood high school attendance areas for equal distribution. Thus, this hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that the means of transportation available to the high school neighborhoods are unequally distributed. The equal or unequal distribution of the means of transportation available may provide insight into why students made their decision to stay at their neighborhood school or traveled to the technical school.

Table 2

Means of Transportation Available to the Neighborhood High School Attendance Areas by Percentage.

<table>
<thead>
<tr>
<th>Neighborhood School</th>
<th>Private Vehicle</th>
<th>Bus</th>
<th>Walk</th>
<th>Other</th>
<th>Stay Home</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>85</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>H</td>
<td>91</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>L</td>
<td>90</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>N</td>
<td>82</td>
<td>9</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>R</td>
<td>81</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>85.8</strong></td>
<td><strong>5.4</strong></td>
<td><strong>5.4</strong></td>
<td><strong>1.4</strong></td>
<td><strong>2.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Chi Square was used to measure if the distribution in means of transportation data in Appendix E could have occurred by chance and chance alone. The Chi Square was significant beyond the .001 level and thus it can be stated that the distribution probably did not occur by chance and chance alone. Observational analysis was then applied to the data. Table 2 illustrates the unequal distribution of the means of transportation for the neighborhood attendance areas. Thus the hypothesis was rejected and it can be stated that the means of transportation available do vary among the neighborhoods.

**Hypothesis Fourteen**

There is no significant relationship between the amount of agreement to a statement concerning transportation to and from a technical center and private vehicle usage of the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between neighborhood private vehicle usage and the concern for transportation for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as private vehicle usage differs so does concern for transportation for technical students. The presence or absence of this relationship may provide insight into why the students made their decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.400 rho for this hypothesis does not meet
the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction, and pattern may still be worthy of observation. For this hypothesis, rho was negative and the magnitude was considered large enough to indicate a low relationship between private vehicle usage and the technical school seniors' concern for transportation. The pattern and negative direction of the plotted points in Figure 13 further illustrate this observation. These observations tend to support the contention that the higher the private vehicle usage, the lower the concern for transportation by the technical students.
Hypothesis Fifteen

There is no significant relationship between the amount of agreement to a statement concerning transportation to and from the neighborhood school and private vehicle usage of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood private vehicle usage and the concern for transportation for neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as private vehicle usage differs so does concern for transportation for neighborhood school students. The presence or absence of this relationship may provide insight into why the

\[ \rho = 0.375 \quad \text{Sig.} > 0.05 \]

Figure 14

Neighborhood School Seniors' Concern for Transportation Correlated with Private Vehicle Usage of Their Neighborhood
(Line is an approximation)
students made their decision to attend their neighborhood school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the .375 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction, and pattern may still be worthy of observation. For this hypothesis, rho was positive and the magnitude was considered large enough to indicate a low relationship between private vehicle usage and the neighborhood school seniors' concern for transportation. The pattern and positive direction of the plotted points in Figure 14 further illustrates this observation. These observations tend to support the contention that the higher the private vehicle usage, the higher the concern for transportation by the neighborhood high school students.

Hypothesis Sixteen

There is no significant relationship between the amount of agreement to a statement concerning transportation to and from a technical center and the total means of transportation available in the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between total means of transportation and the concern for transportation for technical high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as total means of transportation differs so does concern for transportation for technical students. The presence or absence of this relationship may provide insight into why the students
made the decision to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this

\[ \text{rho} = -.100 \quad \text{Sig.} > .05 \]

Figure 15

Technical School Seniors' Concern for Transportation Correlated with Total Means of Transportation Available in the Neighborhood
(Line is an approximation)

coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.100 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction, and pattern may still be worthy of observation. For this hypothesis, rho was negative in direction, but the negligible magnitude indicated little relationship between total means of transportation and technical school seniors' concern for transportation. The diverse pat-
tern and lack of obvious direction of the plotted points in Figure 15 further illustrate this observation. These observations support the contention that there was little relationship between total means of transportation and technical school students' concern for transportation except for direction. The directional relationship suggest that the greater the total means of transportation available the lower the technical seniors' concerns for transportation.

Hypothesis Seventeen

There is no significant relationship between the amount of agreement to a statement concerning transportation to and from the neighborhood school and the total means of transportation available in the attendance area of the neighborhood school.

\[
\rho = -0.25 \quad \text{Sig.} > .05
\]

\[\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 \\
\hline
E & L & N & H & R \\
\end{array}\]

Total Means of Transportation

Concern for Transportation

Figure 16

Neighborhood School Seniors' Concern for Transportation Correlated with Total Means of Transportation Available in the Neighborhood
(Line is an approximation)
The purpose of this hypothesis was to analyze the relationship between total means of transportation and the concern for transportation for neighborhood school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to enable one to state that as total means of transportation differs so does concern for transportation for neighborhood school students. The presence or absence of this relationship may provide insight into why the students made their decision to attend their neighborhood school rather than the technical school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the -.025 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction, and pattern may still be worthy of observation. For this hypothesis, rho was negative in direction, but the negligible magnitude indicated little relationship between total means of transportation and neighborhood school seniors' concern for transportation. The diverse pattern and lack of obvious direction of the plotted points in Figure 16 further illustrate this observation. These observations tend to support the contention that there is little relationship between total means of transportation and neighborhood school students' concern for transportation except for direction. The directional relationship suggests that the greater the total means of transportation available the lower the neighborhood schools seniors' concern for transportation.
Hypothesis Eighteen

There is no significant relationship between the amount of agreement to a statement concerning racial make-up of the technical center by technical students and the segregation rank of the attendance area of the neighborhood schools.

The purpose of this hypothesis was to analyze the relationship between neighborhood segregation rank and the concern for racial make-up for technical high school seniors. Thus, the hypothesis had meaning for

\[ \rho = 0.225 \text{ Sig.} > 0.05 \]

![Diagram](image)

Concern for Racial Make-Up

Figure 17

Technical School Seniors' Concern for Racial Make-Up Correlated with Segregation Rank of Their Neighborhood (Line is an approximation)

The nature of that meaning would be to enable one to state that as segregation rank differs so does concern for racial make-up for technical students. The presence or absence of this relationship may provide insight into why the students made the decision
to attend the technical high school rather than their neighborhood school.

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or greater coefficient to be significant at the .05 level. Thus, the .225 coefficient for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction, and pattern may still be worthy of observation. For this hypothesis, rho was positive in direction, but the negligible magnitude indicated little relationship between segregation rank and technical seniors' concern for racial make-up. The diverse pattern and lack of obvious direction of the plotted points in Figure 17 further illustrate this observation. These observations tend to support the contention that there is little relationship between segregation rank and technical high school students' concern for racial make-up except for direction. The directional relationship suggests that the higher the segregation rank, the higher the concern for racial make-up for technical high school seniors.

Hypothesis Nineteen

There is no significant relationship between the amount of agreement to a statement concerning racial make-up of the technical center by the neighborhood school students and the segregation rank of the attendance area of the neighborhood school.

The purpose of this hypothesis was to analyze the relationship between neighborhood segregation rank and the concern for racial make-up for neighborhood high school seniors. Thus, the hypothesis had meaning for the purpose of this study. The nature of that meaning would be to
enable one to state that as segregation rank differs so does concern for racial make-up for neighborhood students. The presence or absence of this relationship may provide insight into why the students made the decision to attend their neighborhood school rather than attend the technical school.

\[
\rho = .600 \quad \text{Sig.} \ > \ .05
\]

Concentration of Racial Make-Up

Figure 18

Concern for Racial Make-Up

Neighborhood School Seniors' Concern for Racial Make-Up Correlated with Segregation Rank of Their Neighborhood (Line is an approximation)

Rho was the method of data analysis used to demonstrate the relationship for this hypothesis. The test of significance of this coefficient requires a +/- .900 or larger coefficient to be significant at the .05 level. Thus, the .600 rho for this hypothesis does not meet the level of significance and the hypothesis of no difference was held tenable. However, as discussed in Chapter 3, the magnitude, direction,
and pattern may still be worthy of observation. For this hypothesis, rho was positive in direction and the magnitude was considered large enough to indicate a moderate relationship between neighborhood segregation rank and the neighborhood school seniors' concern for racial make-up. The pattern and positive direction of the plotted points in Figure 18 illustrate this observation. These observations support the contention that the higher the segregation rank, the higher the concern for racial make-up for the neighborhood school students.

Table 3


<table>
<thead>
<tr>
<th>Hypothesis No.</th>
<th>Relationship*</th>
<th>Technical Coefficient/Degree</th>
<th>Neighborhood Coefficient/Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Soc. Index-Program</td>
<td>.675 M</td>
<td>.800 H</td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>Soc. Index-Sports</td>
<td>-.400 L</td>
<td>.300 L</td>
</tr>
<tr>
<td>5 &amp; 6</td>
<td>Soc. Index-Extracurr.</td>
<td>-.625 M</td>
<td>-.125 N</td>
</tr>
<tr>
<td>7 &amp; 8</td>
<td>Soc. Index-Friends</td>
<td>-.675 M</td>
<td>-.600 M</td>
</tr>
<tr>
<td>9 &amp; 10</td>
<td>Soc. Index-Family</td>
<td>.100 N</td>
<td>.600 M</td>
</tr>
<tr>
<td>11 &amp; 12</td>
<td>Soc. Index-Counselors</td>
<td>.300 L</td>
<td>.425 L</td>
</tr>
<tr>
<td>14 &amp; 15</td>
<td>Priv. Vehicle-Transp.</td>
<td>-.400 L</td>
<td>.375 L</td>
</tr>
<tr>
<td>16 &amp; 17</td>
<td>Tot. Trans.-Transp.</td>
<td>-.100 N</td>
<td>-.025 N</td>
</tr>
<tr>
<td>18 &amp; 19</td>
<td>Seg. Index-Racial Makeup</td>
<td>.225 N</td>
<td>.600 M</td>
</tr>
</tbody>
</table>

Note: H = High  M = Moderate  L = Low  N = Negligible

*A negative rho indicates the higher A the lower the concern for B. A positive rho indicates the higher A the higher the concern for B.
Summary of Hypotheses

The length of the presentation of the hypotheses seems to necessitate a summary presentation. Table 3 was presented to accomplish this end. The thirteenth hypothesis was not included since it was one of a kind. This summary should simplify the reader's referral process when Chapter 5 refers to Chapter 4 in the discussion of these hypotheses.

Observational Analysis

The observed nature of the concentration of frequencies for why

Table 4

The Reasons Given by Seniors for Why They Attended Their Neighborhood School or the Technical School in Percentages.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Technical Responses/Rank</th>
<th>Neighborhood Responses/Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type of program I wanted was offered here.</td>
<td>93.0 1</td>
<td>58.2 2</td>
</tr>
<tr>
<td>The opportunities to participate in the sports program.</td>
<td>18.0 5</td>
<td>33.6 6</td>
</tr>
<tr>
<td>The opportunities to participate in extracurricular activities other than sports.</td>
<td>31.0 2</td>
<td>43.0 3</td>
</tr>
<tr>
<td>Transportation to and from school was easier.</td>
<td>20.0 4</td>
<td>88.0 1</td>
</tr>
<tr>
<td>Advice or pressure from my friends.</td>
<td>15.0 7</td>
<td>37.8 4</td>
</tr>
<tr>
<td>Advice or pressure from my family.</td>
<td>21.0 3</td>
<td>34.4 5</td>
</tr>
<tr>
<td>Advice or pressure from my counselor.</td>
<td>9.0 8</td>
<td>5.4 8</td>
</tr>
<tr>
<td>The racial make-up of students who attended Tech.</td>
<td>17.0 6</td>
<td>28.8 7</td>
</tr>
</tbody>
</table>
students attended their neighborhood school or the technical school is presented in Table 4. The concentrations would have meaning for the purpose of this study. The nature of that meaning would be to enable one to state the most frequent reasons given by students. These reasons may provide insight into why the students selected their neighborhood school or the technical school. The concentrations and their relationship to the findings in the Review of Literature in Chapter 2 will be presented in Chapter 5.

Table 5
The Reasons Considered Most Important by Seniors for Why They Attended Their Neighborhood School or the Technical School in Percentages.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Technical Responses/Rank</th>
<th>Neighborhood Responses/Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type of program I wanted was offered here.</td>
<td>80 1</td>
<td>29.4 2</td>
</tr>
<tr>
<td>The opportunities to participate in the sports program.</td>
<td>7 2</td>
<td>9.6 3</td>
</tr>
<tr>
<td>The opportunities to participate in extracurricular activities other than sports.</td>
<td>5 3</td>
<td>6.0 6</td>
</tr>
<tr>
<td>Transportation to and from school was easier.</td>
<td>0 7</td>
<td>35.6 1</td>
</tr>
<tr>
<td>Advice or pressure from my friends.</td>
<td>0 7</td>
<td>6.6 5</td>
</tr>
<tr>
<td>Advice or pressure from my family.</td>
<td>4 4.5</td>
<td>4.6 7</td>
</tr>
<tr>
<td>Advice or pressure from my counselor.</td>
<td>0 7</td>
<td>0 8</td>
</tr>
<tr>
<td>The racial make-up of students who attended Tech.</td>
<td>4 4.5</td>
<td>8.2 4</td>
</tr>
</tbody>
</table>
The observed nature of the concentrations of frequencies for the responses that students considered most important reasons for attending their neighborhood school or the technical school is presented in Table 5. The concentrations would have meaning for the purpose of this study. The nature of that meaning would be to enable one to state the most important reasons given by students. These reasons may provide insight into why the students selected their neighborhood school or the technical school. The concentrations and their relationship to the fin-

Table 6

The Reasons Considered Least Important by Seniors for Why They Attended Their Neighborhood School or the Technical School in Percentages.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Technical Responses/Rank</th>
<th>Neighborhood Responses/Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type of program I wanted was offered here.</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>The opportunities to participate in the sports program.</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>The opportunities to participate in extracurricular activities other than sports.</td>
<td>8</td>
<td>5.2</td>
</tr>
<tr>
<td>Transportation to and from school was easier.</td>
<td>20</td>
<td>2.2</td>
</tr>
<tr>
<td>Advice or pressure from my friends.</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Advice or pressure from my family.</td>
<td>9</td>
<td>7.4</td>
</tr>
<tr>
<td>Advice or pressure from my counselor.</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>The racial make-up of students who attended Tech.</td>
<td>39</td>
<td>38.2</td>
</tr>
</tbody>
</table>
Findings in the Review of Literature in Chapter 2 will be presented in Chapter 5.

The observed nature of the concentrations of frequencies for the responses that students considered least important reasons for attending their neighborhood school or the technical school is presented in Table 6. The concentrations would have meaning for the purpose of this study. The nature of that meaning would be to enable one to state the least important reasons given by students. These reasons may provide insight into why the students selected their neighborhood school or the technical school. The concentrations and their relationships to the finding in the Review of Literature in Chapter 2 will be presented in Chapter 5.

The observed nature of the concentrations of frequencies in the shared time concept with and without transportation provided is presented in Table 7. The concentrations would have meanings for the purpose of this study. The nature of that meaning would be to enable one

Table 7
The Acceptability of Shared-Time Concept With and Without Transportation Provided in Percentages.

<table>
<thead>
<tr>
<th>Would you like the shared-time option?</th>
<th>Technical</th>
<th>Neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>With transportation provided?</td>
<td>YES 68.0</td>
<td>YES 41.6</td>
</tr>
<tr>
<td></td>
<td>NO 32.0</td>
<td>NO 58.4</td>
</tr>
<tr>
<td>If yes, would you have been interested without transportation provided?</td>
<td>YES 72.0</td>
<td>YES 58.6</td>
</tr>
<tr>
<td></td>
<td>NO 38.0</td>
<td>NO 41.4</td>
</tr>
</tbody>
</table>
to state the acceptability of the shared-time concept and the effect of transportation on that acceptability. These meanings may provide insight into the acceptability of the shared-time concept by the neighborhood and technical students. The acceptability and its relationship to the findings in the Review of Literature in Chapter 2 will be presented in Chapter 5.

The observed nature of the concentration of frequencies for the level of satisfaction with the home high school is presented in Table 8. The concentrations would have meaning for the purpose of this study. The nature of that meaning would be to enable one to state the level of satisfaction of neighborhood and technical students with their school. The level of satisfaction may provide insight into the responses of the students and their reasons for selecting the neighborhood or technical school. The level of satisfaction and its relationship to the findings will be presented in Chapter 5.

Table 8
The Level of Satisfaction With the Neighborhood School and the Technical School in Percentages.

<table>
<thead>
<tr>
<th>School</th>
<th>Percentage Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>80</td>
</tr>
<tr>
<td>H</td>
<td>77</td>
</tr>
<tr>
<td>L</td>
<td>86</td>
</tr>
<tr>
<td>N</td>
<td>68</td>
</tr>
<tr>
<td>R</td>
<td>86</td>
</tr>
<tr>
<td>T</td>
<td>74</td>
</tr>
</tbody>
</table>
Summary

This chapter has presented the data analysis by presenting the hypotheses and areas of observational analysis from Chapter 3. These presentations and the literature presented in Chapter 2 will be the basis for the Summary, Conclusion, and Recommendations of Chapter 5.
Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study attempted to determine the reasons why high school seniors did or did not choose to attend a technical high school on a full or a part-time basis. Student surveys were conducted to secure these reasons. While observations could be made from the results, it seemed necessary to go further and determine some useful means of converting the data. This was achieved by statistically correlating the survey results with secondary data which aided reliability and would make replication of the study possible. It is hoped that the study provides information necessary to help one develop programs attractive enough to meet student needs and thus encourage optimum participation.

Conclusions

None of the correlation coefficients were large enough to be significant at the desired level, thus all hypotheses were held tenable. When looking at the degree of correlation, eleven of the eighteen coefficients were low or negligible. The direction of the coefficients appeared to be usable information. Upon observing the concentrations of the various responses, it was noted that the responses of neighborhood students were more diverse than those for the technical students.
Type of Program Offered

The direction of the correlations of social rank and concern for programs for technical and neighborhood students reflects that the higher the social rank, the higher the students' concern for programs. The concern for program was the most frequent and most important reason for technical students' selection of the technical high school, and the second most frequent and most important reason for neighborhood students selecting the neighborhood school. The neighborhood students' first concern was transportation. The conclusion was that concern for program was a strong determining factor in school selection. In the case of the neighborhood schools, access was the only stronger determining factor.

Opportunities to Participate in the Sports Program

The direction of the correlations indicated that the higher the social rank the lower the concern for sports participation for the technical students, while the neighborhood students' correlation indicated that the higher the social rank the higher the concern for sports. The concentration of responses for the participation in the sports program reflected more of a concern for the neighborhood school students than for the technical students. The conclusion was that the concern for sports was more of a factor for neighborhood students' school selection than for technical school students' selection.

Opportunities to Participate in Extracurricular Activities other than Sports

The direction of the correlations indicated that the higher the social rank the lower the concern for extracurricular activities other than sports for technical and neighborhood students. The technical stu-
dents considered extracurricular other than sports second to program as their most frequent concern for attending the technical school. The neighborhood students considered extracurricular other than sports their third most frequent reason for attending the neighborhood school. Neighborhood students' first most frequent concern was transportation and second was program. This leads to the conclusion that extracurricular other than sports was a concern to many neighborhood and technical students.

Transportation To and From School

The issue of transportation was a major consideration for students school selection. It was determined that an unequal distribution of the total means of transportation did exist among the neighborhood schools. The unequal distribution was reflected in correlations involving private vehicle usage and total means of transportation available with students' transportation concerns. Technical students' responses consider this area as their fourth strongest concern while neighborhood students considered this as their most important and most frequent concern. The conclusion was that the neighborhood students considered transportation as their major determining factor. Technical students considered it a factor, but of much less degree. The difference in degree may have reflected the technical students having faced the transportation problem from their neighborhood to the technical center.

The transportation factor was considered further through a contingency question which proposed a shared attendance between the neighborhood school and the technical school. The results of these responses
indicated a strong consideration was given to transportation by both technical and neighborhood students, the conclusion being that an option would be greatly affected by the transportation provided.

Advice or Pressure from Friends

The direction of the correlations of social rank and concern for advice from friends for technical and neighborhood students reflected that the higher the social rank, the lower their concern for advice from friends. The frequency of the responses indicated that this was a much stronger concern for the neighborhood students than for the technical students. The conclusion was that peer pressure seems stronger for keeping neighborhood students in the neighborhood schools than peer pressure was to leave the neighborhood to go to the technical school.

Advice or Pressure from Family

The direction of the correlation of social rank and concern for advice from family for technical and neighborhood students reflected that the higher the social rank, the higher the concern for advice from family. Technical student responses indicated that family had a stronger effect than friends, and neighborhood students' responses indicate family slightly lower than friends. For both family and friends, neighborhood student responses were stronger than technical student responses. The conclusion was that family pressure seemed stronger to keep students in neighborhood schools than to encourage them to select the technical school.

Advice or Pressure from "My" Counselor

The direction of the correlations of social rank and concern for advice from counselor for technical and neighborhood students reflected
that the higher the social rank, the higher the concern for counselor advice. The technical and neighborhood students' responses indicated this area as having the least effect on their selection of a school. It seemed plausible to conclude that counselors have little effect on students' decisions relative to selection of schools.

**Racial Make-Up of the Students at Tech**

The direction of the correlation of segregation and concern for racial make-up by technical and neighborhood students reflected that the higher the segregation, the higher the concern for racial make-up. Technical students' responses were less pronounced in this area than neighborhood student responses. However, technical and neighborhood students considered this area as being their least important concern. The conclusion was that while the racial make-up of a school was a concern, it was one that the students considered to be least important.

**Acceptability of the Shared-Time Concept**

The technical and neighborhood high school students' responses indicated that they had a high interest in the shared-time concept. The interest was higher where transportation was provided than it was when transportation was not provided. The conclusion being that students would be interested in the shared-time concept if transportation was provided.

**Level of Satisfaction with the School Attended**

The responses of the students from all the schools involved in the study represented a high level of satisfaction with the school they attended. However, there is a sufficient number who were not satisfied.
Those who were not satisfied as well as some who were satisfied would have probably given consideration to a shared-time option.

**Recommendations**

The literature recognized the need for more student accessibility to vocational and technical programs by students and educators alike. This study reflected satisfaction with the present optional full-time vocational/technical programs and thus the recommendation that these programs continue. The shared-time vocational/technical option was popular in the literature and this study reflected a high interest on the part of neighborhood and technical students. Thus, the recommendation that the shared-time concept be explored. To achieve optimum participation in the full-time and shared-time options for vocational/technical education, one needs to consider the concerns of the consumer of these options.

The need to address a variety of concerns emphasizes the need for flexibility. The need for flexibility and its effect was present in the literature and was reflected in this study. The following should emphasize the necessity for flexibility to maximize participation.

1. Programs offered in the a.m. only, p.m. only, or all day only tend to limit participation and present conflict. This is especially true with sports and other extracurricular activities. Thus, programs should be made available in each time frames.

2. Transportation to and from the technical center needs to be flexible to meet the needs of the schools and the students. Thus, the scheduling of the students' classes and activities needs to be coordinated with travel demands.

3. The age old stigma of vocational education vs. academic education was present in the literature and reflected in the concerns of this study. Thus, the recommendation that a shared-time option be implemented to enable students to attend both the neighborhood and technical school with graduation and extracurricular activities at the neighborhood school.
Flexibility in these areas could overcome many of the obstacles for future participants.

This study reflected that student concerns vary according to the social rank of the neighborhoods. These variations would need to be evaluated when approaching neighborhood students about full or part-time participation in the available vocational/technical programs.

This study attempted to determine the reasons why high school seniors did or did not choose to attend a technical high school on a full or part-time basis. The reasons analyzed resulted in conclusions and recommendations to optimize flexibility, accessibility, and acceptability of vocational/technical options.
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APPENDIX A

DES MOINES SCHOOLS LOOK
AT OPTIONS
Vocational Education Delivery System  
(Options)

Plan A - New Vocational-Technical Facility

Close Technical High School. Ask voters to approve 67½ cent levy to provide taxing authorization to finance the proposed additions at the North High site, moving vocational-technical programs to that site, and the equipment to upgrade the programs.

Retain the use of 1800 Grand for administrative offices, administrative services, and as a site for district activity now housed elsewhere.

The estimated cost of these three items in 1980 was $4,000,000.

Plan B - Resource Center

Close Technical High School and use the facility as a vocational-technical center to serve eleventh and twelfth grade pupils on a half day basis. Provide vocational-technical programs that cannot be offered in the home school.

Provide district transportation from all high schools to the vocational-technical center.

Articulate program development with career education programs of the high schools

Plan C - Comprehensive High Schools

Close Technical High School and expand the curriculum of the remaining five high schools to include vocational and technical education courses to meet the career goals of pupils.

Place vocational-technical programs in schools in a pattern which reflects the interests of pupils and the needs of employers. Encourage pupil transfer to pursue their career goals.

Provide needed facilities by remodeling, minor construction, renting, or using other district owned buildings.
TECH SHIFT TO NORTH GETS DEATH BLOW

By Jonathan Roos

The death knell was sounded Tuesday for plans to close Technical High School and move its programs to North High.

The Des Moines School Board rejected the idea of asking voters a second time to approve a tax to pay for the $6 million relocation project.

Instead, the board gave Superintendent William Anderson the go-ahead to investigate two alternative plans for closing Tech, plus the option of leaving Tech open and closing a different high school.

In other action, the board postponed a decision on closing three elementary schools - Casady, Cowles and Dunlap - until its March 17 meeting.

A recommendation by Anderson that those schools be closed at the end of this school year was tabled so parents from the affected areas could have more time to ask questions and voice their views. A public hearing on the targeted school closings has been set for 6:30 p.m. March 11 in the Tech High Auditorium.

The proposed tax would have underwritten the cost of the Tech-to-North move, including construction of an addition at North and relocating the district's central offices at Tech to a former junior high school.

(However, Anderson recently had suggested a $4 million, scaled-down version of the plan in which administrative offices would have remained at the Tech building, 1800 Grand Ave.)

Enrollment Drop

School officials argued that closing Tech was necessary because of declining enrollment, and would have saved money in the long run. But the tax to pay for the project was defeated in the Sept. 9 school election by 1,700 votes.

The recession and rising unemployment, coupled with tax and utility rate increases announced about that time were blamed for the defeat. And because economic conditions have changed little since then, a five-member board majority concluded Tuesday that the levy would have little chance of passage in a second election.

"I don't think we'd have a prayer of getting it," said board member Ian Binnie.

"A vote for construction of facilities at a time when [people] are reading about closing [schools] is difficult for some people to fathom," added Nolden Gentry.

But Board President Ray Palis and Sue Luthens, the only two members who voted against Anderson's recommendation to consider another alternative to the Tech-to-North plan, said its prospects for passage would be improved if voters better understood the possible consequences of turning it down.
"I can't believe this community is going to vote yes overwhelmingly on building a new jail and no a second time on providing quality education for our students," commented Luthena.

"I would like to try again because it's the very best program," said Palis. "I'm very concerned about diluting the technical-vocational program."

Anderson has suggested two alternatives for closing Tech while continuing to offer its programs in the school district:

'Disperse its programs among the five regular high schools. This would mean, however, that students would have to transfer to another school if their home school didn't offer the program they wanted. Also, some remodeling would be required at each of the high schools.

'Continue to use part of the Tech building as a vocational-technical center for 11th- and 12th-grade students, attending half-day sessions. They would be bused at district expense between the center and their home high schools, where they would take beginning vocational-technical courses and regular academic subjects. Parts of the Tech building not used as a center would be shut down.

Either proposal - along with a recently adopted grade reorganization plan that shifts sixth grade to junior highs and puts Lincoln High on the same footing as other high schools by including ninth graders there - would result in major high school boundary changes.

Still another option before the board is to leave Tech open and close a different high school, with North High being mentioned most often.

Anderson is believed to favor the idea of using part of the Tech building as a vocational-technical center. He told the board he could be ready in October with a detailed comparison of the various alternatives.

In other business, the board adopted a 1981-82 school budget that, in Binnie's words, "is written in sand."

That's because a bill already approved by the Iowa House and headed for the Senate would slow the growth of school spending increases next year from 9 percent to 5 percent.

The $90.7 million operating fund budget approved by the board is based on the larger percentage. It will have to be slashed by $2 million if the smaller percentage becomes law.

Some of the suggested administration proposals for saying an additional $2 million - canceling plans for an expanded gifted and talented program, dropping minor high school sports and closing Hoak Traditional School - drew a group of speakers to the budget hearing who oppose those cuts.

But the board gave supporters of the Hoak program some encouragement. It asked Anderson to study establishing traditional school programs at three other schools.

Besides Hoak, a junior high school may have to be closed and large numbers of employees laid off if $2 million must be cut from the budget.

Des Moines Register
3/04/81
Des Moines' Technical High School should be dismantled as a full-scale high school and turned into a "resource center" offering students half-day sessions, School Superintendent William Anderson recommended Friday.

In the long-awaited recommendation for closing one of the district's six high schools, Anderson said his plan provides the most flexibility and would save about as much as closing a high school outright.

But the proposal has a new twist: Advanced-level academic courses, now in danger of being phased out, would be offered at the center.

The proposal also is designed to be politically palatable because Anderson says no major high school boundary changes would be necessary--a traditional fear of East and Lincoln High parents who believe they would be shortchanged.

Under the proposal, the resource center would be phased in, beginning with 200 students in the fall of 1983. By the fall of 1986, it would be in full operation, serving 900 students in the morning and another 900 in the afternoon.

Eleventh- and twelfth-grade students would attend the center for their vocational courses during one-half of the day. They would take their regular courses back at their home high schools during the rest of the day.

They would be bused, at district expense, between the Tech center and their home high schools. Some beginning vocational-technical courses would be offered at the five regular high schools -- Roosevelt, North, Lincoln, East and Hoover -- but not all beginning vocational-technical courses would be offered at each of the five high schools.

For example, students in auto mechanics might have to go to North High for their first and second years of high school, and printing students might go to East, said Norman Miller, director of secondary education.

Such a system would eliminate duplication of technical programs that currently exists.

But it also would pump more students into North, which has been about half full for the past several years, Miller said.

Converting Tech to a resource center would save money beginning next fall by combining the athletic departments of Tech and North. Larger savings would accumulate as the program is phased in: $263,904 in 1983-84, $477,192 in 1984-85, $687,264 in 1985-86 and $775,753 in 1986-87.

Miller said busing expenses actually would be less than current costs for Tech students because students would be taken en masse from their high schools to the resource center and returned.

That kind of busing is cheaper than providing Metropolitan Transit Authority (MTA) passes for Tech's students, who are scattered all over the 84 square miles of the district.
In addition to savings on busing, the district would save money by eliminating one high school office and support staff, such as the principal and librarian. And it would eliminate up to 34 teaching positions by the fall of 1986, the proposal said.

By converting Tech to a resource center, the five remaining high schools would stay open until near the end of the 1980s, when it may be necessary to close another one, Anderson said.

The district has operated six high schools since Hoover opened in 1967, when enrollment peaked at 46,500 students. Since then, enrollment has declined sharply and, this fall, the district had 32,451 students. By 1986, the district's enrollment is expected to drop below 30,000.

Elementary and junior high schools have been closed because of the enrollment decline.

"It is now imperative that similar cost reductions occur at the high school level," Anderson said in his report.

But Anderson also has left himself an out. "Should the resource center not attract sufficient numbers of students, the district could explore other options for vocational-technical education," he said in the report.

Under the plan, the district's central offices, craft shops and warehouses would remain at Tech.

Administration for the resource center would rest with the five high school principals because the center's curriculum would be an extension of the curriculum in each of the regular high schools, the proposal said.

Miller said the proposal is a "calculated risk" because it drastically changes Tech's program, which he said is successful.

"The thing that will sell this to students is if the program here at Tech is a good quality, and if there's not competing programs at the regular high schools," said Miller.

Adding advanced courses for college-bound students to the center also should help erase Tech's poor image, Miller said. Tech long has suffered from a second-class status among parents and some students who feel the academic program isn't tough enough.

Many advanced courses for college-bound students -- such as third-year French, calculus, physics and others -- may be dropped because too few students decide to take such courses. And with a tight squeeze on the district's finances, such courses are too expensive to continue.

But Miller said if students opt to attend the center, those courses could still be offered. "We're thinking of giving even the college-bound students some hands-on experience in vocational technical programs," Miller said.

He said a pre-engineering student might take calculus and physics at the resource center, but also could take a machine course that could help him later on in his career.

Miller said the center should be phased in to give current students a chance to complete programs they started at Tech and to develop pre-vocational programs at the other five high schools. No major physical changes would be necessary to transfer the first- and second-year programs to the other five schools, he said.

In the proposal, Anderson said the staff also studied closing North, Hoover or Roosevelt, merging Tech and North and operating Tech as a part of North's program, and closing Tech and distributing its programs among the remaining five high schools.
The plan does not mention when south-side ninth-grade students will be assigned to Lincoln, but Anderson said that will be done when there is room at Lincoln. Other ninth graders now attend their high schools.

The board will take its first look at Anderson's plan during a work session Tuesday afternoon at its offices at 1800 Grand Ave.

Des Moines Tribune
10/16/81
A spokesman for the Technical High School Booster Club said Tuesday his group could support a proposal to convert the school into a resource center if certain changes were made in the plan.

However, club member Gary Russell also told the Des Moines School Board that it would be a better idea to close another high school and retain Tech as both a resource center and high school.

School district officials have proposed converting Tech from a full-scale high school to a resource center where 11th- and 12th-graders from the city's other five high schools would be offered vocational and some advanced-level academic courses during half-day sessions.

For the remainder of the school day, those students would take regular courses in their home high schools, thus adding to the enrollment of the home schools.

School officials claim that the conversion eventually would save as much as $776,000 a year, improve the district's educational programs and make more efficient use of school buildings.

Russell, of 10141 Lincoln Ave., said more than $300,000 could be saved next year if only Des Moines school buses, rather than MTA buses, were used to transport students between schools, and if upper-level vocational-technical courses that duplicate those to be offered at the resource center were eliminated at other high schools.

"We also have said we'd like to increase yellow bus service and prevent unnecessary duplication," Superintendent William Anderson said later.

Russell said his group also proposes a competency-based evaluation program for resource center students, so that those not making adequate progress would be returned to their home schools unless they could succeed in some other vocational program.

"That's been our approach all along," said Anderson in an interview.

Russell also said guidance counselors and other school employees should be committed to presenting a positive image of vocational-technical education.

Finally, Russell said the district's policy of allowing students to leave their home high school to enroll in another city school should be modified so those students would have to return to their home schools for extracurricular activities. He said that requirement would discourage high schools from recruiting students for sports or to bolster their own enrollments.

Anderson said there will be no need for open enrollment if the resource center plan is adopted.

If a high school is to be closed, a more logical choice than Tech would be Hoover High, which, except for North High, has the smallest enrollment in the city and draws many students from beyond its own boundaries, said Russell in an interview.

Tech has about 1,500 pupils, Hoover has about 1,300 and North about 800.
The Des Moines School Board is expected to decide soon whether to adopt the resource center plan or choose some other alternative for dealing with declining enrollment at the high-school level.

Robert Rydell, a spokesman for the Polk-Des Moines Taxpayers Association, told the board his group supports the resource center proposal.

In other business, Anderson told the board that $75,000 budgeted for fire safety improvements this year will not be enough to correct 38 fire code violations at 25 city schools. About $100,000 was earmarked last year for correcting violations, but, because of budget cuts, only about $28,000 was spent, Anderson said.

School officials estimate it would cost more than $300,000 to make all the required modifications.

While officials say they will make the changes as funds allow, the city fire marshal has given the district 60 days to install fire escapes at Rice and Perkins schools, said Victor Potter, director of plant and transportation.

The school board Tuesday also approved the sale of the Hoak School site to Stemma D'Italia, 18 Indianola Road, for $215,000. The organization plans to establish an Italian cultural center at the former school at 1801 McKinley Ave.
APPENDIX B

DIRECTIONS TO ADMINISTERING TEACHERS

QUESTIONNAIRE FOR EACH SCHOOL
TO: Administering Teachers

FROM: Ben Norman
8227 N.W. Oakwood Dr.
Ankeny, Iowa 50021

Study Directions

1. For seniors in regular homerooms only
2. Exclude Voluntary Transfer Students
3. Questions
   I. check a yes or no for each question
   II. circle one only
   III. circle one only
   IV. A. check yes or no
        B. answer only if A yes
   V. circle one only

THANK YOU VERY MUCH!!!
Please read and **answer each** question carefully. Thank you.

I. Which high school would you have attended if you had not chosen Tech? (Circle your neighborhood high school.)

East       Hoover       Lincoln       North       Roosevelt

II. I attended Tech rather than my neighborhood high school because

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>A.</td>
<td>of the type of program I wanted was offered here and not at my neighborhood high school.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>of opportunities to participate in the sports program.</td>
<td></td>
<td></td>
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<tr>
<td>C.</td>
<td>of the opportunities to participate in the extracurricular activities other than sports.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>transportation to and from school was easier.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.</td>
<td>of advice or pressure from my friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F.</td>
<td>of advice or pressure from my family.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G.</td>
<td>of advice or pressure from my counselor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.</td>
<td>of the racial make-up of the students who attended Tech.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. Please circle the letter corresponding to the "Yes" answer above which you consider to be your most important "Yes."

   A    B    C    D    E    F    G    H

IV. Please circle the letter corresponding to the "No" answer above which you consider to be your most important "No."

   A    B    C    D    E    F    G    H
V. Assume that you could have attended Tech on a part-time basis for special programs while remaining enrolled in and receiving your Diploma from your neighborhood high school. (Extracurricular activities, including sports, would take place in your neighborhood high school.)

A. Under these conditions, would you have considered attending Tech on a part-time basis if transportation were provided to and from Tech?

Yes _____ No _____

B. If Yes, would you have considered attending Tech on a part-time basis if you were responsible for getting to and from Tech?

Yes _____ No _____

VI. Assume that you could have attended any High School in Des Moines. Which one would you have chosen? (Please circle one)

East Greater Des Moines Education Center (Drop In)
Hoover Lincoln North Roosevelt Tech
Please read and answer each question carefully. Thank you.

I. I attended East rather than Tech because:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. the type of program I wanted was offered here.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. of the opportunities to participate in the sports program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. of the opportunities to participate in extracurricular activities other than sports.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. transportation to and from school was easier.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. of advice or pressure from my friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. of advice or pressure from my family.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. of advice or pressure from my counselor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. of the racial make-up of students who attended Tech.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. Please circle the letter corresponding to the "Yes" answer above which you consider to be your most important "Yes."

A B C D E F G H

III. Please circle the letter corresponding to the "No" answer above which you consider to be your most important "No."

A B C D E F G H
Please read and answer each question carefully. Thank you.

I. I attended Lincoln rather than Tech because:

   A. the type of program I wanted was offered here.
   B. of the opportunities to participate in the sports program.
   C. of the opportunities to participate in extracurricular activities other than sports.
   D. transportation to and from school was easier.
   E. of advice or pressure from my friends.
   F. of advice or pressure from my family.
   G. of advice or pressure from my counselor.
   H. of the racial make-up of students who attended Tech.

   [Yes] [No]

II. Please circle the letter corresponding to the "Yes" answer above which you consider to be your most important "Yes."

  A   B   C   D   E   F   G   H

III. Please circle the letter corresponding to the "No" answer above which you consider to be your most important "No."

  A   B   C   D   E   F   G   H
Please read and answer each question carefully. Thank you.

I. I attended North rather than Tech because:

A. the type of program I wanted was offered here.  
B. of the opportunities to participate in the sports program.  
C. of the opportunities to participate in extracurricular activities other than sports.  
D. transportation to and from school was easier.  
E. of advice or pressure from my friends.  
F. of advice or pressure from my family.  
G. of advice or pressure from my counselor.  
H. of the racial make-up of students who attended Tech.  

II. Please circle the letter corresponding to the "Yes" answer above which you consider to be your most important "Yes."

A B C D E F G H

III. Please circle the letter corresponding to the "No" answer above which you consider to be your most important "No."

A B C D E F G H
Please read and answer each question carefully. Thank you.

I. I attended Roosevelt rather than Tech because:

A. the type of program I wanted was offered here.  
B. of the opportunities to participate in the sports program.  
C. of the opportunities to participate in extracurricular activities other than sports.  
D. transportation to and from school was easier.  
E. of advice or pressure from my friends.  
F. of advice or pressure from my family.  
G. of advice or pressure from my counselor.  
H. of the racial make-up of students who attended Tech.

II. Please circle the letter corresponding to the "Yes" answer above which you consider to be your most important "Yes."

A B C D E F G H

III. Please circle the letter corresponding to the "No" answer above which you consider to be your most important "No."

A B C D E F G H
V. Assume that you could have attended Tech on a part-time basis for special programs while remaining enrolled in and receiving your Diploma from your neighborhood high school. (Extracurricular activities, including sports, would take place in your neighborhood high school.)

A. Under these conditions, would you have considered attending Tech on a part-time basis if transportation were provided to and from Tech?

Yes _____  No _____

B. If Yes, would you have considered attending Tech on a part-time basis if you were responsible for getting to and from Tech?

Yes _____  No _____

VI. Assume that you could have attended any High School in Des Moines. Which one would you have chosen? (Please circle one)

East  Greater Des Moines Education Center (Drop In)

Hoover  Lincoln  North  Roosevelt  Tech
APPENDIX C

DES MOINES CENSUS TRACT MAP

DES MOINES SCHOOL BOUNDARIES
APPENDIX D

SUMMARY OF RESPONSES TO QUESTIONNAIRE
Table 9
Reasons Specified by Neighborhood High School Seniors for not Attending an Available Technical High School in Percentage of Those Responding

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Schools</th>
<th>E</th>
<th>H</th>
<th>L</th>
<th>N</th>
<th>R</th>
<th>Avg.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>the type of program I wanted was offered here.</td>
<td></td>
<td>50</td>
<td>64</td>
<td>53</td>
<td>42</td>
<td>82</td>
<td>58.2</td>
</tr>
<tr>
<td>the opportunities to participate in the sports program.</td>
<td></td>
<td>29</td>
<td>32</td>
<td>28</td>
<td>39</td>
<td>40</td>
<td>33.6</td>
</tr>
<tr>
<td>the opportunities to participate in extracurricular activities other than sports.</td>
<td></td>
<td>45</td>
<td>41</td>
<td>33</td>
<td>45</td>
<td>51</td>
<td>43.0</td>
</tr>
<tr>
<td>transportation to and from school was easier.</td>
<td></td>
<td>86</td>
<td>91</td>
<td>89</td>
<td>89</td>
<td>85</td>
<td>88.0</td>
</tr>
<tr>
<td>advice or pressure from my friends.</td>
<td></td>
<td>45</td>
<td>31</td>
<td>38</td>
<td>36</td>
<td>39</td>
<td>37.8</td>
</tr>
<tr>
<td>advice or pressure from my family.</td>
<td></td>
<td>34</td>
<td>35</td>
<td>32</td>
<td>31</td>
<td>40</td>
<td>34.4</td>
</tr>
<tr>
<td>advice or pressure from my counselor.</td>
<td></td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>5.4</td>
</tr>
<tr>
<td>the racial make-up of students who attended Tech.</td>
<td></td>
<td>37</td>
<td>29</td>
<td>33</td>
<td>18</td>
<td>27</td>
<td>28.8</td>
</tr>
</tbody>
</table>
Table 10
Reasons Specified by Technical High School Seniors for Attending the Technical School Rather than Their Neighborhood High School in Percentage of Total Responding and by Percentage Responding from Each High School Area of Residence

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Neighborhood School</th>
<th>E</th>
<th>H</th>
<th>L</th>
<th>N</th>
<th>R</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>the type of program I wanted was offered here and not at my neighborhood high school.</td>
<td></td>
<td>94.8</td>
<td>100</td>
<td>94.7</td>
<td>81.0</td>
<td>100</td>
<td>93</td>
</tr>
<tr>
<td>opportunities to participate in the sports programs.</td>
<td></td>
<td>12.8</td>
<td>0</td>
<td>21.0</td>
<td>28.6</td>
<td>15.8</td>
<td>18</td>
</tr>
<tr>
<td>opportunities to participate in the extracurricular activities other than sports.</td>
<td></td>
<td>33.3</td>
<td>0</td>
<td>31.6</td>
<td>28.6</td>
<td>31.6</td>
<td>31</td>
</tr>
<tr>
<td>transportation to and from school was easier.</td>
<td></td>
<td>10.2</td>
<td>0</td>
<td>26.3</td>
<td>42.9</td>
<td>10.5</td>
<td>20</td>
</tr>
<tr>
<td>advice or pressure from my friends.</td>
<td></td>
<td>10.2</td>
<td>0</td>
<td>0</td>
<td>47.6</td>
<td>5.3</td>
<td>15</td>
</tr>
<tr>
<td>advice or pressure from my family.</td>
<td></td>
<td>20.5</td>
<td>100</td>
<td>15.8</td>
<td>33.3</td>
<td>5.3</td>
<td>21</td>
</tr>
<tr>
<td>advice or pressure from my counselor.</td>
<td></td>
<td>2.5</td>
<td>50</td>
<td>5.3</td>
<td>9.5</td>
<td>2.1</td>
<td>9</td>
</tr>
<tr>
<td>the racial make-up of the students who attended Tech.</td>
<td></td>
<td>7.6</td>
<td>50</td>
<td>15.8</td>
<td>33.3</td>
<td>15.8</td>
<td>17</td>
</tr>
<tr>
<td>Reasons</td>
<td>Schools</td>
<td>E</td>
<td>H</td>
<td>L</td>
<td>N</td>
<td>R</td>
<td>Avg. %</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>--------</td>
</tr>
<tr>
<td>the type of program I wanted was offered here.</td>
<td></td>
<td>24</td>
<td>23</td>
<td>25</td>
<td>17</td>
<td>58</td>
<td>29.4</td>
</tr>
<tr>
<td>the opportunities to participate in the sports program.</td>
<td></td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>13</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>the opportunities to participate in extracurricular activities other than sports.</td>
<td></td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>1</td>
<td>6.0</td>
</tr>
<tr>
<td>transportation to and from school was easier.</td>
<td></td>
<td>34</td>
<td>42</td>
<td>34</td>
<td>46</td>
<td>22</td>
<td>35.6</td>
</tr>
<tr>
<td>advice or pressure from my friends.</td>
<td></td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>6.6</td>
</tr>
<tr>
<td>advice or pressure from my family.</td>
<td></td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>4.6</td>
</tr>
<tr>
<td>advice or pressure from my counselor.</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>the racial make-up of students who attended Tech.</td>
<td></td>
<td>11</td>
<td>9</td>
<td>12</td>
<td>4</td>
<td>5</td>
<td>8.2</td>
</tr>
</tbody>
</table>
Table 12

Reasons Specified Most Important by Technical High School Seniors for Attending the Technical School rather than Their Neighborhood High School in
Percentage of Total Responding and
in Percentage Responding from
Each High School Area
of Residence

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Neighborhood School</th>
<th>E</th>
<th>H</th>
<th>L Christmas</th>
<th>N</th>
<th>R % Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>the type of program I wanted was offered here and not at my neighborhood high school.</td>
<td>82.0 100 78.9 71.5 84.2 80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>opportunities to participate in the sports programs.</td>
<td>2.6 0 15.8 9.5 5.3 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>opportunities to participate in the extracurricular activities other than sports.</td>
<td>7.7 0 0 9.5 0 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transportation to and from school was easier.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advice or pressure from my friends.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advice or pressure from my family.</td>
<td>5.1 0 0 9.5 0 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advice or pressure from my counselor.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the racial make-up of the students who attended Tech.</td>
<td>2.6 0 5.3 0 10.5 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 13
Reasons Specified Least Important by Neighborhood High School Seniors for Not Attending an Available Technical High School in Percentage of Those Responding

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Schools</th>
<th>E</th>
<th>H</th>
<th>L</th>
<th>N</th>
<th>R</th>
<th>Avg.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>the type of program I wanted was offered here.</td>
<td></td>
<td>14</td>
<td>11</td>
<td>16</td>
<td>14</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>the opportunities to participate in the sports program.</td>
<td></td>
<td>11</td>
<td>7</td>
<td>12</td>
<td>8</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>the opportunities to participate in extracurricular activities other than sports.</td>
<td></td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>5.2</td>
</tr>
<tr>
<td>transportation to and from school was easier.</td>
<td></td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>2.2</td>
</tr>
<tr>
<td>advice or pressure from my friends.</td>
<td></td>
<td>11</td>
<td>12</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>advice or pressure from my family.</td>
<td></td>
<td>12</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>7.4</td>
</tr>
<tr>
<td>advice or pressure from my counselor.</td>
<td></td>
<td>9</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>the racial make-up of students who attended Tech.</td>
<td></td>
<td>36</td>
<td>47</td>
<td>23</td>
<td>42</td>
<td>43</td>
<td>38.2</td>
</tr>
</tbody>
</table>
Table 14
Reasons Specified Least Important by Technical High School Seniors for Not Attending Their Neighborhood High School in Percentages of Total Responding and in Percentage Responding from Each High School Area of Residence

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Neighborhood School</th>
<th>E</th>
<th>H</th>
<th>L</th>
<th>N</th>
<th>R</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>the type of program I wanted was offered here and not at my neighborhood high school.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.8</td>
<td>5.3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>opportunities to participate in the sports programs.</td>
<td>12.8</td>
<td>100</td>
<td>5.3</td>
<td>14.3</td>
<td>0</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>opportunities to participate in the extracurricular activities other than sports.</td>
<td>5.1</td>
<td>0</td>
<td>10.5</td>
<td>14.3</td>
<td>5.3</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>transportation to and from school was easier.</td>
<td>23.0</td>
<td>0</td>
<td>21.0</td>
<td>14.3</td>
<td>21.1</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>advice or pressure from my friends.</td>
<td>10.3</td>
<td>0</td>
<td>0</td>
<td>9.5</td>
<td>15.8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>advice or pressure from my family.</td>
<td>7.7</td>
<td>0</td>
<td>31.6</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>advice or pressure from my counselor.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10.5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>the racial make-up of the students who attended Tech.</td>
<td>41.1</td>
<td>0</td>
<td>31.6</td>
<td>42.8</td>
<td>42.0</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

SHEVKEY-BELL'S SOCIAL AREA ANALYSIS

1970 CENSUS MEANS OF TRANSPORTATION
Table 15
The Responses of Students When Asked if They Would Like to Attend the Technical School on a Part-time Basis with Extracurricular and Diploma Coming from Their Neighborhood High School

<table>
<thead>
<tr>
<th></th>
<th>E</th>
<th>H</th>
<th>L</th>
<th>N</th>
<th>R</th>
<th>Total</th>
<th>E</th>
<th>H</th>
<th>L</th>
<th>N</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>With transportation provided by the district:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% yes</td>
<td>30</td>
<td>48</td>
<td>42</td>
<td>10</td>
<td>11</td>
<td>68</td>
<td>30</td>
<td>11</td>
<td>10</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>% no</td>
<td>70</td>
<td>52</td>
<td>60</td>
<td>19</td>
<td>11</td>
<td>32</td>
<td>9</td>
<td>19</td>
<td>19</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>If yes to above would you have been interested without transportation provided by the district.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% yes</td>
<td>24</td>
<td>26</td>
<td>30</td>
<td>21</td>
<td>21</td>
<td>49</td>
<td>17</td>
<td>21</td>
<td>20</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>% no</td>
<td>76</td>
<td>74</td>
<td>70</td>
<td>29</td>
<td>29</td>
<td>51</td>
<td>33</td>
<td>70</td>
<td>70</td>
<td>18</td>
<td>9</td>
</tr>
</tbody>
</table>

The Responses of Students at All Schools When Asked to Choose Any School They Would Have Liked to Have Attended

<table>
<thead>
<tr>
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Des Moines, Iowa SMSA
1970 Census

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### Table 18

Means of Transportation
Des Moines, Iowa
1970 Census

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Chi Square  Sig. > .001