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A STUDY OF PARENTAL ATTITUDES TO THE EDUCATION VOUCHER

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## CHAPTER I

THE RESEARCH PROBLEM

## Introduction

Public responsibility in elementary and secondary education has historically encompassed both a financial and an operational aspect (Benson, 1968). That is, since the days of Horace Mann and the Common School movement, the predominant means of educating our youth has been through schools publicly operated and financed through taxation. Benson (1961) asserts it to be a statistical fact that, by far, the majority of elementary and secondary education is provided in the public schools. This practice of public operation and public financing of elementary and secondary education has seldom been questioned, and until recently has been an accepted element of the American way of life.

Milton Friedman was one of the first Americans to seriously challenge this practice, although Adam Smith, in 1776, had advocated a procedure whereby private individuals would be hired to assume teaching responsibilities for specific subjects (Carr and Hayward, p. 181). However, it would be difficult to place Smith's proposal in contemporary perspective since it was issued prior to the emergence of the common school in this country.

Friedman (1955) indicates that there are social benefits to be derived from education that benefit all of society, and for this reason
public financial support for education can be justified. But as far as public operation of elementary and secondary education is concerned, Friedman (1955, p. 127) states:

It is more difficult to justify . . . the actual administration of educational institutions by the government, the 'nationalization,' as it were, of the bulk of the 'education industry.'

Friedman (1955, p. 128) proposed that:
Governments could require a minimum level of education which they could finance by giving parents vouchers redeemable for a specified maximum sum per child per year if spent on 'approved' educational service.

Lately, Christopher Jencks and his associates at the Center for the Study of Public Policy, Cambridge, Massachusetts, have become active in the promotion and refinement of the education voucher. Their efforts have resulted in a federal grant from the Office of Economic Opportunity to study the feasibility of the implementation of such a plan.

## Justification for the Study

Several educators have responded favorably to the education voucher and others have reacted to it with guarded optimism. Havighurst (1970) has called education vouchers the "unknown good." Cohodes, chairman of Nation's Schools' editorial advisory board, has expressed his feelings about the education voucher proposal of Christopher Jencks by stating, "It would seem hard to oppose an experimental voucher program on the grounds that it won't work. Let's find out. . ." (1970).

There has been considerable opposition to the voucher proposals, also. Probably, the most severe criticism has come from public school
educators, themselves. The American Association of School Administrators, in its announcement of 1971 resolutions, has stated that it "vigorously opposes any implementation of $a$ voucher system in education" (1970). Similarly, the National Education Association, in its November, 1970 issue of Today's Education, expressed its opposition to the voucher by stating, ". . . the so-called voucher plan under which education is financed by federal or state grants to parents could lead to racial, economic and social isolation of children."

So, on the one hand, there are educators who would like to explore the voucher more deeply, while on the other hand those organizations most closely aligned with public education apparently are fearful of even entertaining a discussion of the voucher. Sroufe (1970) calls this approach taken by these organizations "disheartening" and he implies that their behavior in this regard is educationally irresponsible.

Conspicuously absent from the commentaries, pro and con, have been reactions from parents to the education voucher. Of course isolated comments about voucher $p$ lans in general and comments relative to specific voucher proposals have been heard. But, it seems apparent that there has been very little parental involvement in the voucher controversy, particularly in the area of attitudes toward the conceptual framework of the voucher.

Purpose of the Study

Generally, the purpose of this study was to conduct sensitivity analysis among parents of selected communities in an attempt to describe the feelings and attitudes of these parents relative to concepts
inherent in the education voucher.
Specifically, the purpose of this research was to describe the attitudes and feelings of parents with school age children toward the underlying concepts in the education voucher. Data were gathered to answer questions such as the following: Did these attitudes and feelings differ depending upon the size of the school district in which their children are enrolled? Was there an attitudinal difference between white and non-white respondents?

Definition of Selected Terms

Education Voucher. An education voucher is a sum of money issued by a governmental agency which would be used to purchase schooling for children. Parents would receive a voucher which would enable them to pay for their child's education at a school of their choice. This term will be explored in greater detail in Chapter Two.

Sensitivity Analysis. Sensitivity analysis refers to the systematic examination of affective and behavioral attitudes as they relate to the essential features of the voucher concepts.

Assumptions

Assumptions relevant to this study were as follows:

1. Attitudes toward the education voucher can be measured.
2. The concepts inherent in the education voucher that were identified in Chapter Two are the concepts which were relevant to the study of education vouchers.

## Limitations

Limitations relevant to this study were as follows:

1. Lack of a standardized instrument for collecting the data was a limitation. An attempt was made to minimize this limitation through the use of appropriate instrument development and. statistical techniques.
2. Results of this research were generalized only to the population studied.
3. One-hundred percent return from the sample was not attained.
4. The scope of the research was limited to parental attitudes rather than to the population at large.
5. The study was limited to parents with children in public schools.

## Summary

The purpose of Chapter I has been to present the research problem in introductory and general terms and to state the limitations and assumptions of the research design.

Generally, the purpose of the study will be to conduct sensitivity analysis among parents of selected communities in an attempt to describe the feelings and attitudes of these parents relative to concepts inherent in the education voucher. Considerable confusion has surrounded the voucher since it was first proposed by Milton Friedman in 1955. In spite of the confusion, however, there has been very little objective evaluation of the voucher issue. This study will attempt to focus on parental attitudes toward specific concepts inherent in the education voucher.

## CHAPTER II

# REVIEW OF RELATED LITERATURE AND PRESENTATION <br> OF RESEARCH QUESTIONS 

## Introduction

The purpose of this chapter was to review the literature on the various voucher models, identify basic concepts inherent in these models and present research questions derived from the identified concepts.

Review of Voucher Proposals

Criticism of public schools has become widespread in the last few years. The failure of traditional schooling, according to Levin (September, 1968), has resulted in a "barrage" of proposals from educators and non-educators alike. In addition, a "taxpayers' revolt" is becoming less speculation and more reality (Fox and Levenson, November, 1969). Property taxes soar, turmoil mounts, absenteeism increases and frustration continues.

A11 political elements--conservatives, liberals and reactionaries-at one time or another have complained about the clumsy and ineffective political machinery which is supposed to make public schools accountable to their clients (Education Vouchers, March, 1970). The fact of the matter has been, however, that the survival of the public school system has not been dependent upon effectiveness or accountability.

Levin (September, 1968) states the situation in this matter:

In most cases they (public schools) perform for a captive audience. Pupils are assigned to them for better or worse, and each school can retain most of its students because the majority of pupils have no other alternative (p. 277).

Many education critics, like Herbert Koh1, Charles Silberman and Jonathan Kozol, find very little of the present public educational system worth saving. Fantini (March, 1971), while agreeing with the criticisms of the above-mentioned writers balks at the "continued lashing at the public schools" without offering some corresponding suggestions for improvement short of simply dismanteling the present system.

Suggestions for improvement have been offered from various sources. Some of the more prevalent recommendations have to do with alternative financial approaches to the present elementary and secondary educational system. One of these proposals is the education voucher. Basically, the voucher proposes a system of financing elementary and secondary education by providing parents with government issued vouchers with which to purchase schooling for their children. Several voucher plans have been proposed, all derivatives of the original Friedman proposal. A thorough understanding of the most prevalent of these proposals seems paramount. In addition to the Friedman proposal, this section will explore the proposals of Theodore Sizer, Phillip Whitten and Christopher Jencks.

## Friedman Proposal

The man most usually associated with education vouchers has been Milton Friedman, a University of Chicago economist who first proposed his plan in 1955. Writing in Solo's Economics and the Public Interest
(1955) Friedman proposed that:

Governments could require a minimum level of education which they could finance by giving parents vouchers redeemable for a specified maximum sum per child if spent on "approved" educational service (p. 128).

Friedman (1955) advocated a "free market" approach to the operation of schools by stating that:

The role of government would be limited to assuring that the schools met certain minimum standards such as the inclusion of a minimum common content in their program . . . (p. 128).

This free market approach is referred to as the Unregulated Market Model by the Center for the Study of Public Policy (March, 1970). The value of the voucher would be the same for each child and there would be no restrictions on the part of schools in terms of additional tuition. Simply, Friedman's voucher, also called the Unregulated Voucher, would place elementary and secondary education in a completely "free enterprise" situation with the government assuming essentially a laissez faire position toward its implementation. The role of government then, according to the interpretation of the Friedman proposal by Carr and Hayward (February, 1970), would be as "a regulator of the economy, and its proper function (would be) to enforce contracts, prevent coercion, and keep markets free" (p. 182).

Friedman, and all advocates of the market approach, consider basic schooling as a public function; that in a democracy there is a "common core of values deemed requisite for social stability" (Benson, 1968). Levin (June, 1968) refers to this public function as producing social benefits. He asserts that in addition to the social benefits, private benefits are accrued as well. Private benefits are those which accrue to the individual in a tangible form such as higher earnings and in an
intangible form such as greater awareness and insight.
Levin (June, 1968, p. 33) defines social benefits as (1) provision of minimum levels of literacy, knowledge and understanding of our common heritage which are necessary for the functioning of a stable and democratic society and (2) reduction of disparities in income and opportunities presently associated with race and social class.

Friedman (1955) believes that the financing of public education can be justified on the basis of its social benefits which he calls "neighborhood effects." But, he believes that the actual administration of the vast majority of public elementary and secondary education constitutes a "'nationalization' as it were of the bulk of the 'education industry'" (p. 127). He believes that schools could be administered by both public and private sources.

## Sizer and Whitten Proposal

In proposing their "Poor Children's Bill of Rights" (Psychology Today, August, 1968), Sizer and Whitten argued that America has never offered equality of educational opportunity and that reliance on formal education as a means of social mobility is an untenable proposition. They believe that the present public school system, and the completely free market approach as well, only impede upward mobility. It causes the gap to widen for poor people--particularly poor children of minority races.

Their proposal advocated:
a program to give money directly to poor children (through their parents) to assist in paying for their education. By doing so we might both create significant competition among schools serving the poor (and thus improve the schools) and meet . . . the extra costs of teaching the children of the poor (p. 59).

The proposal of Sizer and Whitten would discriminate in favor of the poor, particularly poor minority children in an effort to insure upward social and economic mobility. Their proposal would be:
based on a 'free enterprise' approach to education and would be patterned after the G. I. Bill of Rights. . . .

It would, quite simply, give money in the form of a
coupon to a poor child who would carry the coupon to the school of his choice, where he would be enrolled. . . . And the supplementary grant which the child would give to his school must be large enough to motivate the school to compete for it (pp. 60-61).

They believe this inverse discrimination can be justified on the basis of their interpretation of "equality of opportunity" which they feel should be "equality of attainment" instead (p. 60). The stringent demands placed on our society, insist Sizer and Whitten, make it imperative that the schools be made appropriate for the people attending them with respect to their environment.

Although Sizer and Whitten attempted to modify to some extent the inequities of social mobility found in the public school system as well as in Friedman's proposal, it has remained for Christopher Jencks and his associates at the Center for the Study of Public Policy to present a plan which could be taken seriously by many individuals and agencies as a possible alternative to the present public school system.

## Jencks Proposa1

In the words of Levin (June, 1968):
The fact that the 'new left' (Jencks) and the 'old right' (Friedman) can concur on the same palliative is reason enough to consider the market approach to education as a serious alternative to the present system (p. 277).

The major educational and philosophical aims and concerns of Christopher Jencks have been published in two articles: "Is the Public

School Obsolete?" (The Public Interest, Winter 1966, pp. 18-28), which is a blistering attack against the organizational ineptness of public schools, particularly those in ghetto areas; and "Giving Parents Money to Pay for Schooling: Education Vouchers" (The New Republic, July 4, 1970) which is a defense for implementation of a voucher system.

Jencks and his associates have been involved in an extensive research effort on the voucher issue. Their published study, Education Vouchers: A Preliminary Report on Financing Education by Payments to Parents (March, 1970), was prepared for the Office of Economic Opportunity (OEO) whose interest in the voucher has been prompted by the OEO's frustration over their "inability to purchase any constructive change by working with education in conventional programs" (Sroufe, p. 88). Sroufe, in a review of the above-mentioned book, rationalized OEO's focus by stating:

The mandate of OEO has been to break the culture of poverty and it has been their experience that no amount of funds administered through school systems would purchase significant change in the life chances of the poor ( p .88 ).

This comment is similar in philosophy to those comments quoted earlier by Levin and Sizer. Its impact is greater, however, because it alludes to a certain amount of governmental acceptance of a voucher pilot effort. In fact, the 0 OO has budgeted $\$ 6,000,000$ a year for the next few years to carry out the voucher experiment; much of this money will be budgeted through the Center for the Study of Public Policy. The Center, under the direction of Jencks and a dozen or so associates, has carefully researched the voucher issue and identified seven major education voucher plans. The basic difference between the plans is in the type of economic regulations that would be placed upon them.

They range from the Unregulated Market Model already described to the Regulated Compensatory Model advocated by Jencks.

The Regulated Compensatory Model seeks to compensate for some of the criticisms and inequities found in present public schools and feared to continue under an unregulated free market approach.

Basically, the essential feature of the Regulated Compensatory
Model is as follows: After state or local acceptance was received, an Educational Voucher Agency (EVA) would be established which would resemble a traditional board of education in that control would be local and financing would be handled through federal, state and local funds (July 4, 1970). The EVA would differ from traditional boards in that it would not operate any schools of its own. Rather, the responsibility of the EVA would be to simply
issue vouchers to all parents of elementary school children in its area. The parents will take these vouchers to a school in which they, want to enroll their child. This may either be an existing public school, a new school opened by the public school board to attract families who would otherwise withdraw their children from the public system, an existing private school, or a new private school opened especially to cater to children with vouchers. If the school meets the basic eligibility requirements laid down by the EVA, it will be able to convert its vouchers into cash, which will cover both its operating expenses and the amortization of capital costs. Such a system would enable anyone starting a school to get public subsidies, so long as he followed the basic rules laid down by the EVA and could persuade enough parents to enroll their children in his school (Jencks, July 4, 1970, p. 19).

Jencks concedes that the amount of changes in the quality of education would depend on how effectively the EVA would regulate the market, especially in terms of which schools were eligible to receive vouchers Also, since the EVA could conceivably be controlled by the same political forces that are presently in control of local boards of education, it would be possible for the EVA to evolve into a similar
bureaucratic and political institution.

Jencks does not believe this would occur however, and he rationalizes his belief in this manner:

Today's public school has a captive clientele. As a result, it in turn becomes the captive of a political process designed to protect the interests of its clientele (July 4, 1970, p. 19).

According to Jencks, the voucher system would free individual schools from these managerial restraints by removing them from their monopolistic status.

Many people do not agree with Jencks on the virtue of putting elementary and secondary education on a competitive basis. Their opposition seems to be centered around the feat that this competition would produce too few regulations rather than too many regulations. Kornegay (June, 1968) summarizes the case against the "competition" proponents by stating:
. . . while such advocates freely use the expression 'competing schools' they are not always clear about how the competition will be implemented; nor does it appear that they have fully explored the consequences of such action (p. 583).

Jencks, however, seems to have recognized this weakness and has made some recommendations to offset the charges. Not only has he recognized the weaknesses of the Unregulated Voucher Models, but it seems apparent that the OEO has no intention of funding such a model either. The Center for the Study of Public Policy, in an addendum to their publication, Education Vouchers, and dated May 1970, has proposed additional ground rules to their original voucher:

1. No school should be able to charge parents tuition in addition to the voucher amount. This rule, according to Jencks, would prevent discrimination against the children of poor families who could not
afford extra tuition charges.
2. In order to give all students an unbiased chance for admission to schools of their choice, participating schools with more places than applicants would enro11 all applicants. Schools with more applicants than places would accept a portion of their students, say half, by their own criteria and the other half randomly.

## Reactions to the Voucher Proposals

Milton Friedman (1955) cited three basic advantages to the voucher method of supporting education. First, a wider range of school selections for parents would be available under the voucher plan. Second, the introduction of private enterprise would produce a competitive atmosphere which would make schools more efficient and promote a variety of educational opportunities within each school. Third, the educational profession would become more flexible and responsive to market forces, particularly in terms of teachers' salaries.

Charles Benson (1968) has explored Friedman's plan thoroughly in terms of the above-mentioned advantages. Concerning the increase of consumer choice, Benson agrees with Friedman that implementation of a voucher system would provide parents with more choices. Benson states that when a parent exercises his limited choice under the present system, he is in effect, paying double for his child's education.

Regarding the introduction of innovation and experimentation, Benson asserts that the present public education system cannot normally assume the risk and money involved in such procedures. He argues that money spent on development is extremely vulnerable to attacks from the education skeptics--both parents and non-parents.

Regarding the increased flexibility and responsiveness to market forces, Benson (1968) agrees that the total economic support would increase under a voucher plan and states:

It would be much harder for a parent, rather than a school board, to deny children a costly education, especially when he was hearing constantly and at first-hand about the specific features of the superior program his neighbor's children were enjoying (p. 58).

Benson finds some agreement on this issue from Henry Levin (June, 1968) who believes that a free market approach to education might enhance the private benefits but the social responsibility of the schools would be hampered seriously especially in the area of equalization of opportunity for all social and racial groups.

Unlike Benson, however, Levin does not view the public schools as adequately providing the social services for the poor. He states:

If the public sector has failed the poor in the efficient production and allocation of social services, the private market can hardly claim a greater degree of success in satisfying their needs (p. 282).

Levin further declares:
Geographic mobility, education, income, access to capital (credit)--the very things which the poor lack and the middle class possess--are the characteristics that enable one to operate most successfully in the private market (p. 282).

Thus, Levin believes that the free market approach or the Unregulated Market Model would probably lead to greater racial and social isolation of pupils than the present school system permits. One of the major reasons for this belief is that the geographic location of schools in the inner city would be economically more costly from a land purchase standpoint than a school building of equal structural quality in the suburbs. In addition to land costs, construction costs and personnel costs would also be greater, according to Levin (June,
1968). So, if the value of the vouchers were the same for all children, built-in inequities would exist for ghetto and inner city children before they ever arrived at school.

To offset this situation, Levin supports the plan of Sizer and Whitten whereby tuition of voucher payments would be inversely related to family income and wealth. With this modification, then, "differences in tuition would be based upon relative educational needs, costs, and the family resources for fulfilling those needs" (p. 286).

However, the proposal of Sizer and Whitten has received very little optimistic consideration largely because of its unfavorable legislative appeal. It seems untenable that a legislature would fund such a program for poor people which would give them an opportunity to enter private schools just as wealthy parents do. The middle class would, in effect, be discriminated against--a situation not likely to meet with legislative approval.

The Center for the Study of Public Policy believes that the SizerWhitten proposal is really quite similar to the completely unregulated model presented by Friedman. The difference would be in degree only, and whereas one plan might lessen the gap between the rich and the poor, the pattern of isolation and segregation would be similar in both proposals.

There seems to be little question that an unregulated voucher plan would widen the gap, at least socially, between the rich and the poor. Friedman, in his original proposal, was not particularly concerned with this aspect. He was apparently more concerned with the freedom of choice rather than the equalization of educational opportunity. Recent social conditions, of course, have placed the emphasis upon the latter
consideration.
Friedman (1955) believed that forced desegregation was as wrong as forced segregation and indicated that his plan would permit parents who said they believed in integration an opportunity to give more than lip service to their statements. Unfortunately, the history of the past fifteen years since Friedman's proposal has indicated that a system permitting voluntary compliance toward integration implementation has produced more rather than less social, racial and economic segregation.

Christopher Jencks, under his Regulated Compensatory Mode1, states that racial discrimination would be forbidden and that racial and social balance would not be left to "free choice." This is a more realistic position than that taken by Friedman (1955, p. 130) who asserted that by widening the range of choices under a private system, social and racial stratification would be reduced. However, neither man has given any evidence to support his contention and there is some evidence to indicate that social and racial stratification would increase under such a plan. For example, one black member of the Orange County Board of Education stated that the reduction of social and racial stratification through integrated education "is a physical impossibility in large urban areas and it is impossible due to pronounced anti-black feelings among whites (Kent, January, 1968).

In essence then, the question keeps reoccurring and it remains unanswered by voucher proponents, "Will the private sector provide better and more equitable educational services for poor children, particularly minority children, than the public sector?" The private sector's efforts at equalization of economic services in all geographic areas is certain1y not good. For, "not only is there no Saks Fifth

Avenue in Harlem, there is no Macy's, Gimbels, Korvettes, or Kleins" (Levin, p. 34).

Another often mentioned objection to the voucher proposals is their constitutional legality. Particularly, this objection is in relation to availability of government issued vouchers for parochial students and the ramifications that might occur in terms of separation of church and state. Jencks rationalizes the constitutional legality of the voucher by arguing that:
the First Amendment's prohibition against an 'establishment of religion' can be construed as requiring the state to treat church schools in precisely the same way as other private schools. The Supreme Court has never ruled on a case of this type . . . . Until it does, the issue ought to be resolved on policy grounds. And since the available evidence indicates that Catholic schools have served their children no worse than public schools, and perhaps slightly better, there seems no compelling reason to deny them the same financial support as other schools (July 4, 1970, p. 21).

The separation of church and state has always been a major constitutional premise of our government. Its interpretation, however, has changes to some extent over the past years. For example, an analysis of the editorial position of The New Republic for which Jencks writes occasionally will reveal this switch. On March 20, 1961, the editors stated that they were exclusively for federal aid to public schools because of their "nationalizing and equalitarian work." The editors were of the opinion that to accept the principle of support for private and public schools equally would be to discredit the mission of the State in education (Ward, 1965). On March 2, 1963, however, the editors proposed some aid for parochial schools if it was publicly supervised. They believed that "a more serviceable approach is that the State should legislate for purely secular ends, but that it should not worry if this incidentally he1ps a church" (Ward, p. 5).

Recently, emphasis has begun to be placed on direct subsidization to parents. Despite criticism from the NEA and the American Jewish Congress, President Nixon has pledged financial assistance to parochial schools, probably through direct reimbursement to parents. An example of the possible direction this assistance will take may be found in the recently enacted Pennsylvania law which provides parents of children in nonpublic schools with direct annual payments of $\$ 75.00$ for each elementary school pupil and $\$ 150.00$ for each secondary school student (Education U.S.A., September 6, 1971). Thus, implementation of some type of voucher system through legislative changes and the OEO's funding of Jenck's proposal becomes more reality and less speculation.

One indication of the seriousness of the voucher "challenge" has been the criticisms from public school educators. The American Association of School Administrators in its announcement of 1971 resolutions has indicated that it "vigorously opposes any implementation of a voucher system in education" (December, 1970). Similarly, the National Education Association has opposed the voucher stating:
. . . the so-called voucher plan under which education is financed by federal or state grants to parents could lead to racial, economic and social isolation of children (Today's Education, November, 1970).

In all the furor and controversy surrounding the voucher, one thing seems more clear than anything else. Both proponents and opponents have failed to substantiate their arguments to any great extent. For example, in a survey which was reported in the Phi Delta Kappan (November, 1969) school board members who opposed the voucher cited, as a reason for opposition, that vouchers would lead to "increased government influence and control of all schools" (p. 132). Proponents countered that the implementation of vouchers would promote democratic free
choice. This survey was conducted in a midwestern state and the respondents were all school board members. With the incredible divergence of conclusions presented above it would be hazardous to speculate as to the conclusions that would be reached by less professionally homogenous groups.

Obviously, a great deal of the confusion and misunderstanding that surrounds the voucher issue will have to be resolved or the voucher's effectiveness as an educational alternative to present public education will be hampered. The responsibility of voucher proponents goes beyond merely criticizing present situations or proposing poorly conceived alternatives to the current situation. Kristol (1968) has stated that the availability of people to effectively implement new programs is always exceeded by the social and political imagination capable of inventing new programs.

Carr and Hayward (February, 1970) have summarized the current voucher controversy by stating:

We must now go beyond mere criticism of the voucher plans and provide perspectives for a conceptual framework within which future plans should be created. Long range educational planning is an absolute prerequisite for inducing successful change. The (voucher) proposals . . . typify the lack of concern for long term educational planning (p. 189).

The following section of this chapter will identify concepts inherent in the various voucher proposals in an attempt to build a stronger theoretical base than currently exists.

Concept Development

The aims of science are explanation, understanding, prediction and control (Kerlinger, 1964). These aims follow logically and sequential1y. Thus, before prediction and control can be attained, explanation
is vital.
This research study was an attempt to establish a theoretical framework to study the educational voucher by identifying the basic concepts inherent in the major voucher proposals. Kerlinger (1964) defines a concept as a "word that expresses an abstraction formed by generalizations from predictions" (p. 31). Willower (1963) states that a concept is simply a "term which is abstract, generalized, and given a specific meaning" (p. 101). In research, concept development is basic to developing a theoretical framework. Before there can be hypothesis construction, there must be concept formulation.

It is interesting to note that explanation is the initial aim of science and without a set of well-defined constructs the ultimate aim of science, which is theory, would be unattainable. Kerlinger (1964) indicates that a theory is a set of interrelated concepts that present a systematic view of specific phenomena by describing relationships among variables, the purpose being the prediction of phenomena.

A very basic step in the voucher issue, then, should be to identify the basic concepts that run through the various voucher models:

## Free Choice

Fundamental to all voucher proposals has been the concept of free choice. Basically, free choice means that the determination for assigning attendance centers for educational purposes would be the responsibility of parents. Traditionally of course, this responsibility has been delegated to local boards of education. Aside from this distinction the concept "free choice" has varied meanings depending upon what side of the issue people find themselves. As Fox and

Levenson (November, 1969) point out, to some parents free choice might mean social and political opportunity to send their children to private schools even if they have to pay tuition, while to others "free choice" might mean equal economic opportunity. In the Review of Literature section, levels of freedom of choice were found to range from almost total freedom in the completely unregulated models to rather closely defined freedom in the more closely regulated models. Regardless of the nature and extent of freedom all voucher proposals have had some element of free choice inherent in them.

## Public and Private Administration

This concept refers to a plan whereby the financing of elementary and secondary education would come from government funds, but the responsibility for operating the systems of education would be from public, parochial or private sources. Fundamental to this concept is the idea of breaking up the present educational system which some writers have called the "harmful monopoly." This so called "harmful monopoly" consists of publicly financed education administered by public officials. Friedman believed that the "neighborhood effects" or social benefits provided by an education warrant the use of public funds. However, he believed the actual administration of elementary and secondary schools could be either public or private. Private, in this sense, could also refer to parochial administration. Kenneth Clark (September 25, 1967) has stated that even unions and industries could be involved in the process of educating the Nation's youth.

## Accountability

Closely connected with and possibly a derivative of free choice is the concept of accountability. Accountability is an often used and sometimes ambiguous term. Within the voucher framework, it refers to the accountability which results through the competition for students by different schools. Kornegay (June, 1968) states that growing numbers of Americans are suggesting that schools should be placed on a "competing basis." In this regard, indicated Kornegay, schools would be held accountable to parents for the schools' failures. Kenneth Clark, in an interview with Newsweek, put it this way:

By such and such a time we must say that the performance of most children, most classes, most grades, must be at this level--or else. I know this goes against the grain of educators--but we must establish the fact that the profession will be judged not on the basis of others but on performance (September 25, 1967, p. 71).

According to some voucher proponents this competitive aspect would improve accountability and hence elementary and secondary education because implicit in the competitive concept in the education voucher is the assumption that "the sovereign consumer has complete knowledge of the market as a rational choice" (Fox and Levinson, 1969).

The accountability which voucher advocates believe would result by placing schools on a competing basis is contingent upon parents having information about various educational plans and curriculum offerings. Thus, implicit in the education voucher though not a directly related concept is the aspect of an information system. Henry Levin, in a personal letter to this researcher, stated that an information system should make available to parents all the relevant alternatives as well as ways of distinguishing among them. Included in this information
system would be a community counselling service, periodic data reports and electronic media of each voucher school to adequately educate parents of the strengths of various schools so that they would be able to make decisions on attendance centers from reasonably enlightened positions.

## Equilibrium

Another concept inherent in most voucher proposals is what might be referred to as economic equilibrium which relates to the balance between a parent's ability to pay for the education of his child and the amount of money required to educate that child. Friedman's original proposal advocated the practice of parents being able to add money from their own resources to their vouchers in order to upgrade their children's education. In the Review of Literature section, voucher proposals were presented that attempted to modify this plan to provide for voucher payments to be inversely related to income. Regardless of the level of individual contribution, all voucher proposals have strategically inherent in their framework the concept of economic equilibrium.

## Presentation of Research Questions

The majority of parents with school age children have no other meaningful educational alternatives than the public schools. Lower income parents, such as those in tenement dwellings and rental situations do not have economic resources to explore other alternatives. Since the predominant means of financing public schools is through property taxes, for those parents who are property owners to select
alternative educational sources would, in effect, cause them to pay double for their children's education.

In addition, most public schools perform for a "captive" clientele (Car1son, 1964), and they do not have to be effective to continue in operation. Generally, it has been the policy of boards of education to adamantly enforce attendance center boundary lines thus removing any avenue of redress, except relocation, for parents who feel that their children have not received satisfactory education.

The education voucher would provide such an alternative because parents would be able to select the attendance center for their children and they would also be provided with monetary compensation to implement that choice. However, an important under lying element to voucher implementation would be the parents' willingness to assume the responsibility for their children's education. The Center for the Study of Public Policy (March, 1970) has indicated that if parents are to assume this responsibility they must be able to take "individual" action in their children's behalf. Thus, for this research study, an underlying concern must be the extent to which parents would implement a voucher plan as an alternative. In this regard, the following general research questions about voucher implementation were proposed:

## General Questions About Voucher Implementation

1. TO WHAT EXTENT ARE PARENTS IN OKLAHOMA SATISFIED WITH THE PUBLIC SCHOOLS IN THEIR DISTRICT?
2. WOULD A MAJORITY OF THE PARENTS OF OKLAHOMA LIKE TO SEE A VOUCHER PLAN TMPLEMENTED?
3. WILL PARENTS WHO EXPRESS A LOW DEGREE OF SATISFACTION WITH PUBLIC SCHOOLS EXPRESS A HIGH DEGREE OF OPTIMISM TOWARD THE EDUCATION VOUCHER?

Further, in an effort to more adequately analyze parental attitudes regarding the voucher the following questions relative to specific demographic characteristics of the respondents were raised:

## Questions Related to Demographic Characteristics

4. DO PARENTAL ATTITUDES TOWARD PUBLIC EDUCATION AND THE EDUCATION VOUCHER DIFFER DEPENDING UPON THEIR LEVEL OF EDUCATIONAL ATTAINMENT?
5. DO PARENTAL ATTITUDES TOWARD PUBLIC EDUCATION AND THE EDUCATION VOUCHER DIFFER DEPENDING UPON THEIR OCCUPATION?
6. DO PARENTAL ATTITUDES TOWARD PUBLIC EDUCATION AND THE EDUCATION VOUCHER DIFFER DEPENDING UPON THEIR RACE?

Much of the criticism of public education in recent years has been leveled at conditions which generally occur in large urban schools. For example, racial conflict, teacher strikes and overcrowded building conditions are but three problems that are prevalent and that are confined almost exclusively to the larger school districts of our nation. In addition, the vastness and impersonal relationships that exist cause many parents to be on the defensive when dealing with these schools. In a letter to the editor of The New York Times Magazine, one parent expressed his frustrations with large, public schools by stating:

Public education in this city is an obvious failure. It is a monopoly controlled by administrators and now by teachers . . . it tends increasingly to be run less for the benefit of the citizens than for that of the staff . . . .

The fact of the matter is that almost every one who has a real choice keeps his kids out of public schools (October 29, 1967, p. 14).

Rural and more sparsely populated communities, on the other hand, seldom become newsworthy as far as criticism of education is concerned. Since one of the stated purposes of this study was to analyze the extent to which school district size affected the attitudes of parents
to the education vouchers, the following question was raised:
7. DO PARENTAL ATTITUDES TOWARD PUBLIC EDUCATION AND THE EDUCATION VOUCHER DIFFER DEPENDING UPON THE SIZE OF THE SCHOOL DISTRICT IN WHICH THEIR CHILDREN ARE ENROLLED?

The following research questions were raised relative to specific concepts presented earlier in this chapter. The purpose of these questions was (1) to determine if differences in attitudes existed among parents depending upon the size of the school district in which their children are enrolled and (2) to determine the nature of the over-all attitudes of parents to the specific concepts.

Questions Related to Selected Voucher Concepts
8. DO PARENTAL ATTITUDES TOWARD COMPETITION FOR STUDENTS BY SCHOOLS AND TEACHERS DIFFER DEPENDING UPON THE SIZE OF THE SCHOOL DISTRICT IN WHICH THEIR CHILDREN ARE ENROLLED?
9. DO PARENTAL ATTITUDES TOWARD GIVING MONEY TO PARENTS TO PURCHASE SCHOOLING FOR THEIR CHILDREN DIFFER DEPENDING UPON THE SIZE OF THE SCHOOL DISTRICT IN WHICH THEIR CHILDREN ARE ENROLLED?
10. DO PARENTAL ATTITUDES TOWARD KNOWLEDGE OF EDUCATIONAL MATTERS DIFFER DEPENDING UPON THE SIZE OF THE SCHOOL DISTRICT IN WHICH THEIR CHILDREN ARE ENROLLED?

## Summary

This chapter reviewed the literature related to voucher proposals and voucher implementation. In addition, concepts inherent in the education voucher were identified and defined. Finally, the research questions which were designed to guide the analysis of the data were presented.

In the review of literature, the voucher proposals of Milton Friedman, Theodore Sizer and Phillip Whitten, and Christopher Jencks
were reviewed. Reactions to these proposals in particular and the voucher controversy in general were also reviewed and presented.

Concepts which were found to be inherent to some degree in all the voucher proposals were identified. These concepts included: (1) free choice; (2) public and private administration; (3) accountability; and (4) economic equilibrium.

Ten research questions were developed to guide the analysis of the data. The questions were divided into three categories: (1) general questions about voucher implementation; (2) research questions related to demographic characteristics of the respondents; and (3) research questions related to selected voucher concepts.

CHAPTER III

## METHOD AND PROCEDURE

## Introduction

This chapter will describe the research design with emphasis upon the sampling techniques, the development of the instrument, and the method of administering the instrument. The chapter concludes with a description of scoring procedures for deriving data for analyses of the research questions and a discussion of statistical treatment of the data.

## Research Design

The goals of science are explanation, prediction and control. Obviously, description and explanation are preliminary to the ultimate scientific goals of control and experimental manipulation of causal variables.

Since this research study was exploratory in nature, a descriptive design seemed appropriate for two reasons. First, the absence of a strong theoretical base precluded experimental research. Secondly, the pioneer nature of the study necessitated the use of a preponderance of qualitative data.

In justifying the use of a descriptive research design with consideration to the nature of this research, the following statement by Van Dalen (1966) seemed appropriate:

Descriptive research contributes to science primarily by building a foundation of facts upon which explanatory hypotheses may be constructed and by checking the validity of existing theories (p. 238).

Van Dalen (1966) further states that descriptive studies may classify, order and correlate but it is not their function to fully analyze and explain relationships.

This exploratory study also involved the use of qualitative data to a great extent. Concerning qualitative data, Van Dalen (1966) states:

Qualitative data--word descriptions--may predominate in studies that examine the general nature of phenomena. Pioneer studies in a field are usually expressed in verbal terms (p. 205).

In summary, when past research is minimal and when the data gathering techniques have not been standardized, it becomes paramount that the researcher select a design which will provide valid answers to the problems presented regardless of the level of scientific accomplishment. Also, explanation and description are phenomena which are basic to the higher order scientific accomplishments of prediction and control. Van Dalen (1966) indicates that if descriptive studies obtain accurate facts and use sound research designs, they provide education with useful and practical information.

## Sampling Techniques

## Population

The population for this study was the parents of school age children in the state of Oklahoma. The population was confined to parents of children who attend public schools in independent school districts in Oklahoma.

The Oklahoma Educational Directory (1970-71) was used to identify the independent public school districts in the state. In order to analyze the relationships between school district size and parental attitudes toward the education voucher, procedures were employed to stratify the population. Following identification of the independent districts, the districts were ranked by Average Daily Attendance (ADA) in descending order. ADA was selected because it is probably a more representative method of determining district size than using the number of teachers employed, which has a tendency to fluctuate depending upon district wealth or federal assistance. The purpose of this ranking procedure was to analyze the range in ADA among the different districts to more logically determine breaks in size. The results of the ranking procedure are reported in Appendix A.

Following the ranking procedure, a decision was made as to the number of strata in which to divide the districts. The ADA by district ranged from 70,554 at Tulsa to 119 at Reydon. This division procedure was prompted by the question of whether there were different characteristics between Tulsa and Reydon and, if so, were the parents of school children in these districts different in terms of their attitudes to concepts inherent in the education voucher? It was arbitrarily decided to divide the districts into three strata. Table $I$, page 32 , presents pertinent data for the three strata.

Stratum I ranged in ADA from 70,554 to 16,700 . An analysis of these five districts showed that all districts were within geographical boundaries identified as metropolitan by the Standard Metropolitan Statistical Area (SMSA).

TABLE I

RANGE OF ADA, AMOUNT AND PER CENT OF THE TOTAL ADA FOR EACH STRATUM

|  | Range of <br> ADA | ADA | Per Cent of <br> Total ADA |
| :--- | :---: | :---: | :---: |
| Stratum I | 70,554 to 16,700 | 188,236 | 35 |
| Stratum II | 8,884 to 2,088 | 139,749 | 26 |
| Stratum III | 1,991 to 119 | 209,339 | 39 |
| Totals |  | 537,324 | 100 |

The remaining districts range in ADA from 8,884 at Enid to 119 at Reydon. While there are similarities in the remaining districts (for example, all have one high school except Norman and Bartlesville each of which have two high schools), there was the possibility that attitudes of parents whose children are enrolled in extremely small school districts would be different from the attitudes of parents whose children are enrolled in larger school districts. For this reason $i t$ was arbitrarily determined to divide the districts into two strata, with the division line being 2000 ADA. Admittedly, those districts immediately above and immediately below 2000 ADA are probably more similar than different, but this situation was not considered crucial because of the sampling techniques employed.

The majority of districts in Stratum II, which ranged in ADA from 8,884 to 2,088 , are located in cities which have state institutions of various kinds or military establishments. In fact, 21 of the 35 cities
represented in Stratum II are sites for institutions of higher learning, mental or social confinement or federal military installations. There is generally a mixture of rural and urban life in the cities whose school districts are represented by Stratum II.

Stratum III, which ranged in ADA from 1,991 to 119 , is predominantly rural in terms of population and orientation, and represents the chracteristics of non-metropolitan areas as defined by the SMSA. The majority of these districts are located in agricultural surroundings. Another characteristic of this stratum is that most of the districts have their entire educational plant in one geographical location and often in one building.

## Sample

Van Dalen (1966, p. 296) indicates that after the population has been properly defined and all the units within the population have been made available, the next steps are to obtain a sufficiently large sample to represent the characteristics of the population and to draw the sample in representative units from the population.

A sample of 500 parents was selected. Although determination of sample size is a subjective decision, a review of the literature on sampling procedures provides some helpful suggestions. According to Van Dalen (1966, p. 298) there are three factors which determine whether a sample is adequate in size: the nature of the population, the type of sampling design, and the degree of precision desired. Kerlinger (1964, p. 62) states, ". . . large samples are more accurate, other things being equal, than small samples." Regarding the size of the sample, Blalock and Blalock (1968, p. 287) say:

No matter how large the population if everybody in it held the same position, behaved the same way, or possessed the same values, a sample of one would give as much information about this fully homogenous population as would a sample of many thousand. If the members of a population differ widely in their behavior or characteristics then a fairly large sample is needed to mirror the population precisely.

The pertinent question, then, seems to be, "how large is large?" In other words, how large must a sample be in order to fall within a sufficiently normal population? To this question Blalock and Blalock reply: "It is suggested that a minimum sample size of 100 should be obtained before any mean or proportion can be considered to have a sufficiently normal distribution."

For purposes of this study, then, it would be desirable for each of the three strata to have sample sizes of 100 or greater. Hence, a total sample size of 500 was considered statistically sufficient.

Using a proportional sampling technique, given the percentages in Table I, the sample size for each stratum would be: Stratum I - 175; Stratum II - 130; and Stratum III - 195. Regarding the use of proportional sampling Van Dalen (1966, p. 299) says:

Proportional sampling enables one to achieve even greater representativeness in the sample. This technique requires selection of units at random from each stratum in proportion to the actual size of the group in the population.

One of the problems connected with drawing representative units from the population in this study was the problem of feasibility. An examination of Appendix A indicates that, theoretically, the five hundred parent names could have been drawn from 235 different districts. Even by weighting the districts according to ADA and then drawing a sample, the time and expenses involved in collecting the sample would be prohibitive. Therefore, it was arbitrarily decided to utilize all the districts in Stratum I and randomly select ten
districts from Stratum II and twenty districts from Stratum III, and then randomly select the parent sample from these districts. The school district selections made from this procedure are in Appendix B. This method of selection was defended not only on the basis of feasibility but on geographic representation as well. Appendix C presents a pictorial description of the sample districts and sample size from each district. An analysis of the map indicates that the sample districts are fairly representative geographically of the state of Oklahoma.

In essence then, the techniques used in the sampling procedure such as stratification to increase homogeneity and large sample size to improve the normality of the distribution are presented as adequate defense to the resolution of the unfeasibility of drawing a completely random sample. Kerlinger (1964, p. 53) addresses the problem of randomness by stating:

How can we be sure that random samples are representative? The answer is that we cannot be sure--ever . . . dead certainty can never be achieved. If he is to understand scientific research, the student must learn to live with this uncertainty. Fortunately, our lack of certainty and our lack of complete knowledge do not impair our research functioning.

After the districts were selected randomly from Strata II and III, along with a contingency sample, superintendents of the selected districts and contingency districts were mailed letters of explanation of the research study and permission was requested to randomly select the necessary names from their districts. Appendix D includes a copy of that letter.

Upon receipt of permission from the designated school superintendents to select the names, addresses, and race of parents, the number of respondents to select from each district was determined. This decision
was made on the basis of district size. In each stratum the selected districts were weighted according to ADA. Then, a table of random numbers (Popham, 1967) was used to select the sample for each stratum. The results of that process are included in the information in Appendix B.

The next step was to establish an appointment with each superintendent, go to his office and determine the names of parents to be used in the sample. Various modifications in assigning numbers to students were necessary depending upon the record keeping characteristics of the districts. However, in all cases randomness was maintained. This procedure culminated the sampling process.

## Instrumentation

## Review of Scaling Techniques

The literature relative to the various instrument scales was reviewed before the instrument to be used in this research study was constructed. The construction of an instrument was necessitated by the absence of any appropriate standardized instrument that would adequately measure the research questions posed in Chapter Two.

Blalock and Blalock (1968) identify four major scaling techniques: (1) Thurstone's equal appearing intervals; (2) Likert's summated scale; (3) the Guttman scale; and (4) Osgood's Semantic Differential. Krech et al. (1962) identify, five principal scaling methods. In addition to the Thurstone, Likert and Guttman techniques, they emphasize the Social Distance Scale was designed primarily to measure and compare attitudes toward different nationalities. In the context of this research it was determined that the Social Distance Scale would be inappropriate. The
authors state (p. 155) that the scale discrimination approach has not been sufficiently tested to determine its strengths and weaknesses. Kerlinger (1964) restricts his discussion to three major attitudinal scales--the Thurstone, Likert and Guttman scales.

The selection of appropriate scaling techniques is, of course, crucial to the over-all research project. Smith et al. (1969, p. 10) indicate that knowledge of the "properties" of the different scaling techniques must be understood. It is not sufficient to simply "assume that one (technique) is as good as another." Hence, a survey of the literature related to the Thurstone, Likert, Guttman and Osgood scales was conducted focusing on the characteristics, statistical assumptions, advantages and disadvantages of each technique.

Thurstone-type Scales. This scale is often referred to as the technique of equal appearing intervals. Blalock and Blalock (1968) identify two basic steps in the process of developing such an instrument, the first of which involves asking:
a group of judges to sort a set of statements concerning the attitude object into categories according to the degree of favorableness - unfavorableness toward the object which each statement implies . . . . The second step . . . consists in administering a sample of the scaled statement to the respondents whose degree of affect is to be measured (pp. 90-91).

Generally, the number of judges ranges from fifty to one hundred and the number of categories ranges from seven to eleven (Van Dalen, 1966). Ultimately, the scale consists of a series of statements, usually about twenty, the position of each statement being determined by the judges' classification (Thomas, 1971).

One major disadvantage of the Thurstone-type scale is that particular attitudes of the judges themselves are influential in the final scale values assigned to the items. Blalock and Blalock. (1968) state
that "when a respondent accepts or rejects a statement, he may do so . . . on the basis of whatever idiosyncratic consideration appeals to him" (p. 92). While the researcher welcomed idiosyncracies of the sample respondents, to have accepted the idiosyncracies of a panel of judges would not have been germane to the research study.

Likert-type Scales. The Likert scale is often referred to as a summated rating scale. It consists of a number of items to which a subject is asked to respond. Responses are made in varying degrees of intensity of favorableness or unfavorableness. Basically, the procedure for constructing a Likert-type scale is as follows (Van Dalen, 1966, pp. 321-322):

The test contains a large number of statements which indicate clearly a position for or against a particular issue. After each statement, subjects check one of several alternative answers, such as 'strongly approve,' 'approve,' 'neutra1,' 'disapprove,' 'strongly disapprove,' . . . . The arbitrary method (of scoring) gives a weight of 1 to 5 to the alternative answers, and the same numerical values are always given to the responses that show the greatest favorableness toward the phenomenon . . . . The total score for each subject is the sum of the values assigned to each item that is checked. Before constructing the final test, the investigator applies techniques that help him identify weak items.

Kerlinger (1964) identified three major distinctions between the Likert-type scale and the Thurstone-type scale: (1) the Likert-type scale has as one of its basic assumptions that the universe of items are of equal attitudinal value whereas the Thurstone-type scale weights the items according to their importance as determined by a panel of judges; (2) the summated rating scale (Likert) concentrates on the subjects and their places on the scale whereas the equal appearing interval scale (Thurstone) concentrates on the items and their places on the scale; and (3) the Likert-type scale permits the subject to
respond in varying degrees of intensity. The Thurstone-type scale allows the subject to simply respond to the already, scaled items. Van Dalen (1966) and Blalock and Blalock (1968) state that the Likert method is just as reliable as the Thurstone technique. In addition, Selltiz et al. (1959) have identified several functional advantages of the Likert-type scale over the Thurstone-type scale: (1) items that are not directly related to the attitude being measured may be used; (2) the Likert-type scale is simpler to construct and more economical to administer; and (3) more categories are possible with the Likert-type scale thus generating more data.

Selltiz, et al. (1959) have identified two distinct disadvantages of the Likert-type scale. First, only ordinal level data may be reached. Second, the composite score may have very little meaning since varying patterns of responses could elicit similar scores. Kerlinger (1964) and Berg (1967) indicate that another disadvantage of the Likert-type scale is the possibility of response set variances confounding the attitude variances. However, the seriousness of this disadvantage has been minimized somewhat by Berg (1967) who has identified several response set patterns and has offered suggestions the researcher can use to cope with these patterns when using a Likert-type scale.

The Likert-type scale is the most frequently used scaling technique among researchers, and Kerlinger (1964) indicates that it seems to be the most useful in behavioral research.

Guttman-type Scales. The Guttman scale or cumulative rating scale consists of a small group of homogenous items the purpose of which is to measure the cumulative relationship between the items and the total
scores (Kerlinger, 1964). For example, the possibility of correctly responding to a particular item is dependent upon a correct response to the preceding items. Blalock and Blalock (1968) explain the essential feature of the Guttman scale in this manner:

The existence of a Guttman scale implies a particular dependency among the component items such that the conditional probability that a respondent will endorse item $I_{i}$, given that he endorses any item higher on the scale than $I_{i}$ is 1.00 (p. 101).

According to Kerlinger (1964), the essential concentration of the cumulative scale is on the scalability of sets of items and on the scale positions of individuals. This concentration was considered to be extraneous to the demands of this research study. Kerlinger (1964) supports this contention to some extent by stating that the cumulative rating scale is less useful and less applicable to behavioral research than either the summated rating scale or the equal appearing interval scale.

Semantic Differential. Recent research on attitudes, particularly attitude change, has utilized a scaling technique known as the Semantic Differential (B1alock and Blalock, 1968). The Semantic Differential was developed by Osgood, Suci, and Tannebaum as a method of measuring the psychological meaning of concepts (Kerlinger, 1964). This measuring instrument was intended to be a generalizable technique that involves no standard scales or concepts, but rather the scales and concepts must be adapted to the unique requirements of each research problem (Osgood, et al., 1957).

The authors, in developing their instrument with the use of factor analysis, discovered that a factor which consistently loaded heavily was labeled the evaluative dimension. A second factor which was
consistently heavy in loading but to a lesser degree was labeled the potency dimension (Osgood, et al., 1957). With this knowledge, Osgood, Suci and Tannebaum proposed that selected concepts could be measured on both evaluative and potency dimensions by having subjects respond to these concepts through the use of several sets of polar adjective pairs such as good-bad, optimistic-pessimistic and pleasant-unpleasant.

This model was given serious consideration by the researcher as a potential instrument. In fact, a research project utilizing voucher concepts with a Semantic Differential approach was conducted in a graduate level course. It was deemed inappropriate for this research study for two reasons. First, it is not possible to determine why respondents would evaluate a particular concept differently (B1alock and Blalock, 1968). For some, the reason might be due to the degree of affect toward the object. For others, the difference might simply be due to the willingness or unwillingness to describe their feelings. Secondly, and probably more importantly, the researcher's inability to adequately and objectively define the concepts in a few words was considered a hindrance to the respondents' evaluations. Also, the comparing of proposed systems (voucher schoo1s) with actual systems (public schools) was considered statistically indefensible.

## Development of the Instrument

After the review of scaling techniques, it became necessary to select a technique for this study and to justify its use. Since the nature of the study was descriptive and since research questions were used rather than hypotheses, instrument validation was not as crucial as it would have been under a different research design. However, this
does not excuse the researcher from proceeding logically and systematically in construction of the instrument. In fact, Van Dalen (1966) indicates that in order to obtain reliable data, a questionnaire must be carefully constructed.

Therefore, the researcher proceeded through four major phases in developing the survey instrument questionnaire. The first phase consisted of choosing the appropriate scaling technique for the study. A Likert-type instrument was selected for the following reasons:

1. A Likert-type instrument can be constructed more easily and administered more economically than other techniques without sacrificing reliability or statistical power.
2. The potential robustness in terms of data generated was particularly appealing since the nature of this study was exploratory. The Likert scale is capable of generating more data than the Thurstone; the Guttman and Semantic Differential were not considered because of previously cited reasons.
3. A11 items were considered to be of equal weight. It was not considered appropriate to rank the items, such as a Thurstone scale would do, again the main reason being that the study was exploratory in nature.
4. The Likert scale concentrates more on the respondents themselves than either the Thurstone or Guttman scales which are basically item oriented (Kerlinger, 1964).

The second phase consisted of preparing questionnaire items related to the concepts identified in Chapter Two. Suggestions for possible items were received from several sources including a review of the literature on education vouchers, a review of the literature
related to attitudinal instrument construction and discussions with parents, private and public school officials and businessmen. A panel of judges, consisting of the researcher's doctoral committee, examined these questionnaire items and the concepts. Their instructions were twofold. First, determine the concepts relevant to the study of education vouchers and, secondly, assure that the questionnaire items accurately reflect the concepts from which they were developed.

Utilizing the panel's recommendations, considerable refinement, especially in terms of communicability of the items, was necessary. Also, an attempt was made to rank the items in terms of controversy and interest. Van Dalen (1966) states that items should be placed in a psychologically sound sequence with crucial or personal questions preceded by questions that are more neutral and impersonal. In addition, an instruction sheet and a personal data information form were also prepared.

Stage three consisted of a pilot study, the purposes of which were to ascertain the following: communicability of the items; communicability of the instructions; and the amount of time required to complete the instrument. In addition, the researcher wanted to know if the items were free from bias.

Two summer school graduate classes from the Department of Education were selected as the sample. There were thirty-nine individuals in the two classes. The professional backgrounds were as follows: nineteen classroom teachers, twelve public school administrators, three college professors, and five graduate students in education. The professional status of the sample enabled the researcher to determine if the items discriminated sufficiently among known groups.

The amount of time necessary for completing the instrument ranged from eight to fifteen minutes, the average time being 11.26 minutes. At the conclusion of the assignment, the respondents were asked to verbally respond to the items and to the questionnaire, over-all.

Two of the items were omitted because of their failure to discriminate and two other items were refined in an attempt to reduce the ambiguity contained in them. In addition, the feedback from the group indicated that a "level of education" section should be added to the information portion of the questionnaire.

The aspect of content validity was also considered at the conclusion of this pilot study. Kerlinger (1964) defines content validity as the "representativeness" of the content to be measured. The five concepts identified in Chapter Two were represented by at least four items each. For this reason, it was determined that the instrument did have content validity. Construct validity was not considered basically because of the highly theoretical ramifications involved therein.

The fourth phase of the instrument development process involved a pilot study using a sample from the population, itself. Van Dalen (1964) indicates that this step of involving a sample from the actual population is crucial to the over-all validity of the instrument. Blalock and Blalock (1970) state that the "common practice of ignoring the sampling issue with regard to the initial group of respondents is not defensible" (p. 96).

A group of twenty names was selected from the contingency sample. Each of these people was mailed the final draft of the instrument under actual data gathering conditions. The main purpose of this stage was to check the communicability of the items and the instructions. Twelve
of the questionnaires were returned, and after analyzing the responses it was decided that the communicability of the instrument was adequate. According to Kerlinger (1964), this phase constitutes the final procedure before putting the instrument into its final form. A copy of the instrument in its final form is included in Appendix E.

Administration of the Instrument

After the sample had been selected and the addresses of the potential respondents determined, the instrument as well as an introductory letter and a self-addressed stamped envelope were sent to each member of the sample. Parents were asked to respond freely and to return the information in the envelope provided. There was no attempt made to assure anonymity as each instrument was numbered. However, respondents were assured that their information would be considered confidential. The procedure utilized in the administration of the instrument had both advantages and disadvantages. There were at least two advantages that merit mentioning. First, interviewer bias was reduced considerably because of the mailed instrument. Each respondent had the same instructions and set of stimuli with which to cope. Second1y, the fact that respondents were permitted to answer the items in their own home reduced the influence that a particular school official may have exerted had the interview been held verbally and in a school environment.

One of the shortcomings derived from the method used in administering the instrument concerned the possible lack of clarity of the instructions. Some of the respondents were obviously unsure of the manner in which they were to complete the instrument. When necessary,
a follow-up letter was sent to them seeking to elicit more complete information. If this failed, and the responses could not be coded, the instrument was discarded.

Probably the most serious disadvantage to the method employed was non-respondent contamination. Many writers, including Kerlinger (1964) and Van Dalen (1966) have stated that this one disadvantage seriously affects the generalizability of mailed questionnaires. They further indicate that, because attitudes of respondents and non-respondents may be reflected in educational as well as interest level differences, effort should be taken to learn something about the non-respondent.

Steps were taken to improve the percentage of returns. A followup letter was sent approximately six weeks after the initial mailing. Combining the return from the two mailings, sixty-two per cent of the instruments were returned. Kerlinger (1964, p. 397) indicates that effort should be made to obtain returns of at least 80 to 90 per cent.

Since the percentage of responses was below that recommended by research specialists, plans were developed to randomly select a group of parents from the non-respondent category.

The procedure followed by Thomas (1971) was employed in the process. The purpose was to establish whether or not there was statistical equivalence between respondents and non-respondents. From the list of non-respondents a sample of ten was drawn from each stratum using a table of random numbers. Through the utilization of follow-up procedures, the cooperation of the thirty selected participants was obtained. Statistical procedures were then employed to determine if the respondents and non-respondents differed significantly in their responses to the twenty-three items in the questionnaire. An
examination of the equivalence checks shown in Table II indicates that the two groups did not differ significantly in their responses.

TABLE II

## A SUMMARY OF EQUIVALENCE CHECKS BETWEEN RESPONDENT AND NON-RESPONDENT PARENTS

| Item | $\text { Respondents }{ }^{*}$ |  | Non-Respondents** |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\mathrm{X}}$ | S.D. | $\overline{\mathrm{X}}$ | S.D. | t-values |
| One | 2.39 | 1.09 | 2.47 | 1.15 | . 340 |
| Two | 2.05 | 1.02 | 2.37 | 1.11 | 1.516 |
| Three | 2.46 | 1.03 | 2.37 | 0.88 | . 335 |
| Four | 2.95 | 1.08 | 2.80 | 0.87 | . 862 |
| Five | 3.35 | 1.44 | 3.57 | 1.33 | . 844 |
| Six | 2.99 | 1.28 | 2.67 | 1.11 | 1.468 |
| Seven | 3.47 | 1.12 | 3.33 | 1.01 | . 704 |
| Eight | 2.94 | 1.14 | 2.87 | 1.02 | . 344 |
| Nine | 3.47 | 1.06 | 3.43 | 0.96 | . 021 |
| Ten | 2.57 | 1.09 | 2.50 | 1.02 | . 352 |
| Eleven | 3.46 | 1.29 | 3.13 | 1.28 | 1.325 |
| Twelve | 3.69 | 1.18 | 3.60 | 1.08 | . 427 |
| Thirteen | 1.62 | 0.62 | 1.57 | 0.50 | . 515 |
| Four teen | 3.34 | 1.31 | 3.23 | 1.28 | . 440 |
| Fifteen | 2.75 | 1.25 | 2.83 | 1.21 | . 339 |
| Sixteen | 3.67 | 1.09 | 3.40 | 0.92 | 1.492 |
| Seventeen | 3.20 | 1.25 | 2.90 | 1.19 | 1.293 |
| Eighteen | 2.41 | 1.02 | 2.40 | 0.99 | . 053 |
| Nineteen | 2.63 | 0.99 | 2.73 | 0.77 | . 649 |
| Twenty | 2.01 | 1.06 | 2.17 | 1.21 | . 690 |
| Twenty-One | 3.11 | 1.28 | 2.93 | 1.21 | . 339 |
| Twenty-Two | 3.45 | 1.08 | 3.20 | 1.05 | 1.232 |
| Twenty-Three | 3.55 | 1.03 | 3.43 | 0.99 | . 622 |
| $\begin{aligned} & * \text { respondents } \mathrm{N}=311 \\ & *{ }^{\text {non-respondents }} \mathrm{N}=30 \end{aligned}$ |  |  |  |  |  |

## Statistical Treatment of Data

When selecting from among alternative statistical tests, it becomes necessary to develop a rationale for the selection. Some of the considerations regarding the selection, according to Siegel (1956), are power of the test, the manner in which the sample of scores was drawn, the nature of the population from which the sample was drawn, and the kind of measurements which were employed.

Incorporated in these decisions is whether to use a parametric or nonparametric test. Nonparametric tests are "distribution free" and conclusions can be made regardless of the shape of the population. In addition, we can make conclusions with fewer qualifications (Siege1, 1956).

The assumptions underlying the use of parametric tests are (1) independent observations; (2) samples are drawn from normally distributed populations; and (3) measurement must be in at least interval scale (Kerlinger, 1964; Siege1, 1956). Both parametric and nonparametric tests assume that the scores were independently drawn.

Siege1 (1956) states:
We can avoid having to meet some of the assumptions of the most powerful tests, the parametric tests, without losing power by simply choosing a different test and drawing a larger N .

Anderson (1961), Lindquist (1953) and Kerlinger (1964) do not place as much importance on these assumptions as Siegel (1956). According to Lindquist, the results obtained when using a parametric test will generally be highly accurate even when the assumptions of homogeneity of variance and normality are violated. Anderson and Kerlinger agree that in most cases in education and psychology it would
probably be safer and more effective to use parametric tests.
The parametric $t$ test and $\underline{F}$ test were selected for this study because they are more powerful tests than the nonparametric tests (given the assumptions) and because many writers have minimized the importance of these assumptions.

## Scoring and Coding Procedures

The purpose of this research effort, as stated in Chapter One, was to conduct sensitivity analysis which was operationally defined as responses from parents which relate to the various concepts inherent in the education voucher. Research questions were presented in Chapter Two to channel these responses. Responses from each of the items were grouped for scoring purposes into five different categories ranging from strongly agree to strongly disagree.

A11 data were transferred to computer cards for ease in data storage and tabulation. Coding procedures were adapted and are explained in Appendix $F$.

Summary

The research design, sampling techniques, instrument development, and statistical treatment of the data were discussed in this chapter.

The population was confined to parents whose children attend independent public schools in the state of 0klahoma. A sample of 500 parents was selected on the basis of two randomization processes. First, thirty-five sample districts were selected from the independent school districts which were stratified according to Average Daily Attendance (ADA) into three strata. Secondly, a proportional random
sample was drawn from lists of parents in each of the selected sample districts.

The development of the instrument involved four steps. First, after reviewing the literature on scaling techniques, a Likert-type instrument was considered appropriate for this study. Second, questionnaire items were developed to describe and measure the concepts identified in Chapter II. Third, a pilot study was conducted, the purpose being to test the communicability of the instructions and the items and to determine the amount of time required to complete the questionnaire. The four th stage of instrument development involved a pilot study using a sample from the population, itself.

The statistical analysis of the data involved the use of the parametric t-test and F-test.

## CHAPTER IV

## PRESENTATION AND ANALYSIS OF DATA

## Introduction

The purpose of this chapter is to present and analyze the data obtained in the study. The analysis is divided into ten sections which follow specifically the ten research questions presented in Chapter Two. The analysis of each research question will include the following: (1) an introductory statement which designates the specific questionnaire items to be used in the analysis; (2) the results of each item including the statistical procedures used; and (3) a summary for al1 items involved in the analysis of the research question.

When the analysis of the data results in the use of percentages of responses to specific questionnaire items, the two "optimistic" categories (agree and strongly agree) will be combined and the two "pessimistic" categories (disagree and strongly disagree) will be combined to provide three response categories--agree, neutral, and disagree.

The first three research questions are concerned with general issues regarding voucher implementation.

General Questions About Voucher Implementation

## Research Question One

Q. 1. To what extent are parents in Oklahoma satisfied with the public schools in their district?

Questionnaire items one and twelve were utilized in the analysis of this research question.

Item 1: "The schools in our district seem to be meeting the educational needs of the vast majority of the children in our community." Over-a11, 72 per cent or 224 of the 311 respondents stated their agreement with item one, whereas 23 per cent of the respondents disagreed. An analysis of variance among the strata showed a significant difference at the . 05 level. Data related to the strata analysis for item one are summarized in Table III.

TABLE III
MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR
RESPONSES TO ITEM ONE BY STRATUM

| Stratum | N |  | $\overline{\mathrm{X}}$ | S.D. |
| :---: | :---: | :---: | :---: | :---: |
| I | 104 |  | 2.77 | 1.14 |
| II | 87 |  | 2.33 | . 92 |
| III | 120 |  | 2.11 | 1.08 |
| Source | SS | df | ms | F-ratio |
| Between Groups | 24.049 | 2 | 12.025 | $10.665^{*}$ |
| Within Groups | 346.146 | 308 | 1.128 |  |
| Total | 370.195 | 310 |  |  |

*Significant at . 05 level.

Item 12: "If a choice were available, I would send my child to a school other than the one he/she attended last year." Over-a11, 73.5 per cent or 229 of the 311 respondents stated their disagreement with item twelve, whereas 16 per cent of the respondents agreed. Means, standard deviations and an F-ratio for item twelve are recorded in Table IV. The F-ratio was significant at the . 05 level.

TABLE IV

MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR RESPONSES TO ITEM TWELVE BY' STRATUM

| Stratum | N |  | $\overline{\mathrm{X}}$ |  | S.D. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | 104 |  | 3.33 |  | 1.30 |
| II | 87 |  | 3.80 |  | 1.08 |
| III | 120 |  | 3.93 |  | 1.08 |
| Source | SS | df |  | ms | F-ratio |
| Between Groups | 21.862 | 2 |  | 10.931 | $8.067^{*}$ |
| Within Groups | 416.022 | 308 |  | 1.355 |  |
| Total | 437.884 | 310 |  |  |  |

[^0]Since the F-ratios for both items were significant at the . 05 level, a t-test for differences among several means (Bruning and Kintz, 1968) was employed to determine which means differed significantly from
each other. For item one, a critical difference of .27 was necessary for the differences to be significant at the .05 leve1. The mean differences between stratum $I$ and stratum II and between stratum $I$ and stratum III were significant. For item twelve, a critical mean difference of .29 was necessary for significance. The mean differences between stratum $I$ and stratum II and between $s t r a t u m$ I and stratum III were critical.

In summary, the responses by strata produced statistically significant differences between stratum one and each of the other two strata for questionnaire items one and twelve. Stratum I respondents tended to express less satisfaction with the schools in their districts than the respondents in the other two strata.

## Research Question Two

Q. 2. Would a majority of the parents of Oklahoma
like to see a voucher plan implemented?
Item 11: "In some nations the government allots a certain amount of money for each child for his education. The parents can then send the child to any public, parochial, or private school they choose. Such a plan should be adopted for this country." The responses by stratum were analyzed and pertinent data is included in Table $V$, page 55. The resulting F-ratio was not significant at the .05 level. Over-a11, 25.7 per cent of the respondents indicated they would like to see a voucher plan adopted for this country. A question similar to item eleven was asked of respondents in a recent nationwide Gallup Poll. The result of that poll, published in the October, 1970 issue of the Phi Delta Kappan, showed that 49 per cent of the respondents indicated approval of the voucher.

TABLE V

MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR RESPONSES TO ITEM ELEVEN BY STRATUM

| Stratum | N |  | $\overline{\mathrm{X}}$ |  | S.D. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | 104 |  | 3.28 |  | 1.31 |
| II | 87 |  | 3.54 |  | 1.17 |
| III | 120 |  | 3.55 |  | 1.35 |
| Source | SS | df |  | ms | F-ratio |
| Between Groups | 5.444 | 2 |  | 2.722 | 1.640 |
| Within Groups | 509.662 | 308 |  | 1.660 | 1.640 |
| Total | 515.106 | 310 |  |  |  |

To summarize Research Question Two, the responses of parents toward the implementation of a voucher plan for this country did not result in statistically significant differences by stratum. On the whole, only about one-fourth ( 25.7 per cent) of the respondents expressed approval of an education voucher whereas 56.5 per cent of the respondents indicated disapproval of an education voucher.

## Research Question Three

Q. 3. Will parents who express a low degree of satisfaction with public schools express a high degree of optimism toward the education voucher?

The responses to item one and item eleven were involved in the analysis of Research Question Three. Since the content of the items has been stated previously in this chapter, it will not be repeated
here. Item one was presented to test the degree of satisfaction with public schools, and item eleven was presented to represent the degree of optimism toward the education voucher.

The analysis of the research question involved two steps. First, a coefficient of correlation was computed between the responses of the sixty-five parents who checked the "disagree" or "strongly disagree" categories for item one and the responses of the same parents to item eleven. Coefficients of correlations were also computed between items one and eleven for each stratum and for the total number of respondents. Table VI shows the resultant correlations. Four of the five correlations were significant at the .05 level. Secondly, the mean score on item eleven for all respondents was compared to the mean score on the same item for the sixty-five respondents identified above. With the smaller score representing a more favorable attitude toward the education voucher, the sixty-five respondents who expressed dissatisfaction with public schools had a mean score of 2.84 as compared to 3.46 on the same item for all respondents.

In summary, the data presented in Table VI indicate that a significant correlation existed between a favorable attitude toward the education voucher and an unfavorable attitude toward the present public educational system. Although the over-all responses and the responses from two of the strata produced significant correlations, by focusing on those parents who specifically expressed disapproval with public education, a higher correlation was obtained. However, with a mean score of 3.00 representing neutrality toward the statement, the mean score of 2.84 registered by the sixty-five respondents to item eleven would seem to indicate that although they expressed dissatisfaction
with public schools they did not express a high degree of optimism toward the education voucher.

TABLE VI

COEFFICIENTS OF CORRELATION BETWEEN RESPONSES
TO ITEM ONE AND RESPONSES TO ITEM ELEVEN

| Group | Correlations |
| :--- | :---: |
| Sixty-five parents* | $-.393 * *$ |
| Stratum I | -.191 |
| Stratum II | $-.215 * *$ |
| Stratum III | $-.287 * *$ |
| Over-a11 | $-.255 * *$ |

*Parents who expressed dissatisfaction with public schools. **Significant at . 05 level.

Questions Related to Demographic Characteristics

The following research questions were related to specific demographic characteristics.

## Research Question Four

Q. 4. Do parental attitudes toward public education and the education voucher differ depending upon their level of educational attainment?

A11 twenty-three questionnaire items were involved in the analysis of Research Question Four. The analysis involved two steps. First, the respondents were categorized according to educational attainment.

Each respondent was asked to indicate the last grade of school completed on the personal data inventory section of the questionnaire. Upon receipt of the questionnaire each respondent was assigned to one of five educational categories: elementary education (for respondents who did not finish high school); high school graduate; some college (respondents with trade school experience beyond high school were included in this category); bachelor degree; and professional degree.

Second, the total scores for the items in the questionnaire were computed for each educational level and an F-ratio was computed to determine if significant differences occurred among the various levels of educational attainment. Means, standard deviations, and an F-ratio for the total scores are presented in Table VII.

TABLE VII
MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR TOTAL RESPONSES BY EDUCATIONAL LEVEL

| Educational Level | N | $\overline{\mathrm{X}}$ | $\mathrm{S}: \mathrm{D}$. |
| :--- | ---: | :---: | :---: |
| 1. Elementary Education | 58 | 66.22 | 8.40 |
| 2. High School Graduate | 107 | 67.36 | 7.45 |
| 3. Some College | 57 | 68.07 | 8.24 |
| 4. Bachelor Degree | 61 | 67.41 | 7.63 |
| 5. Professional Degree | 28 | 69.96 | 7.24 |
| $\quad$ Total | 311 |  |  |


| Source | SS | df | ms | F-ratio |
| :--- | ---: | ---: | ---: | ---: |
| Between Groups | 281.145 | 4 | 70.286 |  |
| Within Groups | 18083.168 | 306 | 59.289 | 1.186 |
| Total | 18364.313 | 310 |  |  |

Since the F-ratio was not significant, it was concluded that parental attitudes toward public education and the education voucher do not differ significantly among parents of different levels of educational attainment.

## Research Question Five

Q. 5. Do parental attitudes toward public education and the education voucher differ depending upon their occupation?

All twenty-three questionnaire items were involved in the analysis of Research Question Five. The analysis involved two steps. First, categories of occupation were selected and each respondent was assigned to a particular category. The occupational categories developed by the National Opinion Research Center (NORC) and the Bureau of the Census were used. These categories are: professional; proprietor; skilled white collar; skilled blue collar; semi-skilled; unskilled and welfare; housewife and widow; and farmer. Each respondent was assigned to a particular category based on the information obtained from the personal data inventory section of the questionnaire.

Second, an F-ratio was computed to determine if the total response scores to the questionnaire items differed significantly among the various occupational categories.

Table VIII presents pertinent data for the analysis of the research question. The F-ratio was not significant at the . 05 level. Hence, it was concluded that parental attitudes toward public education and the education voucher do not differ significantly among parents of various occupational categories.

TABLE VIII

MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR TOTAL RESPONSES BY OCCUPATIONAL CATEGORY


## Research Question Six

Q. 6. Do parental attitudes toward public education and the education voucher differ depending upon their race? Summary data for all twenty-three questionnaire items were involved in the analysis of Research Question Six. The analysis involved two steps. First, the race of each respondent was identified. Second, a t-test was employed to determine if the race of the respondent significantly affected the mean scores for each questionnaire item.

Two categories of race were designated-white and non-white. The non-white category was comprised of Negroes, American Indians, and Mexican-Americans. All other members of the sample were categorized as white. Included in the white category were two Orientals. However, neither of them responded to the questionnaire.

The information necessary for determining the racial composition of the sample was provided by the boards of education of the selected school districts during the sample collecting process. Upon receipt of the questionnaire, each respondent was simply assigned to one of the two race categories.

Each questionnaire item was analyzed to determine the effects of race on parental attitude toward public education and the education voucher. The mean scores, standard deviations and statistical values for the twenty-three questionnaire items for white and non-white respondents are recorded in Table IX, page 62.

Nine of the twenty-three mean differences resulted in statistically significant t-values. Each of the nine items is stated below followed immediately by the percentage distribution of responses to the item:

Item 7: "If parents were provided with enough money to send their children to the school of their choice, they would be able to make wise decisions."

|  | White | Non-White |
| :--- | :---: | :---: |
| Agree | 20.2 | 39.4 |
| Neutral | 17.5 | 15.8 |
| Disagree | 62.3 | 44.8 |
| Total | 100.0 | 100.0 |

TABLE IX

COMPARISONS OF WHITE AND NON-WHITE RESPONDENTS
TO QUESTIONNAIRE ITEMS

| Item | White |  | Non-White |  | t-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\mathrm{X}}$ | S.D. | $\overline{\mathbf{X}}$ | S.D. |  |
| One | 2.35 | 1.07 | 2.68 | 1.21 | 1.549 |
| Two | 2.07 | 1.05 | 1.92 | . 71 | . 847 |
| Three | 2.43 | 1.03 | 2.66 | 1.07 | 1.223 |
| Four | 2.95 | 1.10 | 2.95 | . 92 | . 000 |
| Five | 3.36 | 1.45 | 3.29 | 1.31 | . 264 |
| Six | 2.97 | 1.28 | 3.16 | 1.28 | . 852 |
| Seven | 3.52 | 1.11 | 3.08 | 1.19 | 2.135* |
| Eight | 2.91 | 1.14 | 3.13 | 1.14 | 1.105 |
| Nine | 3.50 | 1.07 | 3.29 | . 98 | 1.213 |
| Ten | 2.64 | 1.11 | 2.08 | . 78 | 3.888* |
| Eleven | 3.53 | 1.26 | 2.92 | 1.42 | 2.489* |
| Twelve | 3.72 | 1.17 | 3.53 | 1.26 | . 871 |
| Thirteen | 1.63 | . 62 | 1.53 | . 55 | 1.041 |
| Four teen | 3.39 | 1.27 | 2.95 | 1.48 | 1.725 |
| Fifteen | 2.73 | 1.23 | 2.92 | 1.38 | . 798 |
| Sixteen | 3.73 | 1.05 | 3.21 | 1.21 | 2.488* |
| Seventeen | 3.14 | 1.25 | 3.61 | 1.19 | 2.248* |
| Eighteen | 2.45 | 1.02 | 2.11 | . 95 | 2.073 r |
| Nineteen | 2.62 | 1.02 | 2.71 | . 73 | . 666 |
| Twenty | 1.96 | 1.04 | 2.39 | 1.17 | 2.128\% |
| Twenty-One | 2.99 | 1.26 | 4.00 | 1.03 | 5.459\% |
| Twenty-Two | 3.52 | 1.04 | 2.95 | 1.22 | 2.714* |
| Twenty-Three | 3.59 | . 98 | 3.24 | 1.28 | 1.605 |

[^1]The preceding data (page 61) indicate that only twenty per cent of the white respondents believed that parents could make wise decisions about attendance centers whereas almost forty per cent of the non-white respondents believed parents were capable of selecting school attendance centers for their children.

Item 10: "Each parent should be able to decide whether the school is meeting the educational needs of his child."

White Non-White

| Agree | 58.9 | 81.6 |
| :--- | ---: | ---: |
| Neutral | 10.7 | 10.5 |
| Disagree | 30.4 | 7.9 |
| Total | 100.0 | 100.0 |

More than eighty-one per cent of the non-white respondents agreed that a parent should be able to decide whether the school is meeting the educational needs of his child. In contrast, 58.9 per cent of the white respondents were in agreement with the statement.

Item 11: "In some nations, the government allots a certain amount of money for each child for his education. The parents can then send the child to any public, parochial or private school they choose. Such a plan should be adopted for this country."

| White | Non-White |
| :---: | :---: |
|  |  |
| 23.4 | 42.1 |
| 17.2 | 21.1 |
| 59.4 | -36.8 |
| 100.0 | 100.0 |

## Almost sixty per cent of the white respondents indicated they

 would not like to see a voucher plan implemented while only 36.8 per cent of the non-white respondents expressed disapproval of such a plan.Item 16: "Teachers should have to compete for students in the same manner that lawyers have to compete for clients."

White Non-White

| Agree | 16.8 | 36.9 |
| :--- | :--- | :--- |
| Neutra1 | 14.6 | 15.7 |
| Disagree | 68.6 | 47.4 |
|  |  |  |
| Total | 100.0 | 100.0 |

Almost sixty-nine per cent of the white respondents were in disagreement with placing teachers in competition for students whereas only 47 per cent of the non-white respondents were in disagreement with the item.

Item 17: "We don't need to spend any more money for the quality of education we are now receiving."

White
Agree
Neutral
Disagree
Total
39.2
14.6
46.2
100.0

Non-White
23.6
10.6
65.8
100.0

Thirty-nine per cent of the white respondents were in agreement with the statement whereas only 23.6 per cent of the non-white respondents agreed with the statement in item seventeen.

Item 18: "If parents were given the money to purchase schooling for their children, they should be permitted to add their own money to that amount to purchase a better quality education."

|  | White | Non-White |
| :--- | ---: | ---: |
| Agree | 67.5 | 73.8 |
| Neutra1 | 13.6 | 18.4 |
| Disagree | -18.9 | 7.8 |
|  | 100.0 | 100.0 |

The majority of respondents in both white and non-white categories indicated that parents should be able to supplement the voucher with money from their own economic resources.

Item 20: "The basis upon which salary for teachers is determined should be some measure of competence in teaching rather than the present basis in which salary is based on number of years teaching experience and number of college hours earned."

White Non-White

| Agree | 79.1 | 55.3 |
| :--- | ---: | ---: |
| Neutral | 9.5 | 23.6 |
| Disagree | 11.4 | 21.1 |
| Total | 100.0 | 100.0 |

Seventy-nine per cent of the white respondents agreed that salary for teachers should be based on some measure of competence in teaching, whereas only 55 per cent of the non-white parents responded in a similar manner.

Item 21: "If parents were given money to purchase schooling for their children, they should have the right to send their children to schools that are separated by race."

|  | White | Non-White |
| :--- | ---: | :---: |
| Agree | 42.2 | 15.8 |
| Neutra1 | 14.6 | 5.2 |
| Disagree | 43.2 | 79.0 |
| Total | 100.0 | 100.0 |

Whereas the responses in the "Agree" and "Disagree" categories were fairly evenly divided among white parents on the issue of racially separate schools, 79 per cent of the non-white respondents indicated
that parents should not have the right to send their children to schools that are separated by race.

Item 22: "There are several different approaches to education that are available today. Most parents are well enough informed about these approaches that they could choose which approach would be best for their children."

|  | White | Non-White |
| :--- | ---: | :---: |
| Agree | 23.8 | 52.7 |
| Neutral | 10.9 | 7.8 |
| Disagree | 65.3 | $\underline{39.5}$ |
| Total | 100.0 | 100.0 |

Sixty-five per cent of the white respondents indicated that parents are not well enough informed about educational innovations to make wise decisions for their children. In contrast, almost fifty-three per cent of the non-white respondents believed parents are sufficiently knowledgeable about different approaches to education to make appropriate selections for their children.

To summarize the data for Research Question Six, two cateogires of race--white and non-white were identified. Nine of the twenty-three mean differences resulted in statistically significant t-values.

## Research Question Seven

Q. 7. Do parental attitudes toward public education and the education voucher differ depending upon the size of the school district in which their children are enrolled?

Summary data for all twenty-three questionnaire items were involved in the analysis of Research Question Seven. The analysis involved two steps. First, the size of the school district of each
respondent was identified. Second, an F-ratio was computed to determine if the size of the school district significantly affected the total mean scores for all questionnaire items.

The total mean scores for all the questionnaire items were tabulated for the three strata. Means, standard deviations, and an F-ratio for each stratum are presented in Table $X$.

TABLE X
MEANS, STANDARD DEVIATIONS, AND F-RATIO OF TOTAL SCORES BY STRATUM

| Stratum | N | $\overline{\mathrm{X}}$ |  | S.D. |
| :---: | :---: | :---: | :---: | :---: |
| I | 104 |  |  | 7.65 |
| II | 87 |  |  | 7.62 |
| III | 120 |  |  | 8.01 |
| Source | SS | df | ms | F-ratio |
| Between Groups | 218.111 | 2 | 109.056 | 1.845 |
| Within Groups | 18146.191 | 308 | 59.108 | 1.845 |
| Total | 18364.301 | 310 |  |  |

The F-ratio was not significant at the .05 level. However, single item differences were significant as evidenced by the statistically significant differences recorded for item one in the analysis of Research Question One.

## Questions Related to Voucher Concepts

The following research questions were related to specific voucher concepts identified in Chapter Two.

## Research Question Eight

Q. 8. Do parental attitudes toward competition for students by schools and teachers differ depending upon the size of the school district in which their children are enrolled?

Questionnaire items four, six, sixteen, twenty and twenty-three represented the accountability-competition concept and were analyzed in an effort to answer Research Question Eight.

Means and standard deviations for the five items were combined for each stratum and an F-ratio among the strata was computed. The F-ratio was significant at the . 05 level. Table XI, page 69, summarizes the data.

The t-test for differences among several means (Bruning and Kintz, 1968) required a critical value of .90 for the differences to be significant. The differences between stratum I and stratum II resulted in statistically significant differences.

In an effort to analyze the feelings of parents to the competition concept each item comprising the concept was analyzed by stratum. The following is a breakdown of the relevant data for each item:

Item 4: "Competition for students by schools and teachers would improve the quality of education."

## TABLE XI

MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR COMPETITION CONCEPT

| Stratum |  | $\overline{\mathrm{X}}$ | S.D. |  |
| :---: | :---: | :---: | :---: | :---: |
| I |  | 14.54 |  |  |
| II |  | 15.89 |  |  |
| III |  | 15.18 |  |  |
| Source | SS | df | ms | F-ratio |
| Between Groups | 88.157 | 2 | 44.079 | $3.984 *$ |
| Within Groups | 3396.801 | 308 | 11.064 | 3.984* |
| Total | 3484.958 | 310 |  |  |

* Significant at . 05 leve1.

|  | Agree <br> $(\mathrm{N}=121)$ | Neutra1 <br> $(\mathrm{N}=88)$ | Disagree <br> $(\mathrm{N}=102)$ |
| :--- | :---: | :---: | :---: |
| Stratum I 40.4 29.8 |  |  |  |
| Stratum II   <br> Stratum III 32.2 34.4 | 29.8 |  |  |
| Percent of Total <br> Responses | 42.5 | 22.6 | 33.4 |
|  | 38.9 | 28.3 | 32.8 |

Thirty-nine per cent of the respondents indicated they would favor competition for students by schools and teachers whereas thirty-three per cent of the respondents indicated they would not favor this type of competition. Probably the most revealing statistic relative to this item is that twenty-eight per cent of the respondents were undecided or had no opinions about the matter.

Item 6: "A parent should be able to hold a teacher responsible for the educational progress of that parent's child."

| Agree | Neutra1 | Disagree |
| :---: | :---: | :---: |
| $(\mathrm{N}=134)$ | $(\mathrm{N}=36)$ | $(\mathrm{N}=141)$ |


| Stratum I | 54.8 | 14.4 | 30.8 |
| :--- | ---: | ---: | ---: |
| Stratum II | 31.0 | 17.2 | 51.8 |
| Stratum III | 41.7 | 5.1 | 53.2 |
| Percent of Total <br> Responses | 43.1 | 11.6 | 45.3 |

Over-all, the issue was fairly evenly divided on this item with forty-three per cent of the respondents agreeing that schools should be responsible to parents for the educational progress of their children and forty-five per cent of the respondents in disagreement on the same issue. By stratum, however, over fifty-four per cent of stratum I respondents expressed agreement with the issue stated in item six.

Item 16: "Teachers should have to compete for students in the same manner that lawyers have to compete for clients."

| Agree <br> $(\mathrm{N}=60)$ | Neutra1 <br> $(\mathrm{N}=46)$ | Disagree <br> $(\mathrm{N}=205)$ |
| ---: | :---: | :---: |
| 19.2 | 19.2 | 61.6 |
| 16.0 | 8.0 | 76.0 |
| 21.7 | 15.9 | 62.4 |
|  |  |  |
| 19.3 | 14.8 | 65.9 |

With almost two-thirds of the respondents checking the "disagree" categories, the results from this item indicate that parents are not interested in placing the teaching profession on the same competitive basis as the legal profession.

Item 20: "The basis upon which salary for teachers is determined should be some measure of competence in teaching rather than the
present basis in which salary is based on number of years teaching experience and number of college hours earned."

| Agree | Neutral | Disagree |
| :---: | ---: | :---: |
| $(\mathrm{N}=237)$ | $(\mathrm{N}=35)$ | $(\mathrm{N}=39)$ |


| Stratum I | 80.8 | 9.6 | 9.6 |
| :--- | ---: | ---: | ---: |
| Stratum II | 73.6 | 12.7 | 13.7 |
| Stratum III | 74.2 | 11.7 | 14.1 |
| Percent of Tota1  <br> $\quad$ Responses 76.2 | 11.3 | 12.5 |  |

Seventy-six per cent of the respondents indicated that salary for teachers should be based on some measure of competence in teaching rather than the use of college hours earned and number of years teaching experience.

Item 23: "Individual public schools should have to compete for students in the same manner as private schools and other agencies in our economic system."

|  | Agree <br> $(N=60)$ | Neutra1 <br> $(N=55)$ | Disagree <br> $(N=196)$ |
| :--- | :---: | :---: | :---: |
| Stratum I | 22.1 | 16.4 | 61.5 |
| Stratum II | 13.7 | 18.4 | 67.9 |
| Stratum III | 20.9 | 18.4 | 60.7 |
| Percent of Total <br> $\quad$ Responses | 19.3 | 17.7 | 63.0 |

Over-all, sixty-three per cent of the parents responded that they did not believe public schools should be placed on a competitive basis with private and parochial schools. Only nineteen per cent of the respondents approved of such a plan.

To summarize, significant mean differences occurred between stratum I and stratum II with regard to competition for students by public schools and teachers. While the over-all responses to individual items measuring the concept indicated that parents do not approve
of placing public schools and public school teachers on a competitive basis, a greater percentage of stratum I respondents were willing to place schools and teachers on a competitive basis than respondents in each of the other two strata. In addition, a noticeably greater percentage of stratum $I$ respondents were interested in being able to hold a teacher accountable for their children's educational progress than stratum II respondents.

## Research Question Nine

Q. 9. Do parental attitudes toward giving money to parents to purchase schooling for their children differ depending upon the size of the school district in which their children are enrolled?

Questionnaire items fourteen, fifteen, eighteen and twenty-one represented the economic equilibrium concept and were analyzed in an effort to answer Research Question Nine.

Means and standard deviations for the four items were combined for each stratum and an F-ratio was computed. Table XII, page 73, summarizes the data.

The F-ratio was not significant at the . 05 leve1. Therefore, it was concluded that the size of the school district in which a parent's child is enrolled does not affect significantly his attitude toward giving money to purchase schooling for their children.

In an effort to analyze the feelings of parents, over-all, to the equilibrium concept, each item comprising the concept was analyzed individually. The following is a breakdown of the relevant data for each item:

TABLE XII

## MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR EQUILIBRIUM CONCEPT

| Stratum |  | $\overline{\mathrm{X}}$ | S.D. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I |  | 11.68 |  | 2.04 |  |
| II |  | 11.78 |  | 2.26 |  |
| III |  | 11:43 |  | 1.74 |  |
| Source | SS | df | ms |  | F-ratio |
| Between Groups | 5.853 | 2 | 2.926 |  | 0.733 |
| Within Groups | 1225.222 | 308 | 3.991 |  | 0.733 |
| Total | 1231.075 | 310 |  |  |  |

Item 14: "If money were given to parents to purchase schooling for their children, it should be inversely related to income; that is, poor parents should receive more than wealthy parents."

Agree Neutral Disagree Total

| Number of Respondents | 100 | 33 | 178 | 311 |
| :--- | :---: | :---: | :---: | :---: |
| Per Cent of Total | 32.1 | 10.6 | 57.3 | 100.0 |

More than 57 per cent of the respondents believe that money given to parents to purchase schooling for their children should not be inversely related to total income.

Item 15: "If money were given to parents to purchase schooling for their children, it should be given in equal amounts regardless of economic status."

|  | Agree | Neutral | Disagree | Total |
| :--- | :---: | :---: | :---: | :---: |
| Number of Respondents | 169 | 33 | 109 | 311 |
| Per Cent of Total | 54.3 | 10.6 | 35.1 | 100.0 |

More than fifty-four per cent of the respondents indicated that money given to parents to purchase schooling for their children should be given in equal amounts regardless of economic status. The slight inconsistency shown in the responses to item fourteen and item fifteen can be explained by analyzing the differences in responses by races to the two items. Research Question Six presented this analysis.

Item 18: "If parents were given the money to purchase schooling for their children, they should be permitted to add their own money to that amount to purchase a better quality education."
Agree Neutral Disagree Total

| Number of Respondents | 212 | 44 | 55 | 311 |
| :--- | :---: | :--- | :--- | :--- |
| Per Cent of Total | 68.1 | 14.2 | 17.7 | 100.0 |

Sixty-eight per cent of the respondents believed that parents should be permitted to supplement the voucher with money from their own economic resources.

Item 21: "If parents were given money to purchase schooling for their children, they should have the right to send their children to schools that are separated by race."

|  | Agree | Neutral | Disagree | Total |
| :--- | :---: | :---: | :---: | :---: |
| Number of Respondents | 121 | 42 | 148 | 311 |
| Per Cent of Total | 38.9 | 13.5 | 47.6 | 100.0 |

Over-all, the issue of separation of students along racial lines was fairly evenly divided with almost thirty-nine per cent of the respondents agreeing that parents should have the right to send their
children to schools that are separated by race and almost forty-eight per cent of the respondents disagreeing with the same issue.

In summary, no significant differences existed among the three strata with regard to the equilibrium concept. The over-all responses to individual items comprising the concept indicated that parents believe vouchers should be of equal value regardless of income and that a parent should be able to supplement the voucher from private economic sources. However, almost one-half of the parents indicated they did not believe a parent should be able to arbitrarily segregate his child by race.

## Research Question Ten

Q. 10. Do parental attitudes toward knowledge of educational matters differ depending upon the size of the school district in which their children are enrolled?

Questionnaire items three, eight, thirteen and twenty-two represented the information system concept and were analyzed in an effort to answer Research Question Ten. The over-all mean score for the items was computed for differences among the strata. Then, response patterns for each item were analyzed to determine the over-all attitudes of parents toward the issue of knowledge of educational matters.

Means and standard deviations for the four items were combined for each stratum and an F-ratio was computed. The F-ratio was significant at the .05 level. Table XIII, page 76 , summarizes the data.

A critical difference of .59 was necessary for the mean differences to be significant (Bruning and Kintz, 1968). Stratum I responses were significantly higher than the responses in the other two strata.

TABLE XIII
MEANS, STANDARD DEVIATIONS, AND F-RATIO FOR INFORMATION SYSTEM CONCEPT

| Stratum |  | $\overline{\mathrm{X}}$ | S.D. |  |
| :---: | :---: | :---: | :---: | :---: |
| I |  | 11.07 |  |  |
| II |  | 10.33 |  |  |
| III |  | 10.04 |  |  |
| Source | SS | df | ms | F-ratio |
| Between Groups | 56.707 | 2 | 28.353 | 5.855* |
| Within Groups | 1486.656 | 308 | 4.842 | 5.855* |
| Total | 1543.363 | 310 |  |  |

```
* Significant at . 05 level.
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In an effort to analyze further the feelings of parents, each item was summarized by stratum. The following is a breakdown of the relevant data for each item:

Item 3: "Our community is, generally, kept well informed about school activities."

|  | Agree <br> $(\mathrm{N}=216)$ | Neutral <br> $(\mathrm{N}=25)$ | Disagree <br> $(\mathrm{N}=70)$ |
| :--- | :---: | :---: | :---: |
| Stratum I | 53.9 | 15.3 | 30.8 |
| Stratum II | 74.7 | 5.7 | 19.6 |
| Stratum III | 79.2 | 3.3 | 17.5 |
| Per Cent of Total <br> Responses | 69.5 | 8.0 | 22.5 |

Only one-half of the respondents in stratum I considered themselves well informed about school activities whereas three-fourths of the respondents in stratum II and stratum III indicated they were well informed about school activities. Over-al1, almost seventy. per cent of the respondents considered themselves we11 informed.

Item 8: "Our community is, generally, kept we11 informed about curriculum offerings and new approaches to teaching and learning."

|  | Agree <br> $(\mathrm{N}=150)$ | Neutra1 <br> $(\mathrm{N}=33)$ | Disagree <br> $(\mathrm{N}=128)$ |
| :--- | :---: | :---: | :---: |
| Stratum I | 31.8 | 9.6 | 58.6 |
| Stratum II | 50.6 | 10.3 | 39.1 |
| Stratum III | 60.9 | 11.6 | 27.5 |
| Per Cent of Tota1 <br> Responses | 48.2 | 10.6 | 41.2 |

Stratum II and stratum III respondents considered themselves better informed about curriculum offerings than did stratum I respondents. Over-all, only one-half of the respondents indicated they were we11 informed about curriculum offerings.

Item 13: "Schools should accept it as their responsibility, to inform parents of the different curriculum possibilities and the choices open to their children."

| Agree | Neutra1 | Disagree |
| :---: | ---: | :---: |
| $(\mathrm{N}=303)$ | $(\mathrm{N}=2)$ | $(\mathrm{N}=6)$ |


| Stratum I | 98.1 | 1.9 | 0.0 |
| :--- | :--- | :--- | :--- |
| Stratum II | 97.8 | 0.0 | 2.2 |
| Stratum III | 96.6 | 0.0 | 3.3 |
| Per Cent of Total |  |  |  |
| Responses 97.4 | 0.7 | 1.9 |  |

The overwhelming majority (97.4 per cent) of the respondents indicated that schools should inform parents of the different curriculum choices available to their children. However, as the data from
item eight reported only 48.2 per cent of the respondents indicated that they were so informed.

Item 22: "There are several different approaches to education that are available today. Most parents are well enough informed about these approaches that they could choose which approach would be best for their children."

| Agree | Neutra1 |  |
| :--- | :--- | :--- |
| $(\mathrm{N}=85)$ | $(\mathrm{N}=33)$ | Disagree <br> $(\mathrm{N}=193)$ |


| Stratum I | 34.6 | 8.6 | 56.8 |
| :--- | ---: | ---: | ---: |
| Stratum II | 27.5 | 8.1 | 64.4 |
| Stratum III | 20.8 | 14.2 | 65.0 |
| Percent of Tota1 <br> $\quad$ Responses | 27.3 | 10.6 | 62.1 |

Over-all, sixty-five per cent of the respondents indicated that parents are not well enough informed about current education approaches to select the appropriate curriculum for their children.

To summarize, the results of the combined mean scores indicated that parental attitudes toward knowledge of educational matters differed between stratum I and each of the other two strata. Specifically, the differences were in the responses to items three and eight. Stratum I respondents, on the whole, did not consider themselves as well informed about educational matters as stratum II and stratum III respondents.

## Summary

Chapter Four has presented and analyzed the data. Research ques* tions were divided into three categories.

First, research questions related to general voucher issues were
analyzed. Over-all, the data indicated that parents are not interested in implementing an education voucher for their district. Also, the majority of parents expressed satisfaction with the public schools in their district. By stratum, stratum I respondents were less satisfied, to a significant degree, with public schools in their district than respondents in the other two strata.

Second, research questions related to the demographic characteristics of occupation, educational level and race of the respondents were analyzed. The responses by race resulted in statistically significant differences.

Third, research questions related to specific voucher concepts were analyzed. Stratum I respondents were significantly more favorable toward competition for students by schoo1s and teachers than respondents in stratum II. Stratum I respondents considered themselves less informed, to a significant degree, about school activities and curriculum offerings than did the respondents in the other two strata.

## CHAPTER V

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Summary

This study measured the attitudes of parents to concepts inherent in the education voucher and analyzed these attitudes in relationship to certain demographic variables. The study was confined to parents whose children attended independent public schools in the state of Oklahoma, Specifically, an attempt was made to ascertain if the attitudes of parents toward public education and the education voucher differed depending upon the demographic characteristics of race, occupation, level of education and size of the school district in which their children were enrolled. School district size was based on average daily attendance (ADA) and the independent school districts of the state were divided into three strata according to the size of the school district.

A sample of 500 was selected on the basis of two randomization processes. First, thirty-five sample districts were selected from the list of independent school districts.

Second, a proportional random sample was drawn from lists of parents in each of the selected sample districts. Data were collected by means of a questionnaire, developed for use in this study, which was mailed to each member of the sample. The questionnaire consisted of a personal inventory sheet and twenty-three Likert-type items of
questions related to voucher concepts. Sixty-two per cent of the sampled parents responded to the original questionnaire. A random sample of thirty, non-respondents, ten from each stratum, was drawn and their cooperation in responding to the questionnaire was obtained. Through the employment of a t-test the respondent and non-respondent groups were found to be equivalent in terms of their responses to the questionnaire items. In this regard, it was assumed that the results could be generalized to the original sample even though 100 per cent return was not accomplished.

The research was guided by ten research questions which were tested using the $\underline{t}$-test and the $F$-test. The .05 level of significance was used throughout the study. For some of the research questions, correlations and percentages were utilized in the analysis. Individual results are summarized below:

## Research Question One

Question one asked to what extent parents in Oklahoma are satisfied with the public schaols in their district. The analysis of two questionnaire items related to the research question indicated that more than 70 per cent of the respondents expressed satisfaction with public schools in Oklahoma.

## Research Question Two

Question two asked if a majority of the parents of Oklahoma would like to see a voucher plan implemented. On1y 25.7 per cent of the respondents expressed approval of such a plan. The question was answered in the negative.

Research Question Three

Question three asked if parents who express a low degree of satisfaction with public schools would express a high degree of optimism toward the education voucher. The question was answered in the negative.

## Research Question Four

Question four asked if parental attitudes toward public education and the education voucher differ depending upon their level of educational attainment. The question was answered in the negative.

## Research Question Five

Question five asked if parental attitudes toward public education and the education voucher differ depending upon their occupation. The question was answered in the negative.

## Research Question Six

Question six asked if parental attitudes toward public education and the education voucher differ depending upon their race. Nine of the twenty-three mean differences were statistically significant. The question was answered in the affirmative.

## Research Question Seven

Question seven asked if parental attitudes toward public education and the education voucher differ depending upon the size of the school district in which their children are enrolled. The question was answered in the negative.

## Research Question Eight

Question eight asked if parental attitudes toward competition for students by schools and teachers differ depending upon the size of the school district in which their children are enrolled. Stratum I responses were significantly lower than responses in stratum II. The question was answered in the affirmative.

## Research Question Nine

Question nine asked if parental attitudes toward giving money to parents to purchase schooling for their children differ depending upon the size of the school district in which their children are enrolled. The question was answered in the negative.

## Research Question Ten

Question ten asked if parental attitudes toward knowledge of educational matters differ depending upon the size of the school district in which their children are enrolled. Stratum I responses were significantly higher than responses in the other two strata. The question was answered in the affirmative.

Conclusions

Based on data from the study, and given the assumptions and the limitations of the research design the following conclusions were drawn:

## Conclusions Relative to General Voucher Issues

1. The majority of respondents expressed favor with public education and were unsympathetic with the education voucher. It could be
tentatively concluded from the results of this study that the education voucher should not be seriously considered for educational purposes in this region. However, replication of the study in other geographic areas of the nation would be helpful in assessing the extent to which the voucher could be considered a viable alternative to the present system of public education.
2. There is sufficient evidence to conclude that parents who are dissatisfied with public education tend to express less disapproval of the voucher as an educational alternative than parents who are satisfied with the education their children are receiving.

Conclusions Relative to Demographic

## Characteristics

1. The attitudes of parents toward public education and concepts inherent in the education voucher are different between white parents and non-white parents. In general non-white parents expressed a greater interest in exercising individual control over the educational process of their children than white parents. The results of the data seem to indicate that white parents are somewhat inclined to leave education to professional educators whereas non-white parents are more interested in involving themselves in education.
2. Stratum I parents consider themselves less informed to a significant degree about school activities and educational matters than parents in the other two strata. Also, parents in stratum I were significantly less satisfied with the public schools in their district than parents in the other two strata.

## Conclusions Relative to Voucher

## Concepts

1. The results of this study seem to indicate that the majority of parents would be reluctant to place the operation of the schools within the domain of the private sector of our economic system. Approximately sixty-five per cent of the respondents indicated that public schools should not have to compete for students in the same manner as private schools and other agencies in our economic system.
2. There is sufficient evidence to indicate that accountability within the public school system itself would be welcomed, particularly with regard to teachers. Seventy-eight per cent of the respondents indicated that some method of measuring competence in teaching should be the criterion for salary advancement rather than years in teaching and college hours earned.

Thus, while parents are not willing to disband the public school in favor of a system managed by the private sector, they are interested in making the schools more accessible to the public in terms of accountability of instruction.
3. Regarding the right of parents to be informed about curriculum innovations and alternative educational approaches, over ninety-seven per cent of the respondents indicated that it is the school's responsibility to keep parents so informed. However, only forty-eight per cent of the respondents indicated that the schools were keeping them informed. Thus, the results of the data indicate that public schools should become more responsible in providing parents with information relative to the educational benefits available to their children.

## Recommendations

The following recommendations are made concerning the instrument used for the study:

1. Future studies of parental attitudes to the education voucher would be enhanced by validating the instrument used in collecting the data for this study. Reliability and validity coefficients would be helpful in assessing the quality of the instrument.
2. The information in the personal inventory section should be requested specifically of the head of the household. Although it was expected that the occupation, level of education and age would be given for the head of the household, failure to be specific in this regard resulted in some misunderstanding.
3. The "undecided" response category should be revised and clarified. Many respondents checked this category if they didn't understand the question. Other respondents were neutral in their feelings about the item. Grouping both types of responses together seems unwise from a research standpoint. It is recommended that the "undecided" category be clarified to represent a neutral position with regard to the attitude in question.
4. Item five was ambiguous to several of the respondents and probably should be restated. The following revision is suggested:

Local boards of education, and not parents, should be responsible for determining which school each child should attend.
5. Item twelve was probably interpreted differently by respondents depending upon the size of the school district. For examp1e, stratum one respondents probably interpreted the choices of attendance centers to mean other public schools in the district. On the other
hand, stratum three respondents probab1y interpreted the choice to refer to private or parochial schools since only one public school was available.
6. Item seventeen which stated, "We don't need to spend any more money for the quality of education we are now receiving," continued to be ambiguous for respondents in spite of several attempts to reduce the ambiguity during the developmental stages of instrumentation. It is recommended that the item be eliminated.

Utilizing the data generated from this study, it is recommended that follow-up research be conducted with respondents whose attitudes were favorable toward the education voucher. Specifically, information relative to the following two questions would be helpful:

1. If parents selected a school other than a public school, would they prefer a private school or a parochial school? Or would parents prefer to establish a school to cater to voucher recipients, in particular.
2. If a voucher plan was implemented, to what extent would parents be willing and/or economically able to supplement the amount with their own funds to raise the quality of education for their children.

There is little question that the voucher, if implemented, would have a threatening effect on public education in this country. While information from this study indicated that the voucher is not a seriously considered alternative in Oklahoma, information regarding parents who do advocate voucher implementation would be helpful in assessing the direction of public education in Oklahoma for the future.

## A SELECTED BIBLIOGRAPHY

Anderson, N. "Scales and Statistics: Parametric and Nonparametric." Psychological Bulletin, LVIII (1961), pp. 305-316.

Benson, C. S. The Economics of Public Education. Boston: Houghton Mifflin Company, 1961.

Benson, C. S. The Economics of Public Education. Second Edition. Boston: Houghton Mifflin Company, 1968.

Berg, I. A. Response Set in Personality Assessment. Chicago: Aldine Publishing Company, 1967.

Blalock, H. M., and A. B. Blalock. Methodology in Social Research. New York: McGraw-Hill Book Company, 1968.

Bruning, James L., and B. L. Kintz. Computational Handbook of Statistics. Glenview, Illinois: Scott, Forsman and Company, 1968.

Carlson, R. O. "Environmental Constraints and Organizational Consequences: The Public School and Its Clients." Behavioral Science and Educational Administration. Yearbook of the National Society for the Study of Education, 1964, pp. 261-276.

Carr, R. A., and G. C. Hayward. "Education by Chit: An Examination of Voucher Proposals." Education and Urban Society, February, 1970, pp. 179 191 .

Clark, K. Newsweek. September 25, 1967, p. 71.
Clayton, A. S. "Vital Questions, Minimal Responses: Education Vouchers." Phi Delta Kappan, Vol. 52, No. 1 (September, 1970), p. 53.

Education U.S.A. Washington, D. C.: National School Public Relations Association, September 6, 1971.

Education U.S.A. Washington, D. C.: National School Public Relations Association, October 25, 1971.

Education Vouchers: A Preliminary Report on Financing Education by Payments to Parents. Cambridge, Massachusetts, Center for the Study of Public Policy: Harvard University Press, 1970.
"Education Vouchers." An Addendum dated May, 1970. Center for the Study of Public Policy, Cambridge, Massachusetts.

Fantini, M. D. "Public Schools of Choice and the Plurality of Publics." Educationa1 Leadership, Vol. 28, No. 6 (March, 1971), pp. 585-591.

Fox, E. J., and W. B. Levenson. "In Defense of the Harmful Monopoly." Phi De1ta Kappan, Vo1. 51, No. 3 (November, 1969), pp. 131-134.

Friedman, M. "The Role of Government in Education." Economics and the Public Interest. New Brunswick, New Jersey: Rutgers University Press, 1955.

Gallup, G. "Second Annual Survey of The Public's Attitude Toward The Public Schools." Phi Delta Kappan, Vol. 52, No. 2 (October, 1970), pp. 99-112.

Havighurst, R. J. "The Unknown Good: Education Vouchers." Phi Delta Kappan, Vol. 52, No. 1 (September, 1970), pp. 52-53.

Jencks, Christopher. "Is the Public School Obsolete?" The Public Interest, Number 2 (Winter, 1966), pp. 18-28.

Jencks, Christopher. "Giving Parents Money to Pay for Schooling: Education Vouchers." The New Republic, Vol. 162, No. 26, Issue 2896 (July 4, 1970), pp. 19-21.

Kerlinger, $F$ N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1964.

Kornegay, William. "The Open Market: A New Model for Our Schools?" Phi Delta Kappan, Vol. 49, No. 10 (June, 1968), pp. 583-586.

Krech, D. R., S. Crutchfield and E. L. Ballachey. Individual in Society: A Textbook of Social Psychology. New York: McGrawHill, 1962.

Kristol, I. "Decentralization For What?" The Public Interest, Number 7. (Spring, 1968), p. 20.

Levin, Henry M. "The Failure of the Public Schools and Free Market Remedy." The Urban Review, Vol. 2, No. 7 (June, 1968), pp. 32-37.

Lindquist, E. Design and Analysis of Experiments. Boston: Houghton Mifflin Company, 1953.

McCann, Walter. "The Voucher Plan and Performance Contracting." NASSP Bulletin, Vol. 55, No. 354 (May, 1971), pp. 91-97.

NEA Reporter. Washington, D. C.: National Education Association, Vol. 9, No. 9, November 27, 1970.

NEA Reporter. Washington, D. C.: National Education Association, Vo1. 10, No. 4, April 23, 1971.

New York Times Magazine. October 29, 1971, p. 14.
Oklahoma Educational Directory. 1970-1971. Bulletin No. 109-T. Issued by Scott Tuxhorn, State Superintendent.

Osgood, C., G. Suci, and P. Tannebaum. The Measurement of Meaning. Urbana, Illinois: University of Illinois Press, 1957.

Popham, J. W. Educational Statistics. New York: Harper and Row, 1967.
"Questions Most Frequently Asked About Education Vouchers." Center for the Study of Public Policy, Cambridge, Massachusetts.

Selltiz, C., M. Jahoda, M. Deutch, and S. W. Cook. Research Methods in Social Research. New York: Holt, Rinehart and Winston, Inc., 1959 .

Siege1, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Co., 1956.

Sizer, Theodore, and Phillip Whitten. "A Proposal for a Poor Children's Bill of Rights." Psychology Today, August, 1968, pp. 5963.

Smith, P. C., L. M. Kenda11, and C. L. Hulin. The Measurement of Satisfactions in Work and Retirement: A Strategy for the Study of Attitudes. Chicago: Rand McNa1ly and Co., 1969.

Sroufe, Gerald E. "Essay Review of Education Vouchers: A Preliminary Report on Financing Education by Payments to Parents." Educational Administration Quarterly, Vol. 7, No. 1 (Winter, 1971), pp. 87-91.

Standard Metropolitan Statistical Areas. Washington, D. C.: Bureau of the Budget Publication, U. S. Government Printing Office, 1961.

The School Administrator. Washington, D. C.: American Association of School Administrators, December, 1970.

Thomas, Larry A. "Perceived Need Satisfaction and Teacher Permanence." (Unpublished Doctoral Dissertation, Oklahoma State University, 1971).
"Today's Education." Journal of the National Education Association, Vol. 59, No. 8 (November, 1970), p. 80.
"Tuition Vouchers and the Public Schools." Center for the Study of Public Policy, Cambridge, Massachusetts.

Van Dalen, D. B. Understanding Educational Research. New York: McGraw-Hill Book Co., 1966.

Ward, L. R. Federal Aid to Private Schools. Westminster, Maryland: The Newman Press, 1964.

Willower, Donald J. "Concept Development and Research." Educational Research: New Perspectives. Danville, Illinois: Interstate Printers and Publishers, 1963, pp. 101-111.

Willower, Donald J. "Some Illustrated Comments on Hypothesis Construction and Research." The Journa1 of Educationa1 Research, Vol. 56, No. 4 (December, 1962), pp. 210-213.

## APPENDIX A

## OKLAHOMA INDEPENDENT SCHOOL DISTRICTS RANKED IN DESCENDING ORDER ACCORDING TO AVERAGE DAILY ATTENDANCE (ADA)

STRATUM I - ADA 70,554-16,700

| Tulsa | 70,554 |
| :--- | ---: |
| Oklahoma City | 64,126 |
| Lawton | 18,766 |
| Putnam City | 18,090 |
| Midwest City | 16,700 |

STRATUM II - ADA 8,884-2,088

Enid
Muskogee
Moore
Norman
Bartlesville
Ponca City
Altus
Shawnee
Sand Springs
Stillwater
Duncan
Edmond
McAlester
Broken Arrow
Ardmore
Sapulpa
Okmulgee
Chickasha

8,884
8,718
8,066
8,025
7,695
6,419
5,932
4,484
4,412
4, 342
4, 224
4,085
4,056
4,055
4,043
3,818
3,388
3,358

| Choctaw | 3,047 |
| :--- | ---: |
| Miami | 2,913 |
| Crooked Oak | 2,902 |
| Western Heights | 2,899 |
| El Reno | 2,632 |
| Woodward | 2,568 |
| Guthrie | 2,567 |
| Tahlequah | 2,471 |
| Claremore | 2,344 |
| Ada | 2,339 |
| Yukon | 2,335 |
| Pryor | 2,195 |
| Durant | 2,139 |
| Owasso | 2,117 |
| Guymon | 2,095 |
| Clinton | 2,094 |
| Blackwe11 | 2,088 |

STRATUM III - ADA 1,999 - 119

| Anadarko | 1,991 | Collinsville | 1,515 |
| :--- | :--- | :--- | :--- |
| Idabel | 1,914 | Lindsay | 1,510 |
| Sallisaw | 1,825 | Frederick | 1,448 |
| Jenks | 1,820 | Bristow | 1,473 |
| Catoosa | 1,762 | Henryetta | 1,439 |
| Pauls Valley | 1,693 | Wagoner | 1,487 |
| Elk City | 1,643 | Dewey | 1,384 |
| Bixby | 1,638 | Alva | 1,353 |
| Hugo | 1,615 | Checotah | 1,326 |
| Cushing | 1,580 | Poteau | 1,300 |
| Vinita | 1,557 | Pawhuska | 1,234 |
| Broken Bow | 1,555 | Tecumseh | 1,229 |
| Seminole | 1,515 | Spiro | 1,227 |


| Perry | 1,227 | Ho11is | 763 |
| :---: | :---: | :---: | :---: |
| Wewoka | 1,223 | Healdton | 763 |
| Jay | 1,210 | Sperry | 761 |
| Sulphur | 1,201 | Tishomingo | 741 |
| Holdenville | 1,169 | Hominy | 740 |
| Stilwell | 1,168 | Heavener | 739 |
| Mustang | 1,149 | Ft. Gibson | 739 |
| Atoka | 1,147 | North Enid | 738 |
| Weatherford | 1,133 | Wa1ters | 721 |
| Hobart | 1,120 | Berryhill | 720 |
| Antlers | 1,105 | Chelsea | 708 |
| Watonga | 1,095 | Fox | 701 |
| Skiatook | 1,075 | Tonkawa | 697 |
| Kingfisher | 1,075 | Comanche | 695 |
| Coweta | 1,058 | Beggs | 695 |
| Locust Grove | 1,025 | Hawor th | 693 |
| Harrah | 1,025 | McLoud | 687 |
| Nowata | 1,023 | Dickson | 687 |
| Noble | 1,019 | Prague | 687 |
| Madi11 | 1,013 | Davis | 680 |
| Byng | 1,012 | Valliant | 675 |
| Eufaula | 1,001 | Jones | 674 |
| Hartshorne | 991 | Boise City | 662 |
| Muldrow | 986 | Marietta | 658 |
| Purcell | 983 | Newkirk | 644 |
| Stigler | 978 | Picher-Hardin | 628 |
| Grove | 974 | Laverne | 628 |
| Union | 964 | Mannford | 627 |
| Marlow | 925 | Colbert | 626 |
| Hennessey | 925 | Morris | 621 |
| Mangum | 923 | Tipton | 621 |
| Wilburton | 916 | Wyandotte | 641 |
| Cleveland | 892 | Coalgate | 612 |
| Vian | 875 | Elgin | 610 |
| Pawnee | 873 | Beaver | 606 |
| Okemah | 853 | Blanchard | 605 |
| Burns Flat | 837 | Apache | 604 |
| Haske11 | 835 | Tuttle | 596 |
| Commerce | 832 | Warner | 595 |
| Wynnewood | 830 | Roland | 590 |
| Bethany | 828 | Wright City | 588 |
| Drumright | 822 | Inola | 585 |
| Chandler | 812 | Wilson | 580 |
| Stroud | 811 | Velma-Alma | 579 |
| Sayre | 811 | Salina | 578 |
| Fairview | 801 | Barnsdall | 573 |
| Carnegie | 801 | Bethel | 571 |
| Cordel1 | 790 | Buffalo | 565 |
| Westville | 772 | Talihina | 563 |

Crescent ..... 563
Konawa ..... 560
Lexington ..... 558
Keota ..... 558
Hooker ..... 554
Colcord ..... 554
Cache ..... 553
Fairfax ..... 553
Weleetka ..... 551
Meeker ..... 550
Vale ..... 543
Wetumka ..... 542
Pocola ..... 542
Kansas ..... 533
Ke11yville ..... 531
Ft. Towson ..... 530
Ramona-Ochelata ..... 527
Lotta ..... 522
Rush Springs ..... 521
Panama ..... 519
Perkins-Tryon ..... 518
Waurika ..... 513
Seiling ..... 511
Newcast1e ..... 510
Hulbert ..... 509
Maysville ..... 498
Plainview ..... 498
Okeene ..... 495
Ringling ..... 489
Quinton ..... 483
Sequoyah ..... 481
Garber ..... 480
Snyder ..... 478
Thomas ..... 477
Shidler ..... 476
Chouteau ..... 472
Helena ..... 472
Vanoss ..... 469
Adair ..... 469
Dewar ..... 468
Waynoka ..... 463
Mooreland ..... 463
Kingston ..... 462
Cherokee ..... 462
Gore ..... 457
Hinton ..... 457
Wayne ..... 455
Shattuck ..... 454
Wellston ..... 451
Savanna ..... 450
Temple ..... 444
Sentinel ..... 444
Boswe11 ..... 442
Porter ..... 441
Allen ..... 439
Geary ..... 438
Welch ..... 436
Grandfield ..... 434
Ft. Cobb ..... 434
Lookeba-Sick1es ..... 432
Porum ..... 430
Boley ..... 428
Quapaw ..... 425
Lone Grove ..... 422
Canton ..... 422
Caddo ..... 422
Butner ..... 416
Afton ..... 414
Clayton ..... 413
Grant ..... 411
Minco ..... 409
Pioneer- P. Vale ..... 401
Granite ..... 401
Elmore City ..... 401
Medford ..... 399
Mounds ..... 397
Fairland ..... 397
Cyril ..... 396
Lakeside ..... 391
Battiest ..... 389
Waukomis ..... 388
Smi thville ..... 388
Dale ..... 387
Sterling ..... 386
Stratford ..... 385
Cement ..... 373
Okay ..... 371
Moton ..... 368
Washington ..... 367
Binger ..... 360
Caney ..... 356
Tupelo ..... 355
Oktaha ..... 355
Erick ..... 352
New Lima ..... 348
Haileyville ..... 348
Kiowa ..... 347
Fletcher ..... 345
Bowlegs ..... 345
Davenport ..... 343
Blair ..... 343
Kiefer ..... 342
Empire ..... 342
Rattan ..... 340
Soper ..... 338
Maud ..... 338
Wister ..... 335
Olive ..... 335
Oaks Mission ..... 334
Ripley ..... 333
Okarche ..... 327
Depew ..... 232
Bokoshe ..... 323
Webbers Falls ..... 322
Stonewall ..... 321
Silo ..... 321
Cheyenne ..... 320
Copan ..... 319
Luther ..... 318
Dover ..... 318
Turner ..... 317
Paden ..... 313
Ninnekah ..... 313
Piedmont ..... 312
Oilton ..... 310
Morrison ..... 309
Dibble ..... 307
Calera ..... 306
Cameron ..... 304
Amber-Pocasset ..... 301
Blue Jacket ..... 298
Indianola ..... 296
Geronimo ..... 295
Bokchito ..... 295
Verden ..... 294
Ringwood ..... 294
Covington-Douglas ..... 294
Eagletown ..... 293
Achille ..... 289
Alex ..... 288
Gans ..... 286
Stuart ..... 285
Keyes ..... 285
Pond Creek ..... 284
Hydro ..... 284
Watts ..... 281
Sasakwa ..... 281
Ryan ..... 278
Hammon ..... 278
Ketchum ..... 277
Red Oak ..... 276
Roff ..... 275
Arnett ..... 275
Kinita ..... 272
Vici ..... 269
Turpin ..... 268
Canute ..... 266
Whitesboro ..... 265
Glenpool ..... 265
Texhoma ..... 264
Boyntown ..... 264
Washita Heights ..... 261
Strother ..... 260
Lone Wolf ..... 258
Howe ..... 258
Graham ..... 258
Crowder ..... 258
Aline-Cleo ..... 258
Liberty ..... 257
Navajo ..... 256
Calumet ..... 256
Bray ..... 256
Cave Springs ..... 255
Bennington ..... 254
Central (Sallisaw) ..... 252
Leedey ..... 251
Lenapah ..... 250
Le Flore ..... 250
Central (Marlow) ..... 250
Wakita ..... 247
Carmen-Dacoma ..... 247
Earlsboro-Harjo ..... 246
Mulha11-Or lando ..... 245
Preston ..... 244
Arapaho ..... 244
Alluwe ..... 243
Tushka ..... 240
Ba1ko ..... 240
Burlington ..... 239
Buffalo Valley ..... 239
Olustee ..... 238
G1encoe ..... 238
Taloga ..... 237
Calvin ..... 237
Foyil ..... 236
Indiahoma ..... 235
Stringtown ..... 234
Jet-Nash ..... 234
Deer Creek (Edmond) ..... 234
Eakley ..... 233
Custer City ..... 233
Carney ..... 233
McCurtain ..... 230
Big Pasture ..... 229
Cashion ..... 227
Varnum ..... 226
Moss ..... 226
For gan ..... 224
Tyrone ..... 222
Sharon-Mutual ..... 221
Kremlin ..... 220
Delaware ..... 220
Springer ..... 219
Canadian ..... 219
Hanna ..... 217
White Oak ..... 216
Gould ..... 216
Ft. Supply ..... 215
Roosevelt ..... 214
Duke ..... 214
Di11 City ..... 214
Wanette ..... 213
Gracemont ..... 212
Drummond ..... 211
Goodwill ..... 209
Schulter ..... 208
Mason ..... 208
Asher ..... 208
Union City ..... 207
Chattanooga ..... 206
Wann ..... 205
Billings ..... 202
Terral ..... 201
Paoli ..... 201
Lomega ..... 201
Blue ..... 198
Braggs ..... 198
Mill Creek ..... 196
Braman ..... 195
Macomb ..... 195
Mar land ..... 194
Panola ..... 194
McLish ..... 193
Arnett (Hollis) ..... 191
Big Cabin ..... 189
Eldorado ..... 189
Dustin ..... 187
Lamont ..... 186
Coleman ..... 185
Wapanucka ..... 184
Davidson ..... 183
Thackerville ..... 182
Merritt ..... 181
Red Rock ..... 180
Fargo ..... 178
Olney ..... 178
Hardes ty ..... 175
Wynona ..... 175
Yuba ..... 175
Ralston ..... 174
Agra ..... 173
Coyle ..... 173
Oney ..... 173
Midway ..... 172
Butler ..... 171
Gotebo ..... 171
Marshall ..... 169
Pittsburg ..... 168
Freedom ..... 166
Pleasant View ..... 165
Hunter ..... 164
Southside ..... 160
Mountain Park ..... 159
C. G. Woodson ..... 158
Deer Creek ..... 1.56
Perne11 ..... 156
Broxton ..... 154
Sweetwater ..... 151
Ames ..... 149
Gage ..... 149
Graham (Weleetka) ..... 149
Yarbrough ..... 139
Wilson (Henryetta) ..... 138
Carter ..... 134
Greenfield ..... 128
Reydon ..... 119

APPENDIX B

PARTICIPATING SCHOOL DISTRICTS

| STRATUM I |  | STRATUM II |  | STRATUM III |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| District | N | District | N | District | N |
| Tulsa | 72 | Duncan | 11 | Pioneer-P. Vale | 06 |
| Oklahoma City | 59 | Sapulpa | 11 | Quapaw | 05 |
| Lawton | 18 | Chickasha | 19 | Harrah | 13 |
| Putnam City | 12 | Miami | 11 | Henryetta | 18 |
| Midwest City | 14 | Guthrie | 09 | Hobart | 17 |
|  |  | Claremore | 11 | Mangum | 10 |
| Total | 175 | Guymon | 07 | Grandfield | 08 |
|  |  | Ada | 11 | Atoka | 10 |
|  |  | *Bartlesville | 20 | Wynona | 06 |
|  |  | Enid | 20 | Forgan | 08 |
|  |  |  |  | Bethany | 11 |
|  |  | Total | 130 | Wi1son | 11 |
|  |  |  |  | Cheyenne | 07 |
|  |  |  |  | Redrock | 06 |
|  |  |  |  | *Wa tonga | 15 |
|  |  |  |  | Chouteau | 13 |
|  |  |  |  | Central (Sallisaw) | 05 |
|  |  |  |  | Marlow | 14 |
|  |  |  |  | *Vici | 05 |
|  |  |  |  | *Medford | 07 |
|  |  |  |  | Total | 195 |
| *districts fro | cont |  |  |  |  |

APPENDIX C geographical representation of sample districts


## APPENDIX D

PERMISSION LETTER TO SUPERINTENDENTS
OF SELECTED SCHOOL DISTRICTS

May 13, 1971

## Selected Superintendent Address

Dear Sir:
The recent emphasis on education vouchers in the various media has had disquieting effects on many educators--particularly educators in public schools. The National Education Association and the American Association of School Administrators have gone on record as vigorously opposing the voucher plans.

However, many individuals are making efforts through research grants and state legislatures to study the feasibility of implementing various voucher plans. Conspicuously absent from these feasibility studies has been parental involvement in the issue. Of course, those of us in public education believe that parental viewpoints should neither be ignored nor taken for granted and that parents should be involved in the whole voucher controversy.

We are anticipating the funding of a research grant to study the attitudes of parents toward concepts inherent in the voucher proposals. We want to know, and we feel that everyone in public education needs to know, the extent to which parents would support the voucher. In order to involve only parents of public school children in our research it is necessary for us to implement controls to the extent that only parents of public school children will comprise the sample.

For this reason, we are asking that you permit us to randomly select 20 names from your student files and provide us with parent names and addresses of those students selected. Please be assured that this information would be kept confidential and would not be used for any further unrelated research efforts. In addition, we are not asking to go into your schools or involve your teachers and students in any way in this research effort.

One of us will call you in a few days to discuss any questions or concerns you may have and, hopefully, to obtain your permission for our request.

Sincerely,

Richard G. Salmon
Assistant Professor College of Education
R. Larry Roberts Graduate Assistant College of Education

APPENDIX E

FINAL COPY OF QUESTIONNAIRE

## Dear Parent:

Your name has been randomly selected from the names of parents whose children attend independent pub1ic schools in the State of Oklahoma to participate in a research project dealing with attitudes toward the nature and direction of public education for the future. Your participation in this effort will require about fifteen minutes of your time for the purpose of answering the items listed below.

Please be assured that your responses will remain anonymous. The number at the top is simply for the purpose of communicating with you in case a clarification is needed. When this questionnaire has been completed, in full, the information will be put on a computer card and your identity. will be lost even to the Research Department.

For your convenience, a stamped addressed envelope has been enclosed in which to return the complete questionnaire. Your assistance in this research will be greatly appreciated.
R. Larry Roberts

Research Assistant

## INFORMATION

Age, as of last birthday__ Number of children
Occupation
Education: last grade completed $\qquad$

## Instructions:

Please respond freely and honestly to the items with your own feelings and opinions. There are no right or wrong answers. Indicate your personal opinion about each statement by circling the appropriate response at the right of each statement.

SA = Strongly Agree; $A=$ Agree; $U=$ Undecided; $D=$ Disagree; $S D=$ Strongly Disagree

1. The schools in our district seem to be meeting the educational needs of the vast majority of the children in our community . . . . . . . . . . . . . . SA A U D SD
2. All citizens are responsible for paying for the education of children . . . . SA A U D SD
3. Our community is, generally, kept well-informed about school activities . . . . SA A U D SD
4. Competition for students, by schools and teachers, would improve the quality of education . . . . . . . . . . . . SA A U D SD
5. It should be the responsibility of local boards of education to determine which school each child should attend . . . . . . . SA A U D SD
6. A parent should be able to hold a teacher responsible for the educational progress of that parent's child . . . . . . . . . . . SA A U D SD
7. If parents were provided with enough money to send their children to the school of their choice, they would be able to make wise decisions . . . . . . . . . SA A U D SD
8. Our community is, generally, kept well-informed about curriculum offerings and new approaches to teaching and learning . . . . . . . . . . . . SA A U D SD
9. If parents were given the chance, they would do a better job of looking after their children's schooling than would the state . . . . . . . SA A U D SD
10. Each parent should be able to decide whether the school is meeting the educational needs of his child . . . . . . SA A U D SD
11. In some nations, the government allots a certain amount of money for each child for his education. The parents can then send the child to any public, parochial or private school they choose. Such a plan should be adopted for this country . . . . . . . . . . . . . . . . . . . SA A U D SD
12. If a choice were available, I would send my child to a school other than the one he/she attended last year . . . . . . . . . . SA A U D SD
13. Schools should accept it as their responsibility to inform parents of the different curriculum possibilities and choices open to their children . . . . . . . . . . . . SA A U D SD
14. If money were given to parents to purchase schooling for their children, it should be inversely related to income; that is, poor parents should receive more money than wealthy parents . . . . . . . . . . . . . . SA A U D SD
15. If money were given to parents to purchase schooling for their children, it should be given in equal amounts regardless of economic status . . . . . . . . . . . . . SA A U D SD
16. Teachers should have to compete for students in the same manner that lawyers have to compete for clients . . . . . . . . SA A U D SD
17. We don't need to spend any more money for the quality of education we are now receiving . . . . . . . . . . . . . SA A U D SD
18. If parents were given the money to purcahse schooling for their children, they should be permitted to add their own money to that amount to purchase a better quality education . . . . . . . . SA A U D SD
19. Complete freedom of choice of attendance centers for each child would be disruptive to the present educational system . . . SA A U D SD
20. The basis upon which salary for teachers is determined should be some measure of competence in teaching rather than the present basis in which salary is based on number of years teaching experience and number of college hours earned . . . . SA A U D SD
21. If parents were given money to purchase schooling for their children, they should have the right to send their children to schools that are separated by race . . . . . . . . . . . . . . . . . . SA A U D SD
22. There are several different approaches to education that are available today. Most parents are well enough informed about these approaches that they could choose which approach would be best for their children . . . . . . . . . . . . SA A U D SD
23. Individual public schools should have to compete for students in the same manner as private schools and other agencies in our economic system . . . . . . SA A U D SD

APPENDIX F

CODING INFORMATION

The following coding procedures were utilized in the data storing process:

STRATUM: One $=1$; two $=2$, three $=3$.
AGE: Twenty to twenty-nine $=1$; thirty to thirty-nine $=2$; forty to forty-nine $=3$; fifty to fifty-nine $=4$; sixty to sixty-nine $=5$.

RACE: White $=1$; non-white $=2$.
NUMBER OF GHILDREN: One $=1$; two $=2$; three $=3$; four $=4$; five $=5 ;$ six $=6$; seven $=7$; eight $=8$; nine or more $=9$.

OCGUPATION: Professional $=1$; proprietor $=2$; skilled white collar $=3$; skilled blue collar $=4$; semi-skilled $=5$; unskilled and welfare $=6$; housewife and widow $=7$; farmer $=8$.

EDUCATIONAL LEVEL: Elementary schooling $=1$; high school graduate $=2$; some college $=3$; bachelor degree $=4$; professional degree $=5$.

ITEM RESPONSES: Strongly agree $=1$; agree $=2$; undecided $=$ $3 ;$ disagree $=4 ;$ strongly disagree $=5$.

## VITA

Raymond Larry Roberts
Candidate for the Degree of
Doctor of Education

## Thesis: A STUDY OF PARENTAL ATTITUDES TO THE EDUCATION VOUCHER

Major Field: Educational Administration
Biographical:
Personal Data: Born in Fairview, Oklahoma, November 24, 1939, the son of Mr. and Mrs. Raymond Roberts.

Education: Graduated from Derby High School, Derby, Kansas, in May, 1958; attended Kansas State Teachers College, Emporia, Kansas in 1958 and Friends University, Wichita, Kansas in 1959 and 1960; received the Bachelor of Arts in Education degree from Wichita State University in January, 1964, with a major in History; received the Master of Education degree from Wichita State University in May, 1967, with a major in Educational Administration; completed requirements for the Doctor of Education degree at Oklahoma State University in May, 1972, with a major in Educational Administration.

Professional Experience: Classroom Teacher, Roosevelt Junior High School, Wichita, Kansas, 1964-67; Assistant Principal, Robinson Junior High School, Wichita, Kansas, 1967-68; Assistant Principal, East High School, Wichita, Kansas, 196870; Graduate Teaching Assistant, College of Education, Oklahome State University, 1970-71; Associate Principal, Southeast High School, Wichita, Kansas, 1971-72; Principal, South High School, Wichita, Kansas, 1972--.


[^0]:    ${ }^{*}$ Significant at . 05 level.

[^1]:    * Significant at . 05 leve1.

