

OKLAHOMA PUBLIC SCHOOL ADMINISTRATORS

SUPPLY AND DEMAND

By

JAMES W. SOWERS

Bachelor of Science in Education
Emporia State University
Emporia, Kansas
1970

Master of Science
Emporia State University
Emporia, Kansas
1975

Specialist in Education
Wichita State University
Wichita, Kansas
1982

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
July, 1989

Thesis
1989D
57310
cop 2

OKLAHOMA PUBLIC SCHOOL ADMINISTRATORS

SUPPLY AND DEMAND

Thesis Approved:

A. Kenneth Stern

Thesis Adviser

John Deussen

Kenneth W. Blair

William E. Segall

Norman N. Durham

Dean of the Graduate College

ACKNOWLEDGEMENTS

Thank you to my wife, Chari, for the many times you have been there when I needed encouragement to achieve the goals that we set together, to help me realize the dreams that we dreamed together, and realize that all things worthwhile can be achieved by trust, hard work and lots of love.

To my children, Nicci and Jeff, your willingness to share one year in Stillwater so that my dream could become reality will always be special to me. I hope that all your dreams become reality and memories of this year shall never diminish over time. The joy of your existence shall always be a source of pride for my life.

I shall always be thankful for my committee's encouragement. Dr. Deke Johnson, chairman of the committee, shall always serve as a source of encouragement through his modeling of a positive attitude toward life. Dr. Ken Stern, dissertation advisor, I thank for his encouragement, leadership, and personal friendship during the course of my doctoral studies. His encouragement has kept me from straying off course. Dr. Kenneth St. Clair, committee member, with whom my association during my sabbatical year meant so much, whose collegial approach to my residency served constantly as a reminder to me that professionalism in education is a lifetime commitment. Dr. Bill Segall, committee member, I thank for his input and encouragement during my time of study at Oklahoma State University.

A special thank you shall always be extended to Dr. Tom Karman who encouraged me to extend my thoughts and look toward the future. His support and encouragement shall always be appreciated.

The Oklahoma Public School Research Council and its executive director, Dr. Kenneth St. Clair helped by providing assistance to enable me to do this study. I hope that the data collected will be used by the various member school districts to attract the needed administrators for their districts.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of the Problem	2
Need for the Study	3
Purpose of the Research	6
Research Questions	7
II. REVIEW OF THE LITERATURE	8
Results of Previous Research	13
III. METHODOLOGY	17
Definitions	17
Assumptions	18
Collection of Data	19
Delimitations	21
Analysis of the Data	21
IV. PRESENTATION AND RESULTS OF DATA	23
Practicing Administrator District Tenure	25
Practicing Administrator State Tenure	27
The Number of Administrators by District Tenure	28
The Number of Administrators by State Tenure	28
Oklahoma Administrators by Sex and Ethnic Origin	29
Certified Administrator Demand Questionnaire	32
Projected Increase in Certified Administrators	33
Projected Decrease in Certified Administrators	33
Retirement and Death Data	34
Administrator Change Data	35
Oklahoma Administrator Severance Rate	36
Projected Oklahoma Administrator Replacement and Severance Demand	37
Projected Oklahoma Administrator Death and Retirement Demand	39
Projected Demand for Certified Oklahoma School Administrators	39
Gender of Oklahoma Administrators	41
Ethnic Origin of Certified Oklahoma Administrators	42

Chapter	Page
Highest Degree Achieved by Certified Oklahoma Administrators	43
Oklahoma Certified Administrator Age	44
Administrator Certificates Issued	45
Oklahoma Administrator Certificate Output Increases	45
Projected Output of Certified Oklahoma Administrators	47
Comparison of Actual and Projected Oklahoma Administrator Certificates	48
Projected Supply of Certified Oklahoma Administrators	49
Projected Supply and Demand of Certified Oklahoma School Administrators	51
Projected Oversupply of Certified Administrators	52
 V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	 54
Practicing Oklahoma Administrator Personnel Data	55
Demand for Oklahoma Public School Administrators	57
Supply of Oklahoma Public School Administrators	60
Major Comparisons of Study Differences 1976 to 1988	62
Conclusions	62
Discussion	63
Implications	64
Recommendations	65
 BIBLIOGRAPHY	 68
 APPENDIX A - COVER LETTERS	 72
 APPENDIX B - ADMINISTRATIVE DEMAND QUESTIONNAIRE	 75
 APPENDIX C - DEATH-RETIREMENT INSTRUMENT	 80
 APPENDIX D - CERTIFICATION INSTRUMENT	 82

LIST OF TABLES

Table	Page
I. Practicing Oklahoma School Administrators by Degree	25
II. Oklahoma School Administrators by District Tenure*.	26
III. Oklahoma School Administrators by State Tenure	27
IV. Years of District Tenure of Oklahoma Public School Administrators	29
V. Years of State Tenure of Oklahoma Public School Administrators	30
VI. Percentage of Certified Practicing Oklahoma Administrators by Gender and Ethnic Origin 1987-88	31
VII. Additions and Reductions of Certified Administrators From 1988-1993	32
VIII. Projected Increase in Certified Administrators 1988- 1993	33
IX. Projected Decrease in Certified Administrators 1988- 1993	34
X. Retirement and Death History for Members of the Oklahoma Teacher's Retirement System 1984-1988	35
XI. Public School Administrators Changing School Districts In a Given Year 1987-1988	36
XII. Public School Administrators Leaving Education for the Period 1983-1988	37
XIII. Projected Certified Oklahoma School Administrator Replacement and Severance Rate by Level	38
XIV. Projected Death and Retirement Rate of Certified Oklahoma School Administrators	40
XV. Projected Demand for Certified Oklahoma School Administrators	41

Table	Page
XVI. Gender of Certified Oklahoma Administrators (By Percent)	42
XVII. Ethnic Origin of Certified Oklahoma Administrators By Percentage	43
XVIII. Highest Degree Achieved by Certified Oklahoma Administrators by Percentage	44
XIX. Oklahoma Administrative Certificates Issued	46
XX. Oklahoma Administrator Certificate Output Increases	47
XXI. Projected Output of Certified Administrators by Oklahoma Preparation Institutions	48
XXII. Comparison of Actual and Projected Oklahoma Administrator Certificates 1983-1988	50
XXIII. Projected Supply of Certified Oklahoma Administrators	50
XXIV. Projected Supply and Demand of Certified Oklahoma School Administrators	51
XXV. Projected Oversupply of Certified Oklahoma Administrators for the Five Year Period 1988-1993	53

CHAPTER I

INTRODUCTION

School leaders today are confronted with rapidly mounting demands for greater accountability in educational efforts at every level of instruction. This challenge can and will be met. The steadily improving quality and character of educational leadership is the solid basis upon which our school programs will become more beneficial. The people who are most likely to improve education are men and women of intelligence, enthusiasm, commitment, and suitable preparation whose motivation is directed toward dedicated service (Doll, 1972, p. 2). There is little to indicate that his statement isn't as viable in 1988 as it was when written 16 years ago.

The supply and demand of administrators has a strong reflection and bearing upon meeting those criteria being demanded by the public. It is essential that qualified administrators be available to accept administrative positions when they become available. Seifert (1976, p. 1) states that the availability of competent, well-trained administrators is paramount when discussing the uncertainties affecting education. Thus, it is essential that the supply and demand for qualified administrative talent be known. This supply will have a direct bearing upon and could affect the quality of education in Oklahoma.

Difficulties in gathering data in regard to supply and demand have been summarized by Hooker (1976, p. 1). Both supply and demand are nebulous, elastic concepts, having many of the properties of an invisible gas which expands, contracts and takes different shapes as the result of external forces. Scientific investigation of these concepts without this assistance of sophisticated controls and techniques is, therefore, hazardous to say the least, all of which may explain why investigators have reported few studies of this nature.

Statement of the Problem

The developing teacher shortage, according to current publications, promises to be the most severe in our nation's history. Some drastic adjustments will need to be made to secure classroom personnel. Antoine M. Garibaldi (1986, p. 3) concurs with this belief by stating that the future of education in this country will be determined in large part by the quantity and quality of teachers in the classroom. Many school systems, particularly in the South and West, are confronted with critical teacher shortages. Fewer college graduates are entering the teaching profession and a quarter of the teaching force is expected to reach retirement age by the turn of the century.

During the late 1970's the message given to many considering education was that there was an over supply of teachers. Anne Jarmu Arnold (1983, p. 26) stated that the annual supply of new teaching graduates dropped from 37 percent of all bachelor's degrees awarded in 1971 to only 17 percent of those presented in 1980. And it is predicted that the 1985 supply of teachers would meet only 85.1 percent of the demand nationwide.

Mary Elliff (1935, p. 1) stated that before any plan can be devised for controlling the relationship between supply and demand in the teaching profession, it is essential to know what the annual supply and demand actually are. This same information could be applied to public school administration supply and demand.

Seifert (1976, p. 2) stated that it is imperative that prospective administrators be advised of the supply and demand for their services. A plan should be developed which would allow prospective administrators to view the job market and receive counseling from advisors in educational administration at institutions of higher education. The greatest problem in doing this is to assess accurately the supply and demand for administrators and provide these data to the aspiring administrators. This information is essential to aid prospective administrators make good career choices and help the profession retain its accountability.

According to Clifford Hooker (1973, p. 46):

The value of a study of this nature lies in the guidance which it provides for policy makers. Persons responsible for setting policies respecting both training programs and the state credentialing function should be aided in their work if a supply and demand study is to be anything more than an academic exercise.

Need for the Study

In looking at the question of administrator supply and demand, attention should be focused on the administrator manpower existing at the state level. The lack of accurate forecasting methods about the supply and demand of administrators indicates a need for collecting data about where the supply will come from, the supply itself and the

demand for the supply. An analysis of these data will reveal what is happening in Oklahoma and what trends are for the future.

The major sources of supply for administrators in Oklahoma were the state's colleges and universities and those institutions granting degrees or certificates in the adjoining states. Very little attention is usually given by the institutions to the total number of administrators prepared to accept the available positions in education.

Several key issues have arisen in Oklahoma in the past few years which will have a direct bearing upon the supply of administrators in the state. The "retirement window" has, by legislative decree, allowed school administrators the opportunity to retire at an earlier age and receive increased benefits. This along with greater accountability demanded by the legislature and populace of this state has made retirement an option available to administrators and other school personnel alike.

Rising costs and lack of adequate funding for education have increased pressure on those placed in charge of directing the educational districts. For many, the opportunities to leave education as dollars and support shrink will leave a void in leadership at all levels of education.

Administrative preparation programs are expensive for a state system of higher education to operate. Currently institutions in Oklahoma are charged with the responsibility of administrator preparation. A question could be raised whether there is adequate control placed on these institutions to insure an adequate supply of properly certified administrators. The current number of programs should be

examined to see if they should be increased or decreased to provide an adequate supply of qualified administrators in Oklahoma.

Other factors which enter into the overview that affect supply of administrators are age, gender, race, and previous experience. Hooker (1973, p. 1) states that a detailed look at school administrators, their age, sex, tenure, level of preparation, and certification provides an accurate picture of school administrators for the next several years.

Many administrators are nearing retirement age or will reach retirement age in the next few years. Many will choose or have chosen the "retirement window" or will retire soon.

Districts now have the opportunity to have the superintendent serve in a dual capacity as superintendent and principal, eliminating some positions. This legislated action will cause districts to look at the economic reality of combining positions to save funds in times of economic shortages.

Women and minorities in the past have not been encouraged to seek administrative positions. Increased numbers of minority students present in our schools has created the need for more minority placement of administrators in schools. Greater emphasis is placed on districts to comply with affirmative action programs that work to insure equity in hiring practices. Adequate numbers of women and minorities are not encouraged to prepare for these positions. The recruitment of women and minority groups into preparation programs must be continued (Martin, p. 91).

The Oklahoma administrator testing program could have an effect on supply since the pass rate is currently less than 70% of the population

taking the examination. This could restrict the overall supply of administrators in Oklahoma as well as other states employing this testing procedure. Other states employing a similar examination will restrict their own administrative supply and may reduce the supply of administrators who cross state lines seeking administrative employment.

The demand for public school administrators will focus on the available jobs. Factors affecting this demand will focus on retirements, attrition, and the addition or deletion of current funded position in Oklahoma schools. This will provide the basis for composing the data and answer the question of "What is the supply and demand for school administrators in Oklahoma?"

Finally, this study will help provide a method to be used to ascertain further information in the years to come of the supply and demand of public school administrators in Oklahoma. In 1976, Edward Seifert laid the groundwork for this type of study by assessing public school administrator supply and demand.

Purpose of the Research

This research was conducted to measure the supply of public school administrators and relate it to the demand. An accurate data base must be generated to allow sufficient data for prospective administrators to be counseled properly and state certification formulas to be generated accurately so that demand will be met by qualified applicants.

Currently, information is not readily available to compile an accurate forecast of the supply picture as it relates to public school administration and the projected demand. Much of this information is

on file in the Oklahoma State Department of Education but cannot be processed by the current retrieval system.

Research Questions

This study addressed the following questions about supply and demand of administrators in Oklahoma:

1. What were the personal, academic and professional demographics of administrators currently holding the standard or provisional certificate at each level (i.e. superintendent, secondary principal, and elementary principal)?
2. What was the current number of, and demand for, administrators by level (i.e. superintendent, secondary principal, and elementary principal)?
3. What was the number of standard or provisional certificates issued by institution in the last five years by year?
4. What was the number of anticipated changes by position and level of administrators in Oklahoma public schools?
5. How was the status of the administrator supply and demand of 1976 similar to, or different from, the period 1983-87?

CHAPTER II

REVIEW OF THE LITERATURE

The responsibility for the operation of a school district falls squarely upon public school administrators' shoulders in the various states. Therefore, administrators must be capable and knowledgeable about many facets within the educational realm. They must be both specialists and generalists as they perform their many functions. Even though the task is very challenging every year teachers leave the classroom to accept administrative positions. As Carlson (1972, p. 8) stated, "To be a school superintendent, according to the regulations in virtually every state, one must have been a classroom teacher." Therefore, to study supply and demand for administrators, one must follow the sequence of ascension to the superintendency.

Seifert (1976, p. 8) stated that supply and demand situations will vary from state to state based on population increases or decreases and the funding practices at the state level. The entire manpower picture, which includes teachers and administrators, must be adjusted to meet the demand variable. Today most observers have come to accept the view that the market for highly educated persons works reasonably well in adjusting the supply to changing demand conditions according to Carter (1976, p. 1).

Regier (1972, p. 11) believed that it is essential for faculty members and counselors to be extremely careful in predicting future job opportunities. Regier (1972, p. 36) proposed establishing a national agency that will collect accurate information from all fifty states to report current teacher supply-demand information as well as forecasting future trends. The Association for School, College and University Staffing Report (Akin, 1987, p. 20) reflects that opportunities for last year's teacher education graduates are better than the previous year and much better than four years earlier.

McCormick (1987, p. 3), however, stated that changes in demographics, state legislation, and other attitudes of young professional educators are fueling what could become an exodus from school leadership positions. Some believe that this exodus threatens the quality of leadership in American schools. Signals of change are reflected in estimates from the American Association of School Administrators, the National Association of Secondary School Principals, and the National Association of Elementary School Principals. They predict that between half and three-fourths of all superintendents are within seven years of retirement and half of all principals will retire within five to eight years.

According to the Educational Research Service (1984, p. 2) the average age of principals at all levels was 46, with 38 percent over 50 years of age. Superintendents' average age was 55 and over 70 percent of them are expected to retire within seven years. According to McCormick (1987, p. 5) schools will witness further exodus, but it need not cause a crisis. This may be the window of opportunity which women and minorities have been waiting for if they are prepared properly.

Women and minorities in educational administration are a rare asset. According to Ortiz (1982, p. 24) women enter the school organization in great numbers as teachers. However, instead of advancing within the organization, a division of labor has occurred to contain females in teaching and to allow males upward mobility. In most educational settings women instruct, while men administer.

Women aspiring to move up are often placed in specialist roles rather than administrative line positions. When given the opportunity for administrative advancement they are given elementary principalships. The elementary principalship according to Ortiz (1982, p. 71) serves to retain women in those positions most conducive to passivity.

Tokenism is another aspect that limits women from actively seeking administrative positions. Being token forces participation in such a way as to provide "contrast-polarization and exaggeration of differences within the school district (Kanter, 1977, p. 211). Many choose to forego the conflict and generalizations made about those who proceed them. Therefore, women must change in two fundamental ways as they advance through the hierarchy, according to Ortiz (1982, p. 77). They must change in regard to cultural socialization and in regard to the demands placed by the new work setting.

Few minorities are in educational administration. Those who are serving in this capacity are usually concentrated in a district where their ethnic group prevails. Minorities are usually placed in minority schools, urged to teach in those areas connected to their ethnic background, and in essence are used to maintain a linkage between the ethnic group and the school district (Ortiz, 1982, p. 116). Some minorities are placed in director positions in charge of special

projects, thus missing the opportunity to gain a line position in administration.

Minority principals are usually placed in schools with minority populations. Principals are placed in schools to serve as role models for minority pupils. Placed on a pedestal, they are set aside, perceived and treated differently because of their schools' uniqueness. The apparent tendency of placing minority administrators in minority schools leads to continuing separation and limitation for administrative advancement.

Another factor affecting supply is the place-bound versus career-bound administrator. Many individuals may have the credentials to fill positions that are vacant but are tied to a specific area for a multiplicity of reasons. Some may be tied because of their spouse's employment, minorities because of strong attachments to their ethnic community, and yet others because of family and personal commitments. Some aspiring administrators according to Carlson (1972, p. 39) continue to work in the school system believing that one day the position will be theirs. For them, it may be a wait in vain.

Kuh, et. al. (1983, p. 1) stated that the negative consequence of a disproportionate supply/demand ratio among school administrators can possibly be avoided if a data-based portrayal of the market situation were to be made available to interested stakeholders (e.g. potential administration students, employed administrators, preparation program faculty, state department personnel).

Hooker (1976, p. 2) suggests that there are three sources of supply to meet replacement needs and fill new positions. First, there are the incumbents (practicing administrators), second are the ready

reserves (teachers fully trained and certified awaiting their opportunity). The final sources are those administrators from neighboring states. This potential supply of administrators is not always easy to identify.

The demand side is tightly controlled in administration by the available positions to be filled. School administrators make up only 6.6 percent of the total employees in elementary and secondary schools according to Bridgman (1988, p. 2). School administrative positions have grown modestly, says Scott Thomson, executive director of NASSP, but the reason is the use of programs, many of them federally mandated, to support many special interest groups.

Demographics affect the supply and demand and employment situation in the United States. Arnold (1983, p. 25) stated that demographics are the most influential factor affecting teacher education: Where there are children, there are schools and a demand for teachers. Many school systems, particularly in the South and West are confronted with critical teacher shortages. Fewer college graduates are entering the profession and a quarter of the teaching force is expected to reach retirement age by the turn of the century, according to Garibaldi (1986, p. 23). Applegate (1982, p. 565) stated that the number of new teacher graduates in the South and Southwest has also declined steadily since the 1970's. With the exception of Arkansas, Missouri and one report from Texas, the trend in this region is for continued shortages in the next five years.

Results of Previous Research

Many articles have appeared in professional journals concerning teacher supply and demand. However, little attention has been focused on the job market for prospective administrators (e.g. superintendents, principals, and assistant principals).

Seifert (1976, p. 14) stated that the supply of public school administrators is a nebulous and elastic variable with its roots buried deep in tradition. As prospective administrators prepare for these positions, they discover the need for more and better preparation in management technique. According to Carter (1976, p. 75), enrollment and degree projections are difficult at best at the graduate level, for there are differing trends in various disciplines in response to different labor market conditions and changing degrees of intellectual excitement and apparent relevance.

Implicit in the demand variable is the uncertainty of job security and the increasing demands placed on administrators by Boards of Education (Brautigam, 1973, p. 8). The complexity of the demand equation according to Seifert (1976, p. 15) is apparent as school monies affect program expansion and school organization. Each variable is dependent upon other variables, and the variables tend to follow circular paths as they chase each other around the administrative demand variable.

For example, public school administration in West Virginia is a man's world. In 1978, less than 20 percent of the administrators in West Virginia were women. None of the women were superintendents and only three were assistant superintendents according to Martin (1979, p. 85). The way to the top of the public school hierarchy was obvious,

but changing. The modal route was to select a home county and become a local upward-mobile education professional.

It is difficult, however, to arrive at a figure for the supply of new administrators to relate to demand. In most cases, educational administrators come from the ranks of teachers. To establish the magnitude of the administrator supply, it would be necessary to determine how many teachers meet the certification requirement for becoming an administrator. This is complicated, in that states differ in the criteria required for administrators, and the criteria differ from one type of administrative post to another. Data on the number of teachers who meet the requirements for educational administrators, however, do not currently exist (LEA, 1977).

Although the supply of teachers eligible to be administrators is not known, it is clear in nearly all cases, when shortages of administrators by school district were examined, the school districts were able to find qualified candidates to fill position openings. "Very few shortages were experienced in the efforts to fill administrative positions with qualified candidates, and these few occurred primarily for principals and vice-principals" (NCES, 1977, p. 9).

McCarthy (1981, p. 23) stated that professionals engaged in educational administration preparation may also need to modify what seem to be parochial orientations. In the next decade, preparation programs that are sensitive to pluralistic issues may have more success in placing graduates in states where a demand for administrators exists.

The apparent over supply of building administrators has implications for policy makers in state and local education agencies.

Monetary incentives for administrators in rural and urban districts might be included in state school funding schemes.

When the supply exceeds the demand, efforts to raise entrance requirements usually are accelerated. It may be an appropriate time for the profession to identify the competencies necessary for satisfactory administrative performance and to reflect them in certification requirements.

For example, Martin (1979, p. 29) reported that a substantial portion of the currently employed administrators in West Virginia were not properly credentialed even though there was an over supply of certified administrators in the state. Such practices might become very difficult to justify in the future.

As competition becomes more keen for administrative openings, criteria for judging applicants for available positions may become more explicit, and perhaps more stringently applied. Definitive standards for judging satisfactory performance may be sought in order to document whether currently employed administrators evidence professional competencies considered necessary for satisfactory job performance (Hersey, 1977). Changes in the supply/demand picture also have implications for affirmative action efforts. In the McCarthy study (1981, p. 26), an increase in the proportion of women preparing for administrative roles is indicated. Yet the male/female ratio in the supply pool appeared quite discrepant from reports of male and female representation in the field. Assuming that the data reported reflect accurately the male/female ratio in the supply pool, a declining demand for school administrators may have a disproportionate impact on women.

Women, as well as minorities, may be disproportionately affected by retrenchment efforts. Women and minorities are over represented among recent hires according to McCarthy (1981, p. 30), and therefore may be the first released as positions are eliminated. The use of other criteria in addition to seniority for reducing personnel as well as alternatives to staff reductions, such as incentives for early retirements, should be explored as to their utility for renewal of the profession. Care is required, however, to ensure that such a policy does not promote tokenism or serve to screen out minorities and women from administrative appointments.

A report by Frankee (1978, p. 28) projected United States public school enrollments and compared them to teacher supply and demand for 1978-86. This same procedure for school administrator staffings was done by Education Research Service, Inc. (1979) which published a report to provide school administrators and school board members with accurate, timely, and reliable data on school systems, allowing comparison among school districts of similar enrollment size and expenditure level. This report pointed to a direct relationship between student enrollment and administrative staffing.

Kuh stated (1983, p. 2) that the supply of certified school administrators remained relatively constant between 1975 and 1980. Central office staff were added during the period; the number of available building administrator positions declined. In some areas, an over supply of certified staff exists. The apparent surplus of certified school administrators has implications for preparation programs, staffing, and retirement policies, and affirmative action efforts.

CHAPTER III

METHODOLOGY

This study attempted to explain the relationship between the supply and demand of Oklahoma public school administrators. The many facets of the administrator supply-demand relationship were identified and investigated, through procedures explained in this chapter.

Definitions

The following terms and definitions were important to this research since the latter was used to provide consistency for this study.

1. Public School Administrator: Any person certified by the Oklahoma Department of Education as a school administrator and employed by a Board of Education as such.
2. Administrator supply: The number of persons certified and eligible to assume public school administrative positions in Oklahoma.
3. Administrator demand: The number of positions that require administrative certification in Oklahoma.
4. Oklahoma Standard Administrator Certificate for the Superintendency: This certificate requires thirty semester hours of graduate work in school administration past the master's work in school administration and other work appropriate to school administration

beyond the work required for the provisional certificate. One full year of experience as a school superintendent or assistant superintendent is required (OSDE, 1986, p. 92).

5. Oklahoma Provisional Administrator Certificate for the Superintendency: This certificate applicant shall have completed a minimum of twenty-four semester hours of coursework which is applicable toward satisfying the requirements for the standard certificate (OSDE, 1986, p. 93).

6. Oklahoma Standard Administrator Certification for the Principal: This certificate includes sixteen semester hours of graduate coursework in school administration beyond the work required for the provisional certificate. One full year of experience as a principal or assistant principal is required (OSDE, 1986, p. 90).

7. Oklahoma Provisional Administrator Certification for the Principal: This certificate shall include completion of all work for the master's degree (OSDE, 1986, p. 91) and have completed a minimum of eighteen hours of graduate work which are acceptable in satisfying the requirements for the standard certificate.

Assumptions

Certain basic assumptions were made in pursuing this study. These assumptions were made by Seifert (1976, p. 21), and will be used in this study.

1. It was assumed that interval scale statistical techniques will provide accurate and orderly data for comparison of Oklahoma Public School Administrator supply and demand.

2. It was the responsibility of the educational administrator preparation institutions to provide qualified administrators for each administrative position in Oklahoma.

3. It was assumed that all administrators in Oklahoma meet the standards for a provisional or standard certificate in Oklahoma.

4. It was assumed that public schools were maintained by the state to provide equal opportunity for all children and thus equally qualified administrators are available for employment by all school districts.

5. It was assumed that a better adjustment between school administrator supply and demand would benefit public school districts by requiring a better selection process for Oklahoma public school administrators.

Collection of Data

The information concerning the supply and demand of administrators was gathered from the Oklahoma State Department of Education certification and personnel files, the Oklahoma Retirement System and Oklahoma public school administrators.

Data gleaned from the certification files yielded information about those individuals holding a valid administrator's certificate. The data included age, sex, professional preparation, highest degree, institution granting the certification, type of certificate held, and the original specialty of certification.

To determine the above mentioned structure of administrators in Oklahoma, it was necessary to select randomly a sample of those individuals holding provisional or standard certificates. A list of

administrators was taken from the State Department of Education certificate files using a table of random selection of numbers (Dixon, 1957, p. 367). To keep the file search simple and to get a 10 percent sample, the table on page 366 was used to select the population to be surveyed. This helped gain entry into the personnel file folder at the State Department which contained the most accurate data available about individuals holding standard and provisional certificates currently employed in Oklahoma public school administration.

Information concerning tenure and total years of experience in Oklahoma was taken from the personnel file of the Oklahoma State Department of Education to help in determining the replacement rate needed at the various levels in public school administration.

The most accurate assessment of those administrators who will leave during any given period was taken from the actuarial tables of the Oklahoma Public School Retirement system. Since this information reflected the total population of public school personnel, this base was considered to be the most accurate information concerning death and retirement for public school administrators.

All of the information mentioned was used to determine the supply variable of Oklahoma public school administrators. This variable according to Seifert (1976, p. 24), was one part of the relationship which affected the employability of future school administrators at all levels.

Gaining information for the demand variable was accomplished by the use of a questionnaire which was developed and sent to selected Oklahoma public school superintendents for their comments and reactions. Their selection was random and was composed of Chief School

Administrators whose districts were members of the Oklahoma Public School Research Council. This study also was designed to determine the validity and reliability of the instrument.

A questionnaire was then sent to each of the 457 Superintendents in independent school districts in Oklahoma. Their responses provided data for projected demand for school administrators and have provided an accurate base for determining positions in the administrative job market.

Delimitations

The comparison of Oklahoma public school administrator supply and demand was limited by the following:

The research was limited to individuals holding valid provisional or standard certificates in school administration in Oklahoma.

Analysis of the Data

Public school administrator supply and demand was reported in statistical terms by use of the interval scale (Seifert, 1976, p. 25). According to J. P. Guilford (1975, p. 22), the essential requirement for an interval scale is equality of units, which means the same empirical distance on some real continuum. Interval scale measurement was used for most of the purposes for this study.

Analysis was done through displaying the data in charts, tables and graphs. The mean was used to show that equal differences in numbers corresponded to equal differences in the amounts of objects among the different type of data collected.

Seifert (1976, p. 25) advocated the use of a formula that would determine the mean for the ungrouped data that would provide a more accurate picture of the data gathered. To determine the confidence interval for a large sample (30 or more cases), it was necessary to calculate the standard error of the mean:

$$S_m = \sqrt{\frac{x^2}{N(N-1)}}$$

The major portion of the data was reported in percentages of the total population. Having access to the total population made it easier to report the results in percentages. Generalizations and comparisons about the supply and demand of administrators in Oklahoma could thus be made in an easy and understandable manner.

CHAPTER IV

PRESENTATION AND RESULTS OF DATA

The supply of and demand for certified administrators was revealed by the investigation of several sources of information. The data are presented in three sections in this chapter: (1) personnel data related to the current practicing administrator, (2) information concerning the existing and projected future demand for certified school administrators, and (3) the existing and predicted future supply of certified school administrators.

The majority of the certified administrator personnel information was taken from the personnel report of the Oklahoma Department of Education. Data concerning the demand of standard or provisionally certified administrators included: administrator numbers, degrees held, district tenure, state tenure, sex, and ethnic origin.

The second section, demand, related the number of present positions requiring a standard or provisional school administrator's certificate. The sources for certified Oklahoma administrator demand were taken from the Oklahoma Department of Education personnel report. Retirement and death data were gathered from the files of the Oklahoma Teacher's Retirement System.

In determining the addition or reduction of Oklahoma administrators as well as the severance rate, a 12 item questionnaire was sent to

the superintendent of schools in the 457 independent school districts. Appendix B contains the 12 item questionnaire which was initially returned by 60.3 percent, or 276, of the school districts sampled. A follow up letter was sent to 181 non-respondents to the first mailing. The return rate for the second mailing was 42.6 percent based on 77 responses. The total of the response was 77.2 percent of the 457 questionnaires initially sent to Oklahoma school superintendents.

The certified supply variable was gathered from the Oklahoma State Department of Education. Information in relation to the supply of standard or provisional administrator certification was reflected by age, ethnic origin, sex, and highest degree held.

The supply and demand data were set up and analyzed to produce a projection of administrator need in the State of Oklahoma. These projections allowed a future look at available administrative positions to persons being certified in public school administration.

The Oklahoma school administrator group was composed of 2,314 members. The master's degree was the most often reflected degree with 91.7 percent of the administrators holding the minimum degree for certification. The second most held degree was the doctorate which composed 6.6 percent of the total administrator population. The specialist degree was held by 1.7 percent of the remaining administrator population, understandable since neither certification nor employing school districts require it.

Superintendents and assistant superintendents held the highest percentage of degrees beyond the masters. The doctor's degree was held by 19.66 percent of the assistant superintendents and by 14 percent of

the superintendents. Table I reflects the number of practicing certified school administrators by level and degree in Oklahoma.

TABLE I
PRACTICING OKLAHOMA SCHOOL ADMINISTRATORS
BY DEGREE

Position	Masters	Specialist	Doctorate	All Degrees
Superintendent	366	27	64	457
Assistant Superintendent	93	1	23	117
Secondary Principal	609	5	21	635
Assistant Secondary Principal	295	1	13	309
Elementary Principal	708	6	30	744
Assistant Elementary Principal	50	0	2	52
TOTALS	2121	40	153	2314

Practicing Administrator District Tenure

The 117 assistant superintendents had more tenure in their present district, with a mean of 13.87 years. The largest group of administrators, elementary principals, had a district tenure of 12.85 years followed closely by the assistant secondary principals with a tenure of 12.67 years.

Superintendents had the fewest years of district tenure with a mean of 8.92 years. Table II reflects the district tenure of Oklahoma

school administrators. The 2314 practicing administrators had a mean district tenure of 11.36 years.

TABLE II
OKLAHOMA SCHOOL ADMINISTRATORS
BY DISTRICT TENURE

Position	Masters \bar{X}	Specialist \bar{X}	Doctorate \bar{X}	All \bar{X}	N
Superintendent	9.24	9.15	7.00	8.92	457
Assistant Superintendent	14.05	22.00	12.78	13.87	117
Secondary Principal	10.50	7.80	9.67	10.45	635
Asst. Secondary Principal	12.77	5.00	11.00	12.67	309
Elementary Principal	12.97	6.67	11.52	12.85	744
Asst. Elementary Principal	9.64	0.00	2.00	9.35	52
TOTALS	11.56 N=2121	8.83 N=40	9.40 N=153	11.36 N=2314	

The 23 Assistant Superintendents holding the doctorate degree had a district tenure of 12.78 years. This was the longest tenure of any group of administrators. They also had the longest district tenure of those holding the masters degree with a district tenure of 14.05 years followed by the elementary principals with a district tenure with a mean of 12.97 years.

The Superintendents holding the doctorate had the least district tenure with a mean 8.92 years in their present district. Administrators holding a specialist degree reflected a smaller mean, however the

elementary principals category, secondary principals and assistant secondary principals had six, five and one member respectively.

Practicing Administrator State Tenure

The state tenure average for all practicing school administrators was 17.10 years of service to the public schools of Oklahoma. The assistant superintendents' category averaged 21.10 years of state tenure. This is the longest tenure for any of the administrator categories comprising more than ten members. The second highest category was that of superintendents with a mean of 18.38 years of state tenure. Table III indicated the state tenure of Oklahoma school administrators.

TABLE III
OKLAHOMA SCHOOL ADMINISTRATORS
BY STATE TENURE

Position	Masters \bar{X}	Specialist \bar{X}	Doctorate \bar{X}	All \bar{X}	N
Superintendent	19.62	17.15	17.55	18.38	457
Assistant Superintendent	21.18	22.00	20.74	21.10	117
Secondary Principal	16.86	11.40	15.29	16.77	635
Asst. Secondary Principal	16.62	12.00	14.54	16.52	309
Elementary Principal	16.71	6.67	14.67	16.55	744
Asst. Elementary Principal	12.28	0.00	10.00	12.19	52
TOTALS	17.27 N=2121	14.85 N=40	16.80 N=153	17.10 N=2314	

The 93 assistant superintendents holding a masters degree had the longest state tenure with a mean of 21.18 years. Superintendents followed with a mean of 19.62 years of state tenure. This was followed by the secondary principals with a mean state tenure of 16.864 years.

The assistant elementary principals had the least state tenure of all the administrative with a mean of 12.28 years of state tenure followed by the assistant secondary principals holding a doctorate degree who had a mean state tenure of 14.67 years.

The Number of Administrators by District Tenure

Table IV indicated that 209, or 32.9 percent, of the secondary principals in Oklahoma had between one and five years district tenure. The data also show that this cell has the largest number of administrators with 658, or 28.4 percent, having five or fewer years district tenure. The second largest category was that of the superintendents with 202 members, or 44.2 percent, in the one to five year tenure cell. Of the 2314 administrators, 1633, or 70.5 percent, have 15 or fewer years of tenure in their present district.

The Number of Administrators by State Tenure

The state tenure of administrators revealed that the 16-20 year tenure cell had the largest population. The largest group in this cell was the elementary principals with 183 members, or 30.3 percent. They were followed closely by the secondary principals with 180 members, or 29.7 percent, of the cell. Table V, on page 30, indicated the composite of Oklahoma state tenure for administrators.

TABLE IV
YEARS OF DISTRICT TENURE OF
OKLAHOMA PUBLIC SCHOOL
ADMINISTRATORS

Position	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 and up	N
Superintendent	202	89	73	47	23	16	3	3	0	1	457
Assistant Supt.	19	32	23	16	12	8	5	2	0	0	117
Secondary Principal	209	132	129	82	56	23	2	2	0	0	635
Asst. Secondary Principal	56	69	84	53	32	11	4	0	0	0	309
Elementary Principal	156	158	159	143	84	42	1	1	0	0	744
Asst. Elementary Principal	16	12	15	8	1	0	0	0	0	0	52
TOTALS	658	492	483	349	208	100	15	8	0	1	2314

Oklahoma Administrators by Sex and Ethnic Origin

The practicing Oklahoma school administrator population was primarily a male caucasian group. This group comprised 76.1 percent of the total administrator group. The second largest group was the female caucasian, comprised of 16.55 percent of the administrators. The third largest group was made up of black male administrators who had 75 members, or 3.24 percent of the total population.

Table VI, on page 31, indicated that males dominate the superintendency in Oklahoma, comprising 98.03 percent of that category.

Nine females, or 1.97 percent, of that category make up the remainder of the superintendent population.

The largest female population was in the elementary principal category where 262 women were employed, comprising 35.23 percent of the elementary principals. This female category was comprised of 31.85 percent caucasian, 2.84 percent black, and 0.54 percent American Indian.

TABLE V
YEARS OF STATE TENURE OF
OKLAHOMA PUBLIC SCHOOL
ADMINISTRATORS

Position	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 and up	N
Superintendent	20	34	82	131	91	68	24	6	0	1	457
Assistant Supt.	2	9	21	29	23	17	8	7	1	0	117
Secondary Principal	26	88	169	180	103	52	13	3	1	0	635
Asst. Secondary Principal	16	39	92	75	52	25	8	2	0	0	309
Elementary Principal	37	104	180	183	146	73	16	5	0	0	744
Asst. Elementary Principal	6	13	19	8	5	1	0	0	0	0	52
TOTALS	107	287	563	606	420	236	69	23	2	1	2314

The second largest ethnic group was blacks. The black administrator group was composed of four superintendents, five assistant superintendents, 31 secondary principals, 34 assistant secondary

principals, 39 elementary principals and three assistant elementary principals.

TABLE VI
 PERCENTAGE OF CERTIFIED PRACTICING OKLAHOMA
 ADMINISTRATORS BY GENDER AND
 ETHNIC ORIGIN
 1987-88

	Am. Indian		Asian		Black		Caucasian		Hispanic	
	No.	%	No.	%	No.	%	No.	%	No.	%
Superintendent										
Male	12	2.63	1	0.22	4	0.88	431	94.31	0	0
Female	1	0.22	0	0	0	0	8	1.75	0	0
Assistant Superintendent										
Male	3	2.56	0	0	4	3.42	95	81.20	0	0
Female	0	0	0	0	1	0.85	14	11.97	0	0
Secondary Principal										
Male	10	1.57	0	0	23	3.62	554	87.24	0	0
Female	0	0	0	0	8	1.26	39	6.14	1	0.16
Assistant Sec. Principal										
Male	6	1.94	2	0.65	25	8.09	209	67.64	0	0
Female	1	0.32	0	0	9	2.91	57	18.45	0	0
Elementary Principal										
Male	11	1.48	0	0	18	2.42	453	60.89	0	0
Female	4	0.54	0	0	21	2.82	237	31.85	0	0
Assistant Elem. Principal										
Male	2	3.85	0	0	1	1.92	19	36.54	0	0
Female	0	0	0	0	2	3.85	28	53.85	0	0
Total Male	44	1.90	3	0.13	75	3.24	1761	76.10	0	0
Total Female	6	0.26	0	0	41	1.77	383	16.55	1	0.04
Grand Total	50	2.16	3	0.13	116	5.01	2144	92.65	1	0.04

The fifty Indian administrators comprised 2.16 percent of the total practicing administrator population. This group was comprised of 12 superintendents, three assistant superintendents, 10 secondary principals, six assistant secondary principals, 11 elementary principals and two assistant elementary principals.

Certified Administrator Demand Questionnaire

Of the 353 responding Oklahoma school superintendents 70, or 19.83 percent, indicated they will add administrators in the period 1988-1993. In this same time frame, 15 districts, or 4.2 percent of the districts, will reduce numbers of administrators. However, 80.17 percent of the districts will not add personnel, while 95.8 percent will not reduce administrative positions. Thus, 75.9 percent of the districts will not add or reduce personnel. Table VII indicated this information.

TABLE VII
ADDITIONS AND REDUCTIONS OF CERTIFIED
ADMINISTRATORS FROM 1988-1993

	Number of Districts	% of N (N=353)
Will add certified administrators	70	19.83
Will <u>not</u> add certified administrators	283	80.17
Will reduce certified administrators	15	4.20
Will <u>not</u> reduce certified administrators	338	95.80
Will neither add nor reduce certified administrators	268	75.90

Projected Increase in Certified Administrators

In the five year period from 1988 to 1993, an increase of 115 new administrative positions have been projected by the respondents to the demand questionnaire. The category showing the largest increase was that of elementary principals. The respondents projected an increase of 50 positions.

The respondents projected a 4.8 percent increase in the number of secondary administrators. This amounted to an increase of 45 positions for the period ending in 1993. The superintendent category, which includes superintendent and assistant superintendent, reflected a projected increase of 20 positions, or 3.5 percent, for the period 1988 to 1993. Table VIII reflected the yearly projected increase of administrators by level and year.

TABLE VIII
PROJECTED INCREASE IN CERTIFIED ADMINISTRATORS
1988-1993

Certification	88-89	89-90	90-91	91-92	92-93	Total	%
Superintendent	9	3	6	2	0	20	3.5
Secondary	16	16	12	0	1	45	4.8
Elementary	15	17	9	2	6	50	6.3

Projected Decrease in Certified Administrators

The superintendents responding to the questionnaire projected a decrease of 31 administrative positions. This reflected a decrease of

16 secondary personnel. This was 1.7 percent decrease in positions for the period ending in 1993.

The elementary principal category reflected a 1.51 percent decrease or a total position loss of 12. The category reflecting the least decrease was that of the superintendency where only three positions, or a .63 percent decrease, was reflected. Table IX illustrates the projected decrease in administrative positions by level and year of anticipated reduction.

TABLE IX
PROJECTED DECREASE IN CERTIFIED ADMINISTRATORS
1988-1993

Certification	88-89	89-90	90-91	91-92	92-93	Total	%
Superintendent	2	1	0	0	0	3	.63
Secondary	15	0	1	0	0	16	1.70
Elementary	9	1	1	0	1	12	1.51

Retirement and Death Data

The projection of public school administrator demand was shown in the retirement and death rates of the 83,000 members of the Oklahoma Teacher's Retirement System. The retirement and death rates apply to all members of the system regardless of their positions in the public schools of Oklahoma. Public school administrators are members of the retirement system and come under the retirement and death rates of the active membership. The data gleaned from Table X showed the total retirement in the five year's time span from 1984 to 1988. Of 8276

members, a mean of 1655.2 teacher-members retired. The aforementioned rate amounted to 1.96 percent of the total retirement membership. The retirement rate showed a fluctuation from a low of 0.75 percent retirements in 1985 to a high of 4.1 percent in 1986.

The death rate for members of the Oklahoma Teacher's Retirement System reflected a mean death rate of 0.0074 percent. Table X indicated that the death rate has been very consistent for the period 1984-1988. The total deaths over the five year period researched was 3,097 members, or a mean of 619.4 member deaths.

TABLE X
RETIREMENT AND DEATH HISTORY FOR MEMBERS OF THE
OKLAHOMA TEACHER'S RETIREMENT SYSTEM
1984-1988

	1984	1985	1986	1987	1988	Total	\bar{X}
Retirements	1223	588	3510	991	1964	8276	1655.2
Percent of Retirements	1.58	0.75	4.10	1.15	2.24	9.82	1.96
Deaths	578	613	594	641	671	3097	619.4
Percent of Deaths	0.007	0.008	0.007	0.007	0.008	0.037	0.0074
Total Membership	77442	77957	85269	86388	87850	414906	82981.2

Administrator Change Data

Table XI reflects the change rate for each category of Oklahoma administrators. The superintendents had the largest percentage of change with 12.04 percent of administrators serving their first year in a district. The second highest percentage group was the secondary

principal with 7.24 percent changing positions. The elementary principals had a change rate of 4.2 percent and ranked third.

TABLE XI
PUBLIC SCHOOL ADMINISTRATORS CHANGING SCHOOL
DISTRICTS IN A GIVEN YEAR
1987-1988

	Master's	Specialist	Doctorate	N	Percent of Change
Superintendent	43	1	11	55	12.04
Asst. Superintendent	1	0	1	2	1.71
Secondary Principal	44	1	1	46	7.24
Asst. Sec. Principal	11	0	2	13	4.20
Elementary Principal	26	0	4	30	4.03
Asst. Elem. Principal	1	0	1	2	3.80
Total	126	2	20	148	6.39

Oklahoma Administrator Severance Rate

Public school administrators have been leaving education at the mean rate of 24.8 per year for the period 1983-1988 according to superintendents responding to the demand survey. The severance rate of 1.07 percent was based on the mean number of administrators leaving the profession in comparison with the 2314 practicing administrators in Oklahoma. Table XII indicated the complete number of administrators who have left public education in the period 1983-1988.

TABLE XII
PUBLIC SCHOOL ADMINISTRATORS LEAVING EDUCATION
FOR THE PERIOD 1983-1988

	Number	\bar{X}	Severance Rate
Administrators Leaving Education	124	24.8	1.07%

Projected Oklahoma Administrator Replacement
and Severance Demand

The projected demand for certified public school administrators was a projection of six variables. These variables included: replacement rate, severance rate, retirements, deaths, addition of certified administrative positions, and reduction of certified administrative positions.

The severance rate was projected against the total certified practicing administrators allowing the projection of those leaving education to be looked at by category. The highest percentage replacement was that of the Superintendent with an 8.26 percent replacement rate. This was followed by the secondary principal group with 3.47 percent replacement rate. Those two areas reflected the areas of most replacement.

The administrators severing their ties with public school administration were reflected in response by item seven on the demand questionnaire (see Appendix B). The largest group leaving the profession was in the elementary principal category where 7.96 individuals were projected to leave school administration. The second

largest group severing these with administration was in the secondary principal category.

The projection for the replacement-severance variable reflected a need to replace 439.95 administrators in the period 1989-1994. The administrator category which reflected the greatest projected demand was the superintendency with 213.19 individuals needed for the period ending in 1994. In the same period the secondary principal category projected a demand for 144.19 certified individuals. Table XIII indicated a complete projected demand for the replacement and severance variables for certified administrator demand.

TABLE XIII

PROJECTED CERTIFIED OKLAHOMA SCHOOL
ADMINISTRATOR REPLACEMENT AND
SEVERANCE RATE
BY LEVEL

	Annual Replacement Percentage	Projected Severance Numbers	Projected Demand		Total Projected Demand 1988-1993
			1988-89	1989-93	
Superintendent	8.26	4.89	42.69	170.55	213.19
Assistant Supt.	0.0002	1.25	1.27	5.09	6.36
Secondary Principal	3.47	6.79	28.82	15.30	114.19
Assistant Sec. Principal	0.0044	3.31	4.67	18.68	23.35
Elementary Principal	0.0027	7.96	9.97	39.88	49.85
Assistant Elem. Principal	0.0010	0.55	0.60	2.41	3.01
Total			87.97	351.91	439.95

Projected Oklahoma Administrator Death
and Retirement Demand

The projection of certified administrator death and retirement demand was done by applying the mean death and mean retirement percentage to the practicing certified administrators in each administrative category. The projected deaths and retirements during any given year were summed to project the demand for each category. The total projected certified administrator demand due to death and retirement amounted to 312.4 individuals in the period 1988-1994.

The administrative category projecting the largest death-retirement demand was the elementary principal category which projected 100.45 replacements for the five year period. The second largest group in projected demand, due to the death-retirement factor, was the secondary principals. This category reflected a demand projection of 85.75 administrators in the five year period from 1988-1994. Table XIV indicated a composite demand projection for all the administrative categories.

Projected Demand for Certified Oklahoma
School Administrators

The projected demand for certified school administrators in Oklahoma was a result of the death-retirement projection, replacement severance projection, and the addition-reduction projections found in Tables VIII, XV, XIII and XIV. The projection revealed a total administrator demand of 882.51 certified public school administrators

in the time frame 1988-1993. The mean projected demand was 176.50 certified administrators per year for the aforementioned time frame.

TABLE XIV
PROJECTED DEATH AND RETIREMENT RATE OF CERTIFIED
OKLAHOMA SCHOOL ADMINISTRATORS

	Number Retiring	Number of Deaths	Projected Demand		Projected Total Demand 1988-1993
			1988-89	1989-93	
Superintendent	8.96	3.38	12.34	49.36	61.70
Assistant Superintendent	2.29	0.87	3.16	12.64	15.80
Secondary Principal	12.45	4.70	17.15	68.60	85.75
Asst. Secondary Principal	6.06	2.28	8.34	33.36	41.70
Elementary Principal	14.58	5.51	20.09	80.36	100.45
Asst. Elementary Principal	1.02	0.38	1.40	5.60	7.00
Total			62.48	249.92	312.40

The projection revealed a need for 340.15 secondary administrators in the period ending in 1993. This amounted to a mean demand of 68.03 secondary administrators in this five year projection. The superintendent category projected a demand for 320.05 administrators in the same time frame. The projected mean for the superintendent category was 64.01 certified administrators for 1988 through 1993.

The projected demand for individuals in the certified elementary administrator category was 222.31 for the five year period, with a mean

demand of 44.46 positions per year. A complete demand projection can be found in Table XV.

TABLE XV
PROJECTED DEMAND FOR CERTIFIED OKLAHOMA
SCHOOL ADMINISTRATORS

	Increased Administrative Positions	Decreased Admin. Positions	Projected Death Retirement Totals 1988-1993	Projected Severance Replacement Totals 1988-1993	Total Demand 1988- 1993
Super- intendent	20	3	77.50	219.55	320.05
Secondary Principal	45	16	127.45	167.54	340.15
Elementary Principal	50	12	107.45	52.86	222.31
Total Demand = 882.51					
$\bar{X} = 176.50$					

Gender of Oklahoma Administrators

The gender of Oklahoma school administrators was ascertained from the certificate files of the Oklahoma Department of Education. A random sample of 400 administrators reflected that 82 percent of the sampled administrators in Oklahoma were male.

The superintendent category lead the way with 94.06 percent of its membership being male. The secondary principal ranked second, with 85.19 percent male. The largest female category was the elementary administrators with 30.66 percent. Table XVI reflected the percentage of male and female public school administrators.

TABLE XVI
GENDER OF CERTIFIED OKLAHOMA ADMINISTRATORS
(BY PERCENT)

Certification	Total N	% Female	% Male
Superintendent	191	5.94	94.06
Secondary	162	14.81	85.19
Elementary	137	30.66	69.34
Total	400	18.00	82.00

Ethnic Origin of Certified Oklahoma
Administrators

The ethnic origin of public school administrators was determined from the Oklahoma Department of Education certification files. A random sample of 400 administrators reflected that 91.5 percent of the sample population was caucasian. The black administrators comprised 5.75 percent of the sample population.

The largest administrator group in the sample of 101 was the caucasian male superintendent composing 90.09 percent of the sample. The secondary male caucasian administrators made up 67.9 percent of the sample of 400 and ranked second.

The largest number of female administrators was found in the elementary principal category where 27.0 percent of elementary principals are female. The black female elementary principals comprised 2.92 percent of the sample population of 137 elementary principals.

The smallest administrator category containing members was the American Indian group. The male superintendent and secondary administrative categories reflect a sample of 2.9 and 3.08 percent respectively. Table XVII reflects a composite of ethnic origin and sex for the sample population.

TABLE XVII

ETHNIC ORIGIN OF CERTIFIED OKLAHOMA
ADMINISTRATORS BY PERCENTAGE

Certification	Am. Indian		Black		Caucasian		Total N	Percent Total
	M	F	M	F	M	F		
Superintendent	0.75	0.00	0.25	0.0	22.75	1.50	101	25.25
Secondary	1.25	0.00	2.75	1.0	30.50	5.00	162	40.50
Elementary	0.50	0.25	0.75	1.0	22.50	9.25	137	34.25
Total	2.50	0.25	3.75	2.0	75.75	15.75	400	100.00

Highest Degree Achieved by Certified

Oklahoma Administrators

The random sample of 400 certified administrators was taken from the Oklahoma Department of Education certification file. The masters degree administrator made up 90.75 percent of the sample population with the doctoral degree making up 8.0 percent of the sample.

At the secondary level 83.33 percent of the males in the sample held the master's degree. The male superintendent had 76.23 percent of the sample population holding the master's degree while 66.42 percent of the elementary principals held that degree. The largest female population was the elementary principals group where 26.27 percent of the sample population held the master's degree.

The largest percentage of school administrators holding the doctoral degree was the male superintendent, comprising 15.84 percent of the sample population. The second largest male group holding the doctoral degree was the secondary principal with 3.7 percent. The largest group of female administrators holding the doctoral degree was the elementary principals, who had 2.92 percent. Table XVIII reflects the total percentages of degree for males and females for the sample population.

TABLE XVIII
HIGHEST DEGREE ACHIEVED BY CERTIFIED
OKLAHOMA ADMINISTRATORS
BY PERCENTAGE

Certification	Master's		Specialist		Doctoral		Total N
	M	F	M	F	M	F	
Superintendent	79.21	2.97	1.98	0.00	15.84	0.00	101
Secondary Prin.	83.34	12.96	0.00	0.00	1.85	1.85	162
Elementary Prin.	66.42	26.27	0.74	1.46	2.19	2.92	137
Total	75.75	15.00	0.75	0.50	5.50	2.50	400

Oklahoma Certified Administrator Age

Administrator age was a factor in assessing supply of administrators for the various categories superintendent, secondary principal, and elementary principal. However, in replicating the study that Seifert completed in 1976, it became more difficult to access personnel records without violating confidentiality through the Oklahoma State Department of Education. Access to the information was not obtained.

Administrator Certificates Issued

Ten colleges and universities were surveyed for the period 1984 through 1988 concerning administrator certificates issued. Of the eight responding institutions, 3439 administrator certificates were issued for the years surveyed. Northeastern State University was the recommending institution for 796 certificates issued for the period studied. The second ranking institution was Oklahoma State University with 695 certificates issued. Oklahoma University ranked third with 564 certificates issued, followed by Southwestern State University with an output of 441 recommendations for certification.

The eight Oklahoma administrator preparation institutions returning the survey revealed 451 certificates issued in 1983-84 and 450 certificates issued in 1988. Table XIX indicated the number of certificates issued by year for the period beginning in 1983 and ending in 1988.

Oklahoma Administrator Certificate

Output Increases

Table XX, on page 47, indicated the yearly gain or loss of administrator certificate output by the Oklahoma administrator preparation institutions. The yearly gain or loss of administrator certificate was computed from the information supplied by the institutions.

TABLE XIX

OKLAHOMA ADMINISTRATIVE CERTIFICATES ISSUED

Oklahoma Colleges and Universities	1983- 1984	1984- 1985	1985- 1986	1986- 1987	1987- 1988	Total
University of Oklahoma	141	118	196	91	18	564
Oklahoma State Univ.	93	126	158	217	101	695
Central State	49	26	122	125	106	428
East Central State*						
Northwestern State	11	18	26	117	15	187
Northeastern State	70	59	219	358	90	796
Southeastern State*						
Southwestern State	41	40	134	160	66	441
Phillips University	0	0	1	3	1	5
Tulsa University	46	54	125	45	53	323
Total	451	441	981	1116	450	3439

* Data was not available

The University of Oklahoma ranks first in administrator output with a total increase of 87 certificates per year in this time span from 1983-88. The second ranking institution was Central State University with an increase of 65 certificates and a mean output of 16.25 certificates. Southwestern State University was the third leading institution in administrator certificates issued with a mean output of 6.0 administrator certificates issued in the time period studied.

The total administrator output for all institutions was 216 additional certificates issued for the period. An increase was shown in each of the years except 1983-84 when four fewer certificates were issued and in 1987-88 when 434 fewer certificates were issued than in the proceeding year of 1986-87.

TABLE XX
OKLAHOMA ADMINISTRATOR CERTIFICATE
OUTPUT INCREASES

Oklahoma Colleges and Universities	1984 Base	1984- 1985	1985- 1986	1986- 1987	1987- 1988	Total	Mean
University of Oklahoma	141	-23	78	105	-73	87	21.75
Oklahoma State Univ.	93	33	32	59	116	8	2.00
Central State	49	-17	98	3	-19	65	16.25
East Central State*							
Northwestern State	11	7	8	91	-102	4	1.00
Northeastern State	70	-11	160	139	-268	20	4.00
Southeastern State*							
Southwestern State	41	-1	94	26	-94	24	6.00
Phillips University	0	0	1	2	-2	1	0.25
Tulsa University	46	8	71	-80	8	7	1.40
Total	451	-4	542	345	-434	216	6.75

* Data was not available

Projected Output of Certified

Oklahoma Administrators

The projected output of certified administrators in Oklahoma was derived by using a linear method to compute the projection. The base year for this projection was 1988. Each administrator preparation institution was projected to increase or decrease by the mean administrator certificates recommended by the institutions from 1983-1988.

The administrator output in the period 1983-1988 reflected a mean increase of 598.55 administrator certificates. The institution recommending the largest projected increase was Central State University with a mean output increase of 154 certificates. The second ranking institution was Oklahoma State University with a projected mean administrator output of 125 certificates issued for the five year period 1983-1988. Table XXI shows a composite of all Oklahoma

institutions returning the survey who have prepared administrators for the five year period from 1983-1988.

TABLE XXI
PROJECTED OUTPUT OF CERTIFIED ADMINISTRATORS
BY OKLAHOMA PREPARATION INSTITUTIONS

Oklahoma Colleges and Universities	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	Mean
University of Oklahoma	18	40	62	84	106	62.00
Oklahoma State Univ.	109	117	125	133	141	125.00
Central State	122	138	154	170	186	154.00
East Central State*						
Northwestern State	16	17	18	19	20	18.00
Northeastern State	90	94	98	102	106	98.00
Southeastern State*						
Southwestern State	72	78	84	90	96	84.00
Phillips University	1.25	1.5	1.75	2.0	2.25	1.75
Tulsa University	53	54.4	55.8	57.2	58.6	55.80
Total	481.25	539.9	598.55	657.2	715.85	598.55

*Data was not available

Comparison of Actual and Projected Oklahoma
Administrator Certificates

A comparison of the mean actual and projected Oklahoma administrator certificates revealed a decrease of 13.00 percent. The institution preparing the largest number of administrators was Central State University, with a projected increase of 44.2 percent in the eleven year period from 1983-1994. Phillips University projected the second largest increase, but due to limited numbers this number is not significant. Southwestern State University, with a -4.5 percent was third. All other universities showed a percentage decrease in the numbers of certificates issued for this eleven year period of actual

and projected increases and/or decreases in certificates issued. Table XXII shows a composite of all projected increases or decreases for the period.

Projected Supply of Certified Oklahoma
Administrators

The projected supply of standard and provisional certified Oklahoma public school administrators was computed from the total supply of administrators as of 1988. The total administrative supply was 4,268 members with a makeup of 973 superintendent certificate holders, 1,658 secondary principal certificate holders, and 1,637 elementary principal certificate holders. A mean percentage decrease of 2.6 percent was applied to each certification level. This percentage was computed by deriving the mean of percentage decrease of the projected certificates.

A decreased supply of certified administrators in the period 1989-1993 was projected to be 415 administrators, with a mean of 83 fewer new administrators being prepared each year of the period. The secondary certification area reflected the largest mean decrease in the time period studied with a projection of 32.4 fewer administrators certified. The projected supply of superintendents and elementary principals reflected a mean decrease of 19 and 31.6 respectively in the period from 1989-1994. Table XXIII indicated a composite of the projected supply of certified Oklahoma administrators.

TABLE XXII
COMPARISON OF ACTUAL AND PROJECTED OKLAHOMA
ADMINISTRATOR CERTIFICATES
1983-1988

Oklahoma Colleges and Universities	Actual Mean	Projected Mean	Percent Certified Increase/Decrease
University of Oklahoma	113	62	-45.1
Oklahoma State Univ.	139	125	-10.1
Central State	86	154	44.2
East Central State*			
Northwestern State	37	18	-51.4
Northeastern State	159.2	98	-61.2
Southeastern State*			
Southwestern State	88	84	-4.5
Phillips University	1	1.75	42.8
Tulsa University	64.6	55.8	-12.07
Total	687.8	598.55	-13.00

*Data was not available

TABLE XXIII
PROJECTED SUPPLY OF CERTIFIED OKLAHOMA
ADMINISTRATORS

Certification	1989- 1990	1990- 1991	1991- 1992	1992- 1993	1993- 1994	Total Decrease	\bar{X} Decrease
Superintendent	948	923	899	876	853	95	19.0
Secondary Principal	1615	1573	1532	1492	1453	162	32.4
Elementary Principal	1594	1553	1513	1474	1436	158	31.6
Totals	4157	4049	3944	3842	3742	415	83.0

Projected Supply and Demand of Certified

Oklahoma School Administrators

Table XXIV indicated the total supply and total demand of certified Oklahoma school administrators. The total supply was calculated by adding the mean projected supply to the actual supply. Likewise, the total demand was derived by summing the mean projected demand with the actual demand.

TABLE XXIV

PROJECTED SUPPLY AND DEMAND OF CERTIFIED
OKLAHOMA SCHOOL ADMINISTRATORS

Certification	Projected Mean Demand 1988	Actual Demand 1988	Total Projected Demand	Projected Mean Supply 1988	Actual Supply 1988	Total Projected Supply
Superintendent	64.01	574	617.91	19	973	954
Secondary Principal	68.03	944	971.51	32.4	1658	1625.6
Elementary Principal	44.46	796	806.57	31.6	1637	1605.4
Total	176.5	2314	2395.99	83.0	4268	4185

The projected total demand was 2,395.99 administrators in fiscal year 1988. The administrator category with the largest demand was the secondary level with a projected demand of 971.51 administrators. The second largest group was the elementary principal with a demand of 806.57 administrators. The superintendents' category was third with a demand for 617.91 administrators.

The projected total supply for all administrator categories was 4185 administrators. The secondary administrative category revealed a projected supply of 1,625.6 administrators to rank first in supply. The second ranking administrator group was the elementary principal with a projected supply of 1,605.4 administrators. The superintendent supply ranked last in projected supply with 954 members.

Projected Oversupply of Certified Administrators

The projected oversupply of public school administrators in Oklahoma for the period 1989-94 was calculated by subtracting the total demand from the total supply and subtracting the mean supply from the projected demand. The sum of the oversupply plus the sum of the demand-supply differences created a linear oversupply projection.

Projected in Table XXV is a total oversupply of 1,484.9 certified Oklahoma school administrators in the 1993-94 school year. The administrative category with the largest excess was the elementary group with an excess of 776.5 members. The secondary administrator category projected an oversupply of 534.4 administrators in the 1993-94 school term. The superintendent category projected an excess of 174 members for 1993-94, representing the smallest oversupply of all the administrative groups.

TABLE XXV

PROJECTED OVERSUPPLY OF CERTIFIED OKLAHOMA
ADMINISTRATORS FOR THE FIVE YEAR
PERIOD 1988-1993

Certification	1988-89	1989-90	1990-91	1991-92	1992-93
Superintendent	354	309	264	219	174
Secondary Principal	678.4	642.4	606.4	570.4	534.4
Elementary Principal	828.1	815.2	802.3	789.4	776.5
Total	1860.5	1766.6	1672.7	1578.8	1484.9

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this research was to measure the supply of certified Oklahoma public school administrators and relate it to available demand data. The data generated will assist school administrator preparation institutions in counseling prospective school administrators. In addition to the guidance function for prospective administrators, it will help to establish a base so state credentialing policies may be formulated for better usage of administrator preparation institutions.

In Chapter II, a review of the literature was presented dealing with teacher supply and demand, as well as administrator supply and demand. Much material continues to be published concerning teacher supply and demand while little is still written on administrator supply and demand in the United States and in Oklahoma. In 1976, the only other document published concerning school administrator supply and demand was done by Edward H. Seifert. It was hoped that by replicating that study trends may be drawn for others to utilize in preparation for administrative assignments or studies.

The research design used available administrator demand and supply resources. Data such as state tenure, district tenure, certificate

levels, gender, and ethnic origin were taken from the Oklahoma Department of Education files.

The questionnaire used to study administrator additions, reductions, and severance rates was sent to the superintendents of the 457 independent school districts in Oklahoma. A return rate of 77.2 percent was realized when 353 of the 457 questionnaires were returned.

Administrator supply information was gathered from the certification files of the Oklahoma Department of Education. Data such as gender, age, highest degree, and type of certification held was secured from the certification file.

Replacement data for school administrators was taken from the Oklahoma Teacher's Retirement System. Retirement and death data from the aforementioned source was considered the most accurate information available.

The measure of central tendency, the mean, along with the standard error of the mean, and percentage were used to statistically report the data. The analysis of the data was reported in the form of tables in Chapter IV.

Practicing Oklahoma Administrator

Personnel Data

The practicing Oklahoma administrator group was comprised of 2,314 certified members. The master's degree was held by 91.65 percent of the certified administrators. The largest administrative category was the elementary principalship with 744 members. Among this group, 708 members held the master's degree as their highest level of achievement.

Beyond the minimum requirements for Oklahoma administrators certification, the category reflecting the highest academic degree attained was that of the superintendent. The superintendent category reflected 14 percent holding an earned doctorate while assistant superintendents had 19.65 percent of their membership holding this degree.

Oklahoma school administrators had a mean tenure by district of 11.36 years of experience. Assistant superintendents had a mean tenure of 13.87 years followed by elementary principals with 12.85 mean years of tenure. The superintendent category reflected the lowest tenure of all administrative groups having only 8.92 years of district tenure.

Administrators holding the doctor's degree had 2.16 fewer years of district tenure with 9.4 as compared to their counterparts holding a master's degree with 11.56 years of district tenure.

Public school administrators averaged 17.10 years of experience in the public schools of Oklahoma. The assistant superintendents had 21.10 years of experience while superintendents had 18.38 years of experience working in Oklahoma public schools.

The secondary principal, assistant secondary principal, and elementary principal had 16.77, 16.52 and 16.55 years of experience, respectively. This variance was only 0.25 years of experience within the groups.

The master's degreed assistant superintendent with 21.18 years of state tenure was followed by superintendents with 19.62 years of tenure. It was reflected that 28.44 percent of all administrators had between one and five years of district tenure. Superintendents in

Oklahoma having fewer than five years of district tenure comprised more than 44.2 percent of the category.

The state tenure for Oklahoma school administrators revealed that the state tenure cell of 16 to 20 years contained 26.19 percent of the total practicing administrators. Superintendents had the largest percentage found in any one cell with 28.66 percent occupying the 16-20 year cell for state tenure.

The typical Oklahoma school administrator was a male caucasian. This group comprised 76.10 percent of the practicing administrators. This study revealed that 81.37 percent of all practicing Oklahoma school administrators were male.

The practicing female administrator population was made up of 18.63 percent of the population. The superintendent category was dominated by males with 98.01 percent. The largest practicing female administrator category was the assistant elementary principal with 57.7 percent.

Demand for Oklahoma Public School Administrators

The 353 responding Oklahoma independent school district superintendents revealed that there will be little addition or reduction of administrative positions in Oklahoma school districts. The superintendents indicated that 80.17 percent of the districts were not adding positions and 95.80 percent were not reducing certified administrative staff.

The total increase of administrators was projected to increase by 4.97 percent over the period from 1988-1993. In this same time span

an increase of 4.8 percent of the certified secondary principals, 6.3 percent of the certified elementary principals, and 3.5 percent of the certified superintendents was projected by the chief school administrators in Oklahoma. The largest single category increase was in the elementary area with a projected increase of 50 administrators in 1992-1993.

A few school districts will be reducing the number of certified administrators during the time span studied. A total decrease of 31 positions, or 1.33 percent of the practicing administrators, was projected. Secondary principal positions were projected to decrease by 1.70 percent and elementary positions would drop by 1.51 percent of the total practicing administrators in their respective categories.

The mean retirement for the 83,000 members of the Oklahoma Teachers' Retirement System was 1.96 percent based on a mean retirement of 1,655.2 members per year in the time period 1984-1988. The death rate for active members of the retirement system was 0.0074 percent based on 619.4 deaths per year. The combination of deaths and retirements was projected into a replacement rate for Oklahoma school administrators.

An administrator change rate was developed using the 148 public school administrators changing school districts. The change rate for all administrators in Oklahoma was 6.39 percent of the total practicing administrators. Superintendents had the highest change rate with 12.04 percent of the group changing districts. Secondary principals had a change rate of 7.24 percent.

The certified Oklahoma administrator severance rate for the 124 administrators leaving educational administration in the period 1983-

1988 was 1.0 percent of the total practicing administrators. The total certified administrator demand due to replacement and severance was projected to be 87.97 in 1988-89. The total administrator demand for the five year period was projected to be 439.95 administrators. The category projecting the largest demand was the superintendency with a projected demand of 213.19 administrators in the time span studied. The projected replacement and severance demand for administrators ranking second was the secondary principals with a total projection of 114.19.

The projected number of certified Oklahoma administrators retiring and dying in the years 1988-89 was 62.48. The total projected deaths and retirements over the five year life of the projection was 312.40 administrators. The elementary principal category revealed the highest total replacement demand with a projection of 100.45 in the period from 1988-93.

Total projected demand for Oklahoma school administrators was 882.51 individuals for the time span studied. This amounted to a projected mean demand of 176.50. Total demand projected for secondary administrators was 340.15 as compared to the superintendents with a projection of 320.05 for the period studied. Elementary administrators projected a demand of 500.80 for the period 1988-93.

An increased demand for public school administrators will continue in the time period from 1989-1993. Even though new administrative positions will be few, retirements will continue at an accelerated rate for the period. Some administrators choose to leave the profession, creating additional vacancies. As a result of these variables, the demand for administrators will increase. It was important to look at

the supply side to measure whether the supply would meet or exceed the demand for public school administrators in Oklahoma.

Supply of Oklahoma Public School Administrators

The typical certified school administrator in Oklahoma was a male caucasian holding a master's degree. The male administrators composed 82.0 percent of the sample and females made up 18.0 percent of the sample population.

The ethnic origin of certified Oklahoma administrators was based on a sample of 400 administrators and revealed a caucasian population of 91.50 percent. The black administrator population reflected a percentage of 5.75, and the Indian administrators revealed 2.75 percent of the sample population.

The highest degree achieved by 90.75 percent of the sample population of the Oklahoma school administrators was the master's degree. The doctor's degree was held by 8.0 percent of the sample population. In the superintendent's category, 82.18 percent of the sample held the master's degree, while 15.84 percent held the doctor's degree. In the secondary principals' category, 96.3 percent of the sample held the masters, and 3.70 percent held a doctorate. Elementary principals in the sample had 92.69 percent of their members holding a master's degree while 5.11 percent held a doctorate.

The output of administrator certificates revealed that Northeastern State University provided recommendations for 796 administrators in the period from 1983-88. The institution recommending the second largest number of administrator certificates was Oklahoma State University with 695 recommendations for certificates.

The other six institutions recommended the balance of 2,048 administrators who were administratively certified in Oklahoma.

A projected output of public school administrators indicated that the University of Oklahoma will produce a total increase of 87 administrator recommendations. The decrease in numbers of certificates issued revealed a 13.00 percent decrease in certificates issued for the time span studied. The other seven institutions had decreasing amounts of certificates issued for this same period.

A total supply of 4,268 administrators was projected for the 1988-89 school year, while the projected demand was 2,314.0 administrators was projected. This indicated an oversupply of 1954 administrators. The oversupply was projected to decrease during the time span projected in all administrator categories. In the years 1993-94, an oversupply of 1484.9 administrators was projected for all levels of school administration. The categories of elementary and secondary principals projected an oversupply of 776.5 and 534.4 administrators, respectively, in the years 1993-94.

The aforementioned data indicated that prospective public school administrators appear to face a brighter job market in the future, with 1.75 certified Oklahoma administrators available for each position. This condition appears to grow even better for administrators as the number of prospective certified administrators in Oklahoma decreases.

Major Comparisons of Study Differences

1976 to 1988

The practicing administrators group in 1988 was composed of 2,314 members while in Seifert's study (1976), 1,590 members made up the study. Elementary principals numbered 744 members while in 1976, 520 administrators made up this group.

The typical Oklahoma school administrator was still a male caucasian. In 1976, 11 percent of the total practicing administrators population were non-male caucasians while in 1988, 24 percent of the total population were non-male caucasian. This reflects a 218 percent increase in the number of administrators certified who were non-male caucasian.

The study reflects a major difference in the total supply of certified administrators at all levels. An increase was projected in Seifert's study (1976) reflecting an oversupply of 2,662.85 administrators for the years 1980-81, whereas in 1993-94 a projected oversupply still exists with a projected oversupply of 1,484.0 administrators at all levels exists. Instead of a projected increase, a decrease in the total supply was now evident.

Conclusions

The findings of this research provided answers to some of the critical questions which generated this supply and demand study of certified public school administrators in Oklahoma. The study provided a data base for comparison of past, current, and future trends for educational administration in Oklahoma.

This study revealed that comparing certified female administrators of 1976 to female administrators of 1988, female administrators have increased in numbers but a lack of numbers still exists. The minority members both female and male in the study reflected similar findings to 1976 that indicated there is a lack of minority representation in the administrative population of Oklahoma Public Schools.

The study revealed that Oklahoma administrator preparation institutions have over prepared numbers of administrators for the existing positions. This number reflected a declining trend rather than an increasing one as was reflected in the study in 1976. The study would imply that, without change, administrator oversupply could result in administrator shortages. Therefore, administrator preparation institutions in Oklahoma should reevaluate the output of certified administrators.

Discussion

The data generated from this administrator supply-demand research are open to criticism due to the mobility of the employment population studied. However, the information from this research will allow prospective administrators an opportunity to view their opportunities in the job market in relationship to job availability.

The supply and demand study of administrators in Oklahoma indicates a decreasing oversupply in relation to the current demand of available and projected positions. This surplus is controlled by administrator preparation institutions and the Oklahoma state credentialing agency. As this surplus declines, the credentialing agency and

the institutions preparing administrators must continue to maintain quality standards for admission into programs and certification.

Implications

This study does not answer all the questions about administrator supply and demand because of variables beyond the scope of the study. Therefore, implications can be drawn to substantiate the need for additional studies in this field.

The administrator testing program initiated in Oklahoma may severely limit the number of administrators able to obtain a certificate and substantially limit the supply needed to fill the demand of vacant positions. The testing program could also limit the number of administrators willing to apply for employment in Oklahoma from other states. The program could also encourage prospective administrator candidates to seek employment in other states, further reducing the supply of potential certified administrator certificate holders.

The three-year window for retirement will reopen in 1990 for administrators wishing to elect early retirement. This window may encourage administrators to take this option creating a much greater demand than currently projected. This has an implication for prospective candidates who elect to seek educational administrator certification. The sudden loss of supply could greatly alter the available pool of quality administrator candidates. State colleges and universities could be forced to alter their course offerings in educational administration to allow more candidates into certification programs.

The trend evidenced in this study for greater employment of women and minorities in administrative positions should continue to grow.

The addition of women and minorities in educational administration has been basically limited to the principalship at the elementary and secondary levels. The implications are that the superintendent positions will be filled by qualified candidates from the supply of certified administrators creating a change in employment patterns for promotion to the superintendency.

Oklahoma administrators are limited by law to one year employment contracts while adjoining states have multi-year contract provisions. Public school administrators in Oklahoma may be electing to leave Oklahoma because of this factor.

Salaries and economics are a condition of employment for public school administrators in Oklahoma. Oklahoma's economy for the last several years may have discouraged out-of-state administrator candidates from applying for public school administrator positions in Oklahoma effectively eliminating an additional factor for supply. Oklahoma public school administrators may have left employment in Oklahoma for higher salaries in other states, further reducing the supply of certified public school administrators.

Additional studies could be generated from the implications mentioned. Many other implications may be generated as others study and review the findings presented in this study.

Recommendations

The findings of this research provide a data base for future supply and demand studies of public school administrators in Oklahoma.

The following recommendations were developed from the research.

1. A follow-up study of Oklahoma administrator supply and demand should be conducted every five years.
2. The finding of this study should be made available to administrative preparation institutions and credentialing agencies in Oklahoma.
3. A concentrated effort should be made by administrator preparation institutions in Oklahoma to recruit and encourage qualified minorities to seek administrative certification in Oklahoma.
4. Research should be conducted on the effect of the Oklahoma administrator testing program and its effect upon administrator supply.
5. The data gathering techniques used in administrator supply and demand should be refined and conducted by the Oklahoma State Department of Education as a service to potential Oklahoma administrators and to Oklahoma administrator preparation institutions.
6. A regional supply and demand study should be conducted to further develop counseling efforts for prospective administrator candidates.
7. Regardless of whether the oversupply continues, it is important that research continue in administrator supply and demand. It is a valuable tool for examining state regulations, programs for administrator certification, and helping define the financial support needed to insure quality control for administrator preparation programs.

Reflecting on the study, it is important to provide an overview for future study of public school administrator supply and demand in Oklahoma. The issue of quality versus quantity in a pool of prospective administrators could be focused upon. What constraints might this

put on local educational units in selecting candidates to fill administrative positions? Standards for admission to educational administration programs could be closely scrutinized. Should standards be established or should open admission to programs based on teaching experience be continued. What effect would this have on institutions preparing administrative candidates for certification. Should higher standards be set by the state certification agency to insure that quality is a major factor in receiving a certificate. All of these thoughts and others that may arise could provide valuable direction for the state of Oklahoma, its academic institutions preparing administrators for certification, and individuals who are seeking administrative certification. The direction given will help define the leadership role of administration in Oklahoma public schools.

BIBLIOGRAPHY

- _____. The Board's Role in Selecting the Administrative Team. Arlington, Virginia: American Association of School Administrators, 1981.
- _____. "Teacher Demand Forecasted," American Teacher, Vol. 69, October 1984.
- _____. "Teachers--Supply, Demand and Status," Principal, Vol. 62, No. 3, January 1983.
- Akin, James N. "Teacher Supply and Demand: A Recent Survey," ASCUS, Addison, Illinois, 1987, pp. 19-21.
- Applegate, J. R. and McCleary, L. L. "Teacher Supply, Shortage or Surplus?" Phi Delta Kappan, Vol. 63, No. 8, April 1982.
- Arnold, Anne Jarmu. "Teachers on the Move: In and Out of the Job Market," Learning, Vol. 11, No. 8, March 1983, pp. 25, 26.
- Berry, Barnett. "A Qualitative Critique of Teacher Labor Market Studies," The Urban Review, Vol. 17, No. 1, 1985, p. 98.
- Blackmon, C. R. et al. "Teacher Supply and Demand: What are the Facts," NASSP Bulletin, Vol. 66, No. 458, December 1982, pp. 71-73.
- Brautigam, Carl W. "What About the Administrative Job Market," Education Summary, Vol. V, October 1973, p. 8.
- Bridgman, Anne. "Facts on the Proliferation of School Administrators," The Education Digest, Vol. LIII, No. 5, January 1988.
- Cantagalli, Carolyn May. Trends in the Supply of And Demand for Pennsylvania Public School Administrators. Unpublished Doctoral Thesis, University of Pennsylvania, 1981.
- Carlson, Richard O. School Superintendents: Careers and Performance. Columbus, Ohio: Charles A. Merrill Publishing Company, 1972.
- Carlson, Richard O. Executive Succession and Organizational Change. Chicago, Illinois: Midwest Administration Center, University of Chicago, 1962.

- Carter, Allan M. Ph.D's and the Academic Labor Market. New York: McGraw-Hill Book Company, 1976.
- Dixon, Wilfred J., et al. Introduction to Statistical Analysis. New York: McGraw-Hill Book Company, 1957.
- Doll, Ronald C. Leadership to Improve Schools. Worthington, Ohio: Charles A. Jones, 1972.
- Edmonton, B. and Knapp, T. R. "Demographic Approach to Teacher Supply and Demand," American Education Research Journal, Vol. 16, Fall 1979.
- Elliff, Mary. Some Relationships Between Supply and Demand for Newly Trained Teachers. New York: Teachers College, Columbia University, 1935.
- Fallon, Berlie J. The Art of Followership. Bloomington, Indiana: Phi Delta Kappa, 1974.
- Ford, J. D. "Shortage versus Standards," Clearinghouse, Vol. 60, October 1966, p. 62.
- Ford, Jerry D. "Shortage Versus Standards," The Clearinghouse, Vol. 60, No. 2, October 1986, p. 62.
- Frankee, Martin. Projections of Enrollments and Classroom Teacher Staffing in Elementary and Secondary Schools. Washington: National Center for Education Statistics, 1978.
- Garibaldi, Antoine M. The Decline of Teacher Production in Louisiana and Attitudes Toward the Profession. Atlanta, Georgia: Southern Education Foundation, 1986.
- Guilford, J. P. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill Book Company, 1975.
- Heller, Melvin P. Preparing Educational Leaders: New Challenges and Perspectives. Bloomington, Indiana: Phi Delta Kappa, 1974.
- Hersey, P. W. "NASSP's Assessment Center--From Concept to Practice," National Association of Secondary School Principals Bulletin No. 61, September, 1977, pp. 74-76.
- Hooker, Clifford P. The Supply and Demand of Public Administrators in Minnesota. Revised, 1976.
- Hooker, Clifford P. "The Supply and Demand of Public School Administrators in Minnesota," Administrative Leadership, Vol. VIII, Winter 1973.
- Howard, Jack L. The Supply and Demand for Public School Administrators. Unpublished Doctoral Thesis, University of Missouri, 1982.

- Hunter, E. "Schools Face Crisis Issues--Time for Leadership," NASSP Bulletin, Vol. 70, December 1986, pp. 109-112.
- Kanter, Rosabeth Moss. Men and Women of the Corporation. New York: Basic Book, Inc., 1977.
- Kuh, George, et al. "Supply and Demand for School Administrators," Educational Research Quarterly, Vol. 8, No. 2, 1983.
- LEA Survey of Teacher and Administrator Shortages. National Center for Education Statistics, Fall 1977.
- Martin, James A. Supply and Demand of Public School Administrators in West Virginia. Washington, D. C.: National Institute of Education, 1979.
- Masland, S. W. and Williams, R. T. "Teacher Surplus and Shortage: Accepting Responsibilities," Education Digest, Vol. 49, Fall 1984.
- McCarthy, Martha, et al. An Investigation of Supply and Demand for School Administrators in Six States Between 1975-76 and 1979-80. Indiana University, ERIC Document No. ED 210798, 1981.
- McCormick, Kathleen. "The School Executive Shortage: How Serious Is It," The Education Digest, Vol. LIII, No. 4, December 1987.
- Murphy, Joseph, et al. Approaches to Administrative Training in Education. Albany, New York: University of New York Press, 1987.
- National Center for Educational Statistics. Teacher and Administrator Shortages in Public School Systems, Fast Response Survey System Report No. 4, Fall 1977. ERIC Document 165390.
- Oklahoma State Department of Education. Teacher Education and Certification Handbook. Oklahoma City, Oklahoma: Central Printing, Oklahoma State Department of Education, 1986.
- Oklahoma State Department of Education. Oklahoma Educational Directory, 1987-88. Oklahoma City, Oklahoma: Central Printing, Oklahoma State Department of Education, 1987.
- Ortiz, Flora Ida. Career Patterns in Education. New York: Praeger Publishers, 1982.
- Pearce, I. F. A Contribution to Demand Analysis. London: Oxford University Press, 1964.
- Pettigrew, Jo Arnold. The Supply and Demand of Public School Teachers in Oklahoma. Unpublished Doctoral Thesis, Oklahoma State University, 1980.

- Pope, Beatrice. Factors Influencing Career Aspirations and Development of Women Holding Administrative Positions in Public Schools. Palo Alto, California: R & E Research Associates, 1982.
- Powers, Thomas P. Administrative Behavior and Factors Related to Upward Mobility. Chicago: University of Chicago, 1966.
- Regier, Herold G. Too Many Teachers: Fact or Fiction?. Bloomington, Indiana: Phi Delta Kappa, 1972.
- School Staffing Ratios: Update 1978-79. Arlington: Educational Research Services, Inc. 1979.
- Seifert, Edward H. Supply and Demand of Public School Administrators in Oklahoma. Unpublished Doctoral Thesis, Oklahoma State University, 1976.
- Way, Joyce. "Are Job Forecasters Painting a Realistic Picture for Teacher Education Graduates," Phi Delta Kappan, Vol. 63, No. 3, 1981.
- Weaver, W. Timothy. "Educators in Supply and Demand: Effects on Quality," School Review, Vol. 86, No. 4.
- Williams, Peter R. C. Planning Teacher Demand and Supply. Paris: UNESCO, 1979.

APPENDIX A

COVER LETTERS



OKLAHOMA PUBLIC SCHOOL RESEARCH COUNCIL

AFFILIATED UNIVERSITIES
The University of Oklahoma
Oklahoma State University

OKLAHOMA STATE UNIVERSITY
Stillwater, Oklahoma
74078-0146

OFFICE OF THE EXECUTIVE SECRETARY
Gundersen Hall, Room 309
Phone 624-7244

April 28, 1988

Dear School Administrator:

The Oklahoma Public School Research Council is interested in assessing demand for public school administrators in Oklahoma. The data received from the enclosed questionnaire should provide more accurate career information for Oklahoma school administrators; it should aid persons responsible for establishing policy in administrative training programs, state credentialing agencies and educational funding programs.

The information that we are requesting is available only from you, the practicing public school administrator in the state. It will be of great help to the Oklahoma Public School Research Council and the administrative profession in Oklahoma in determining the demand for superintendents, principals, and assistants at all levels of administration.

Please complete and return this questionnaire in the enclosed envelope at your earliest convenience. Your prompt response to this request will be greatly appreciated.

Sincerely,

James W. Sowers

James W. Sowers
Research Associate
O.P.S.R.C.

Kenneth St. Clair

Dr. Kenneth St. Clair
Executive Secretary
O.P.S.R.C.

A. Kenneth Stern

Dr. A. Kenneth Stern
Research Director

Enclosure



OKLAHOMA PUBLIC SCHOOL RESEARCH COUNCIL

AFFILIATED UNIVERSITIES
The University of Oklahoma
Oklahoma State University

OKLAHOMA STATE UNIVERSITY
Stillwater, Oklahoma
74078-0146

OFFICE OF THE EXECUTIVE SECRETARY
Gundersen Hall, Room 309
Phone 624-7244

June 10, 1988

Dear School Administrator:

On April 28, 1988 we sent you a questionnaire concerning demand for public school administrators in the State of Oklahoma. We certainly do appreciate your help in furnishing data about the schools you operate, and we would like the opportunity to help you with some information about your chosen field of educational administration.

The data received from you is vital in determining what course of action should be taken in the preparation of public school administrators, financing of administrative positions, and guidance of prospective administrators.

We know this is a busy time of the year, but please take a minute out of your busy schedule to respond to the instrument. Another copy of the questionnaire and a pre-addressed envelope are enclosed for your convenience. We shall greatly appreciate your taking time to complete and return the questionnaire.

Sincerely,

James W. Sowers

James W. Sowers
Research Associate
O.P.S.R.C

Kenneth St. Clair

Dr. Kenneth St. Clair
Executive Secretary
O.P.S.R.C.

A. Kenneth Stern

Dr. A. Kenneth Stern
Research Director

Enclosure

APPENDIX B

ADMINISTRATIVE DEMAND QUESTIONNAIRE

ADMINISTRATIVE DEMAND QUESTIONNAIRE

School District _____

This questionnaire deals with Oklahoma public school administrators and the number of additions or reductions of positions which require administrative certification.

- How many members of your administrative staff are required to hold a valid standard or provisional administrative certificate? Please indicate the number of certified administrators on the appropriate lines below.

<u>Position</u>	<u>Number</u>
Assistant Superintendent	_____
Secondary Principal	_____
Assistant Secondary Principal	_____
Elementary Principal	_____
Assistant Elementary Principal	_____
Other (Title: _____)	_____

- Does your school district plan to add personnel or positions, within the next five years, which will require the individual to hold a valid standard or provisional administrator's certificate?

_____ Yes
 _____ No (If no, skip question three.)

- If your district plans to add administrative positions, how many positions, in what administrative area(s), and during what school years will the positions be added? Please indicate your response by writing the number of positions to be added in the appropriate space(s) on the chart below.

<u>Positions</u>	<u>School Years</u>				
	88-89	89-90	90-91	91-92	92-93
Asst. Supt.	_____	_____	_____	_____	_____
Sec. Principal	_____	_____	_____	_____	_____
Asst. Sec. Prin.	_____	_____	_____	_____	_____
Elem. Principal	_____	_____	_____	_____	_____
Asst. Elem. Prin	_____	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

4. Does your school district plan to reduce personnel or positions, within the next five years, which currently require the individual to hold a valid standard or provisional administrators certificate?

Yes
 No (If no, skip question five.)

5. If your school district plans to reduce administrative positions, how many positions, in what administrative area(s), and during what school years will the positions be deleted? Please indicate your response by writing the number of positions to be deleted in the appropriate space(s) on the chart below.

<u>Positions</u>	<u>School Years</u>				
	88-89	89-90	90-91	91-92	92-93
Asst. Supt.					
Sec. Principal					
Asst. Sec. Prin.					
Elem. Principal					
Asst. Elem. Prin.					
Other (Specify)					

6. What is the number of positions in your district which will become vacant in the next five years due to retirement and during which year will they become vacant? Please indicate your response by writing the number of expected retirements in the appropriate space(s) on the chart below.

<u>Positions</u>	<u>School Years</u>				
	88-89	89-90	90-91	91-92	92-93
Asst. Supt.					
Sec. Principal					
Asst. Sec. Prin.					
Elem. Principal					
Asst. Elem. Prin.					
Other (Specify)					

7. How many members of your certified administrative staff have accepted employment outside of educational administration in the past five years? Indicate on the chart below the number of administrators who have left educational administration in the column representing the school year in which they left. (If you do not have five years tenure in the district please defer this question to someone who may have this information.)

<u>Positions</u>	<u>School Years</u>				
	83-84	84-85	85-86	86-87	87-88
Superintendent					
Asst. Supt.					
Sec. Principal					
Asst. Sec. Prin.					
Elem. Principal					
Asst. Elem. Prin.					
Other (Specify)					

8. What is the composition of your current certified administrative staff by position, gender and race? Please indicate the number of administrators in your district in the appropriate spaces on the chart below.

<u>Position</u>	Am. Indian		Asian		Black		Caucasian		Hispanic	
	M	F	M	F	M	F	M	F	M	F
Superintendent										
Asst. Supt.										
Secondary Prin.										
Asst. Sec. Prin.										
Elementary Prin.										
Asst. Elem. Prin.										
Other (Specify)										

9. Is the district you represent currently considering consolidation within the next five years which would affect the need for administrators at various levels?

_____ Yes
 _____ No (If no, skip question ten.)

10. If you are considering consolidation, check below how the consolidation might affect your need for administrators in relation to your current administrative staff.

<u>Need for Administrators</u>	<u>More</u>	<u>Fewer</u>
Central office administrators (i.e. assistant superintendent)	_____	_____
Secondary administrators	_____	_____
Elementary administrators	_____	_____

11. In your district, how many administrative positions, in the last five years, have been filled with out-of-state applicants? Please indicate the numbers(s) in the appropriate space(s) on the chart below.

<u>Positions</u>	<u>School Years</u>				
	83-84	84-85	85-86	86-87	87-88
Asst. Supt.	_____	_____	_____	_____	_____
Sec. Principal	_____	_____	_____	_____	_____
Asst. Sec. Prin.	_____	_____	_____	_____	_____
Elem. Principal	_____	_____	_____	_____	_____
Asst. Elem. Prin.	_____	_____	_____	_____	_____
Other (Specify)	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

12. How many quasi-administrative positions are currently held by non-certified personnel?

<u>Position</u>	<u>Number</u>	<u>Position</u>	<u>Number</u>
Asst. Supt.	_____	Asst. Elem. Prin.	_____
Sec. Prin.	_____	Other (Specify)	_____
Asst. Sec. Prin.	_____		_____
Elem. Prin.	_____		_____

13. Please write below any comments you wish to add to the above information:

APPENDIX C

DEATH-RETIREMENT INSTRUMENT

January 4, 1989

Ms. Sue Peterson
Oklahoma Teacher's Retirement System
P. O. Box 53524
Oklahoma City, OK 73153

Dear Ms. Peterson:

Thanks so much for taking time to help me with the needed data. As per our telephone conversation, I have included in this letter the three specific areas of retirement information needed for my study. The chart below is provided for your convenience in recording this data. As you can see from the chart, data is needed for each of the following school years: 1983-84, 1984-85, 1985-86, 1986-87, and 1987-88.

Retirement and Death Information
for Teachers 1983-88

Data Needed	83-84	84-85	85-86	86-87	87-88
Number of Retirements					
Number of Deaths					
Total Membership in the Oklahoma Teacher's Retirement System					

Again many thanks for the much needed help. A pre-addressed, stamped envelope is enclosed for your convenience in returning the above data to me. If you need additional information please call me at 316-833-3660.

Sincerely,

James W. Sowers

James W. Sowers
OSU Doctoral Candidate
2711 Milro Circle
Wichita, KS 67204

APPENDIX D

CERTIFICATION INSTRUMENT



OKLAHOMA PUBLIC SCHOOL RESEARCH COUNCIL

AFFILIATED UNIVERSITIES
The University of Oklahoma
Oklahoma State University

OKLAHOMA STATE UNIVERSITY
Stillwater, Oklahoma
74078-0146

OFFICE OF THE EXECUTIVE SECRETARY
Gundersen Hall, Room 309
Phone 624-7244

February 20, 1989

Dear Director of Teacher Certification:

I am a doctoral candidate in Educational Administration at Oklahoma State University. The topic of my dissertation is Public School Administrator Supply and Demand in Oklahoma. In order for me to project an accurate supply count of administrators in Oklahoma, it is essential that I gather the following information concerning certification.

For the years from 1983 through 1988 I need to know the number of provisional and standard certificates issued for the administrative areas of elementary principal, secondary principal and superintendent.

The chart below is included for your convenience in recording the requested information:

Data Needed	83-84		84-85		85-86		86-87		87 88	
	Prov.	Std.	Prov.	Std.	Prov.	Std.	Prov.	Std.	Prov.	Std.
Elementary										
Secondary										
Superintendent										
TOTALS										

Thank you for taking time from your schedule to accommodate this need. This information will be available to you upon completion of the study. The report will be shared through the Oklahoma Public School Research Council to the State Superintendent of Schools and to colleges and universities under the Oklahoma State Regents for Higher Education. I look forward to your response to this questionnaire with great anticipation. A stamped, pre-addressed envelope is enclosed for your convenience in returning this data to me.

Sincerely,

James W. Sowers

James W. Sowers
OSU Doctoral Candidate
2711 Milro Circle
Wichita, KS 67204

2
VITA

James W. Sowers

Candidate for the Degree of

Doctor of Education

Thesis: OKLAHOMA PUBLIC SCHOOL ADMINISTRATORS SUPPLY
AND DEMAND

Major Field: Educational Administration

Biographical:

Personal Data: Born in Ottawa, Kansas, November 15, 1947, the son
of Clare and Marion Sowers.

Education: Graduated from Williamsburg High School, Williamsburg,
Kansas, in May 1965; received Associate of Arts Degree from
Allen County Community Junior College, Iola, Kansas, in May,
1968; received Bachelor of Science Degree in Education from
Emporia State University, Emporia, Kansas, in December,
1970; received Master of Science Degree in Curriculum and
Instruction from Emporia State University, Emporia, Kansas,
in May, 1975; received Educational Specialist Degree in
Educational Administration from Wichita State University,
Wichita, Kansas, in August, 1982; completed requirements for
the Doctor of Education Degree at Oklahoma State University
in July, 1989.

Professional Experience: Teacher, Iola Junior High School, Iola,
Kansas, 1971-1976; Assistant Principal, Valley Center Junior
High School, Valley Center, Kansas, 1976-1978; Principal,
Valley Center Junior High School, Valley Center, Kansas,
1978-1980; Assistant Principal, Wichita High School
Northwest, Wichita, Kansas, 1980-1984; Associate Principal,
Wichita High School West, Wichita, Kansas, 1984-1987;
Principal, Allison Junior High School, Wichita, Kansas, 1988-
1989.

Professional Organizations: Phi Delta Kappa, National Association
of Secondary School Principals, Kansas Association of
Secondary School Principals, Kansas Association of
Supervision and Curriculum Development, United School
Administrators, Wichita Educational Administrators
Association.