A SURVEY OF PLANNING RESOURCES AVAILABLE TO LOCAL ADMINISTRATORS IN PLANNING FOR VOCATIONAL EDUCATION PROGRAMS

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CHAPTER I

INTRODUCTION

The Roman philosopher Seneca once observed,

"When a man doesn't know what harbor
he wants, any wind is the right wind."

Planning has long been viewed by organizational man as an effective means of ascertaining what is to be achieved as well as providing an efficient path toward its achievement.

In recent years greater attention has been focused on the need for planning in education. This attention is due primarily to accelerating social demand and dissatisfaction with the adaptive capabilities of the schools, together with the tremendous growth in educational expenditures.

While the need for educational planning is being greatly emphasized, the implementation of planning presents many problems. Among these problems is a lack of resources with which to plan. To be effective, planning requires certain resources for that purpose. These resources may be classified as:

1. Information resources;
2. Human resources;
3. Capital resources; and
4. Time.

Without these resources planning may be fragmented and haphazard and lead toward misdirected goals.

Vocational education is no exception to the need for educational planning. Indeed, due to the relatively expensive nature of vocational education and its "end product" orientation, even greater planning efforts may be called for. It seems reasonable to assume that better planning could be accomplished if planning resources were available to local administrators for that purpose.

Significance of Study

The expected results of this study are three-fold. First, it will allow local planners an opportunity to review their planning needs and to make those needs known to state-level planners. Second, it will allow state-level planners the opportunity to identify local planning needs by size of school and experience level of the administration; and to formulate policies which will aid in satisfying these needs. A third possible outcome of the study, assuming the need is shown, is to provide a basis for the state's school administrator training institutions to offer formal training in educational planning as a part of the curriculum.

The overall significance of the study, then, is to provide a basis from which educational planning in the vocational area may be improved. Improved planning, then, should tend toward a more economic use of available resources and a more effective means of satisfying the skill training needs of secondary students in Oklahoma.

Problem

It is apparent that administrators could utilize certain planning resources if available to them. The problem that appears to exist is

that administrators lack certain necessary resources with which to plan.

Purpose

The purpose of this study was to determine the availability, use, value, and reason for non-use of planning resources at the local level and to determine if a relationship exists between these factors and both school size and experience level of administrators.

Objectives of the Study

1. To identify the resources available to local administrators in planning for vocational programs;
2. To determine the use and non-use of available planning resources;
3. To determine the value of available planning resources when used;
4. To determine the reason for non-use of available planning resources;
5. To determine the perceived use and non-use of planning resources if made available;
6. To determine the perceived value of non-available planning resources if they were made available;
7. To determine the perceived reason for non-use if the planning resources were made available;
8. To determine the relationship between the above variables and school size; and

9. To determine the relationship between the above variables (1-7) and experience level of administrators.

Definition of Terms

Common schools--public educational institutions at the elementary and/or secondary level other than the area vocational-technical school.

Vocational programs--educational programs, other than academic programs, which deal with both vocational and technical skills, designed primarily to prepare the student for an entry-level job.

Comprehensive high schools--public secondary schools which have one or more vocational programs as a regular part of their curriculum.

Local planning--planning which takes place at the school district level.

Planning resources--those items or tools necessary to conduct planning, such as information, time, expertise, equipment, and personnel.

Scope of the Study

The data for this study was derived from the total population of comprehensive school superintendents in Oklahoma.

Instrumentation

The survey instrument used in this study consisted of a questionnaire designed to identify:

1. The availability of specified planning resources;
2. The use of planning resources when available and the perceived use of non-available resources if made available;
3. The relative value of specified planning resources; and

4. The reasons for non-use of specified planning resources.

The list of planning resources was derived from the literature and from interviews with the professional staff of the State Department of Vocational and Technical Education as well as with a variety of school superintendents. A conceptual model of the instrument is included in Appendix B.

Procedure

The study began with pilot testing of the instrument by administering it to a limited number of school superintendents and professional staff of the State Department of Vocational and Technical Education. These individuals were asked to critique the instrument for clarity, form and item validity. Corrections were made as required. (See Appendix A for completed instrument.)

The corrected instrument was mailed to each of the 464 superintendents in the population along with an appropriate cover letter and return envelope. A follow-up letter was mailed to the non-respondents after three weeks in an effort to encourage the largest possible return.

Treatment of Data

The data from the instrument was reported as mean responses for each of the planning resources complemented by frequency distributions and standard deviations where appropriate. Summed scores were listed for each of the items. The relationship between these scores and the size of school and years of experience of the administrators was examined by computing chi-square statistics and correlation coefficients.

CHAPTER II

REVIEW OF LITERATURE

The review of literature began with a search of the ERIC information system and includes articles found in the Oklahoma State University Library, as well as various research publications found in the Oklahoma State Department of Vocational and Technical Education Library. An additional source of information was derived from a series of four superintendent's workshops sponsored by the Oklahoma State Department of Vocational and Technical Education (1975).

The review of literature revealed a broad range of needs for educational planning. On the national level, it revealed that the need exists for systematic and continuous planning for effecting improvements in all aspects of life, and especially in education. (Morphet, Jessen, and Lubka (1972) stated that "for too long the education system has been viewed by many persons, including educators, as a self-sufficient system that seems to be quite autonomous and independent of other systems") (p. 23). As a result, he noted, education has not been especially concerned with scientific, economic, or human needs of the society in which it operates and to which it contributes.

Due to the nature of the educational system in the United States, it is obvious that new and improved provisions for education should be made at both the national and state levels of education. However, unless new and more suitable roles are identified and actively assumed by the

local educational agencies, the efforts made at national and state levels are likely to be relatively ineffective. Morphet, Jessen, and Lubka (1972) further indicated that relatively few local school systems thus far have become seriously involved in, or even attempted, bonafide comprehensive and systematic long-range planning. Many have been involved with pressing problems, crisis-generated situations, and planning relating mainly to budgets. As a result, little attention has been given long-range planning. Such procedures, according to Morphet, Jensen, and Lubka should be considered "economically indefensible."

The rapid growth of educational expenditures in recent years, from approximately 7.6 percent of the nation's Gross National Product in 1969, to a present-day estimate of approximately 12 percent, has generated increasing concern for a measure of effectiveness. Bowles (1965) writes that:

> ...within the next decade education will be changed. It will change first, because it is headed straight into a major economic crisis. It is not that we cannot afford the high cost of education--we cannot afford its low productivity (p. 22).

Long-range planning requires funds and other resources that have seldom been available in sufficient amounts to local school systems for that purpose. Yet if such resources were available and utilized wisely, the long-term gains in student learning and in the effective utilization of staff and other resources should more than counterbalance the funds required for effective planning. Furthermore, increased effectiveness in student learning and increased efficiency in the utilization of funds should result in an even broader base of public support for education.

The growing emphasis on planning as a tool to bring about a greater degree of efficiency in education can best be described through the

realization that planning is now required at every level of government (Horvath, 1972). With respect to vocational education, planning is now required at all three levels of government (local, state, and national), as a result of the 1968 Vocational Education Amendments (1968).

Athough fragmented to a degree at every level, planning is probably least developed at the local level, where it has a greater chance of affecting needed change. With respect to vocational education, Burkett (1971) stated, "it seems quite clear to me that the planning should start at the local level where manpower needs are known and the planners are closer to the needs of the people" (p. 26). Further supporting the need for planning at the local level, the planning section in the President's Manpower Report (1967) stated that planning should involve a coordinated effort on the part of the education and manpower agencies at the local level.

The difficulty in vocational education planning at the local level stems from a variety of problems, not the least of which is lack of resources to conduct planning. These planning resources are primarily informational resources, but may also include human resources, financial resources, and to a minor extent, capital resources. It is evident, that in order to plan, one must have the means with which to plan.

The research consultant to the National Advisory Council on Vocational Education, Bruce Reinhart (1971), stated that "the chief bottleneck in planning and evaluation of vocational education continues to be lack of pertinent information" (p. 38). Without such information, says

Reinhart, "managers are forced to direct a multi-billion dollar space age enterprise by intuition" (p. 5).

Concerning informational resources, a national planning commission study concluded that an effective local plan should start with developing an accurate local information base. Horvath (1972) found that the primary data need at both the state and local levels for vocational program planning is information of present and future market demand for occupational skills. Other informational needs alluded to by Horvath were "vocational interest of the population, student enrollment and occupational data, and area labor supply information" (p. 16). A national panel of vocational education consultants (Reinhart, 1971) declared that there was a notable lack of information concerning the number of youth who graduate from vocational programs, the number who get jobs, and their success after employment.

Discussions with superintendents in Oklahoma (Oklahoma Superintendents Conference, 1975) also indicated a need for more pertinent information in planning vocational programs. Of prime concern to these local level vocational planners was information concerning student interest in vocational education. Superintendents were in general agreement that their curriculum, including the vocational education offering, should be based on the needs of students. Student interest information, then, appeared to be the basic informational requirement in determining whether to add or delete vocational programs.

Following closely behind student interest information, in terms of most needed information resources, was cost information. Due to limited budgets and the relatively expensive nature of vocational programs, superintendents considered reliable cost information extremely important

in determining their vocational offering. Cost information was divided into initial cost and continuing or maintenance cost information. Many superintendents felt that total cost information, including both initial and maintenance cost information, was needed in order to plan their vocational offering.

Another informational resource required at the local level, as identified by superintendents, was job market information relating to the various vocational skills. According to those superintendents in attendance, job market information should be available in order to assist in the determination of need for a particular vocational program.

Other information needs, identified by superintendents (particularly those employed in smaller schools), was information concerning the availability of vocational teachers and other general requirements associated with the planning of vocational programs.

The literature revealed that another essential requirement in effective comprehensive educational planning is the human element. While the lack of sufficient informational resources may drastically limit the quality of planning, likewise insufficient or unqualified planners may greatly reduce the development and implementation of a well-developed plan. Morphet, Jessen, and Lubka (1972) write that "a key role for local educational units in the changing society is to provide effective leadership and services in improving education" (p. 35). Unless, they continue, "the people who are most directly affected by the provisions that should be made for education, actively support those provisions, there is little likelihood that effective change will be made" (p. 36).

Human resources required for effective comprehensive planning of vocational education programs includes, not only administrative expertise in planning, but also a variety of support personnel. Morgan, Lawrence, and Champion (1974) concluded in their study of the state level vocational problems, that one of the most important problems was the "lack of training in planning techniques of the local-level staff" (p. 8). Among the suggestions made by Oklahoma superintendents (1975) was that a regional administrator be assigned to assist, advise, and disseminate information to the local school systems. This suggests that local administrators desire additional personnel support and planning expertise to assist in their local planning effort.

Planning personnel are often available but lack sufficient time with which to conduct planning activities. The literature indicated that while time to plan may be available, it may not be available in sufficient quantities when most needed. Selakovich (1967) alluded to the fact that time for planning is too often lacking in the public schools due to pressure of doing what has to be done.

Another planning resource, which if available to local planners, could enhance the planning effort is the necessary equipment for the assimilation of data (information). Information that is not relevant to the purpose of planning, or that is not provided or assimilated into meaningful form, is generally of little value. Hussain (1973) has postulated that "the performance of educational institutions could be upgraded by the use of properly designed and implemented information systems" (p. 2).

In summary, the literature emphasized the need for improved educational planning at all levels of government, and particularly at the

local level. This need for improved planning is based on rapidly accelerating expenditures for education and the corresponding public demand for a measure to which these funds are utilized effectively. Current federal legislation presents guidelines delineating the responsibilities of vocational education planning at both the state and local levels. In order to meet these requirements local administrators must have certain planning tools or resources available to them. Among these planning resources are informational resources, human resources, time, and equipment for the assimilation of information.

CHAPTER III

DESIGN AND CONDUCT OF THE STUDY

The purpose of this chapter is to describe the methods and procedures used in conducting the study. These were dictated by the central purpose of the study which was to determine what planning resources were available to local comprehensive school administrators in planning for vocational programs. Specific objectives of the study also provided guidance for the design and conduct of the investigation. The objectives were:

1. To identify the resources available to local administrators in planning for vocational programs;

For those planning resources that are available...

2. To determine the use and non-use of available planning resources;
3. To determine the value of available planning resources;
4. To determine the reason for non-use of available planning resources;

For those planning resources that are not available...

5. To determine the perceived use and non-use of planning resources if they were made available;
6. To determine the perceived value of non-available planning resources if they were made available;

7. To determine the reason for non-use of planning resources not currently available if they were made available;
8. To determine the relationship between the above variables and school size; and
9. To determine the relationship between the above variables and experience level of the superintendent.

In order to collect and analyze data pertaining to the purpose and objectives of the study, it was necessary to accomplish the following tasks:

1. Determine the population for the study;
2. Develop the instrument for data collection;
3. Develop a procedure for validating the instrument; and
4. Select methods of data analysis.

The Study Population

The population for this study was composed of 464 superintendents employed in the same number of school districts. This number (464) represents the total population of independent school districts in Oklahoma and includes both those currently with and without vocational programs. The total population was used rather than attempting a representative sample through random selection because of the manageable size of the population, its accessability, and the belief that it would lead toward a more valid study.

Superintendents were used for the study population rather than other administrators because of the role they play in the school system. As the chief administrator of the local school district, superintendents are generally responsible for the planning and implementation of

vocational programs and are considered to have a better understanding of the availability of planning resources.

Superintendents employed in school districts without vocational programs (non-comprehensive), as well as those with vocational programs (comprehensive) were included in the study in an effort to gain a broader base for the study. It was felt that both non-comprehensive and comprehensive schools maintained a common need for planning and that a more accurate description of planning needs could be gained by the inclusion of both in the study.

Superintendents employed in area vocational-technical schools (AVTS) were not included as a part of the study population because of the lack of commonality in goal orientation, organizational structure, and financial base with the local school districts. While both the area schools and the local high schools have a common need for planning vocational programs, area schools deal only with vocational education, while the local high schools must deal with the total educational milieu for secondary students.

Superintendents thus selected for the study population were divided according to school size and years of experience as a school superintendent as follows:

School Size (K-12)

(1) Small - 500 students or less

(2) Medium - 500 to 2000 students

(3) Large - 2000 students or greater

Experience Level

(1) 5 years or less

(2) 5 to 15 years

(3) 15 years or greater

This classification of superintendents was deemed necessary in an effort to satisfy objectives eight and nine concerning the variance of the first seven objectives by school size and experience level. The divisions were more or less arbitrary; however, the attempt was to establish homogeneous groups with respect to the commonality of planning problems.

Development of the Instrument

Due to time and travel limitations as well as the magnitude of the study population, a written questionnaire was chosen as the most appropriate type of instrument for the study. In formulating the questions used in the questionnaire, the investigator participated in a series of superintendent workshops which were designed, in part, to identify local planning needs. From these workshops a stratified random sample of comprehensive school superintendents indicated, in discussion groups, their needs in planning for vocational programs. Additional input into the formulation of the questions for the instrument came from a review of related literature and from interviews with the professional planning staff within the State Department of Vocational and Technical Education. Once formulated, the questions were randomly ordered on the instrument with respect to their perceived relative importance.

Responses to the questions were designed to achieve maximum ease of understanding and minimum time requirements in completion. Seven response variables were provided under each question, three of which

were dichotomous in nature (yes-no), two were likert-type questions, and two were multiple response type questions.

Each question was presented in an information systems design model so that each variable led to other specifically related variables and the entire question became a forced choice question (Appendix B).

Pilot Testing of the Instrument

In an effort to validate the instrument, a pilot test was conducted by administering it to a panel of judges composed of school superintendents and professional staff members of the Oklahoma State Department of Vocational and Technical Education. These judges were asked to complete the questionnaire and to make comments as to clarity and appropriateness of the questions and to indicate any difficulty they had in completion. Only minor problems were noted and corrections were made as necessary. The completed questionnaire is included in Appendix A.

Collection of Data

The completed instrument was mailed to each of 464 superintendents in the study population, along with an appropriate cover letter (Appendix A), directions for its completion, and a self-addressed, stamped envelope. A follow-up letter was mailed to non-respondents after a three-week time period had elapsed.

Analysis of Data

The following description of the analysis procedure is included to provide the reader an overview of the statistical treatment of the data

collected. Also included is a brief description of the contingency coefficient.

The BMDO 25 computer program as described in BMD Biomedical Computer Programs (1973) was utilized to analyze the data in this section. From this program a chi-square with degrees of freedom and a contingency coefficient were computed. By using the chi-square statistic with degrees of freedom, a significance level for each variable was calculated from a chi-square table. All significance levels were reported, regardless of their magnitude, in an effort to give the reader a relative view of any existing or potential relationship. However, significance levels greater than .10 were considered insignificant for purposes of this study. The alpha of .10 was selected because of large N and belief that the possibility of Type I errors was not too serious (Slakter, 1972).

Ratio scores were calculated by dividing positive responses by negative responses. Where negative responses were larger, a negative score was reported. For example, if 100 superintendents gave a positive response to a particular variable and 50 superintendents gave a negative response, the ensuing ratio score would be 2.

The contingency coefficient (C) is a non-parametric measure of correlation considered uniquely useful in correlating nominal data (Slakter, 1972). An additional desirable feature of the contingency coefficient is that it has the same value regardless of the order of frequencies or how the categories are arranged. Because of these features, it was determined to be the most appropriate method of correlating the categorical (nominal scale) information that this study provides.

As in all statistical measures, C has certain limitations and peculiarities; two of which will be noted here because of their direct effect on this study.

1. Because C is based on the chi-square statistic, it can properly be used only if fewer than 20 percent of the cells have an expected frequency of less than five and no cell has an expected frequency less than one.
2. Unlike the Spearman r and other non-parametric measures of correlation, the maximum value which C can attain depends on sizes of K (columns) and r (rows). For example, the maximum value C can attain in a 3 x 3 table is .816.

Because of the first limitation, correlation of some of the data intended for this study was impossible to achieve. In such cases only descriptive statistics were reported. The second limitation presents no problem, but is presented here only to provide the reader with a proper understanding of the C values attained in this study.

The tabled data presented in Chapter IV is presented by listing a condensed summary statement of each of the fifteen planning resources and data for each of the related variables. The following is offered as an explanation of each of those condensed statements for each of the fifteen planning resources.

1. "External technical assistance"--refers to planning assistance of a technical nature provided by individuals or institutions outside of the local school district.
2. "Time"--refers to the time necessary to conduct comprehensive planning activities.

3. "Staff assistance personnel"--refers to personnel within the local school staff necessary to conduct comprehensive planning activities.
4. "Initial cost information"--refers to information concerning the basic or beginning costs of establishing a vocational program.
5. "Maintenance cost information"--refers to the ensuing cost of maintaining a vocational program once it has been established.
6. "Program addition requirements information"--refers to the general requirements that must be met by local school districts in order to gain state and federal funding of additional vocational programs.
7. "Employer satisfaction information"--refers to information provided by employers of vocational graduates concerning their satisfaction with those graduates in fulfilling their job requirements.
8. "Teacher availability information"--refers to information concerning the availability of certified teaching personnel for various vocational programs.
9. "Staff organization"--refers to the organization of in-house staff which may lead toward a more effective planning effort.
10. "Graduate satisfaction information"--refers to (feedback) information from students who have recently completed training in a vocational program about the worth of that vocational program.
11. "Financial resources"--refers to the finances (money) necessary to conduct a comprehensive planning effort.

12. "Employment opportunity information"--concerns job market information or the availability of employment for various vocational skills.
13. "Student interest information"--refers to the interest of the student body in enrolling in the various vocational programs.
14. "Planning expertise within staff"--refers to personnel within the local staff who have sufficient knowledge of planning.
15. "Data assimilation equipment"--refers to mechanical equipment ranging from simple calculators to sophisticated computers, which may be used to assimilate or integrate various data.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to identify the planning resources that are available to local administrators. For those resources that are available, to determine the degree of use, the value when used, and the reason for non-use. For those planning resources that are not available, to determine the perceived use, the perceived value, and the perceived reason for non-use if they were made available. Additionally, the study sought to correlate this information with size of school and experience level of the superintendent.

The results of the analysis of data are presented in this chapter in two parts. Part 1, analysis of background data, is presented in an effort to afford the reader a statistical basis from which this study was derived and from which it may be interpreted. The analysis of background data is composed of (1) the study population by school size, (2) the study population by experience level of superintendents, and (3) the perceived level of planning expertise of superintendents.

Part 2, statistical analysis of objective data, is designed to offer an analysis of the objectives with which this study addresses itself. Part 2 is composed of three sections as follows:

(1) Section one discusses the availability of planning resources to local superintendents in relation to school size and experience level of superintendents.

(2) Section two offers an analysis of the data concerning those planning resources that were found to be available in section one. Analysis is given as to the (1) use and non-use of available planning resources, (2) the value of planning resources when used, and (3) the reason for non-use when the planning resources were available.

(3) Section three offers an analysis of the data concerning those planning resources where were found in section one to be not available. Analysis is given as to the use and non-use, the value, and the reason for non-use if the planning resources were made available.

Statistical analysis of the data is reported as (1) frequencies, mean values, and standard deviations, (2) percentages and ratios, (3) chi-squares, degrees of freedom, and significance levels, and (4) contingency coefficients.

The frequencies, mean values and standard deviations are reported in an effort to establish absolute values for each of the variables with which this study was designed.

Percentage and ratio statistics are provided to indicate the existence of relationships and the direction of those relationships.

The chi-square statistic, with degrees of freedom and significance levels, is provided to indicate the probability level or "truth" of an existent relationship. The contingency coefficient is added to show the magnitude of an existent relationship.

Part 1--Analysis of Background Data

Table I contains a summary of the total number of common schools by school size in Oklahoma and the percent of total (School Enrollment Data, 1975). Columns two and three of the table list respectively the total number of responses to the questionnaire and the percent of total by school size. Column five lists the percent of responses in relation to the total number of schools for each of three school size categories.

TABLE I

TOTAL NUMBER OF SCHOOLS BY SCHOOL SIZE, FREQUENCY OF RESPONSES AND PERCENT OF TOTAL

School Size (K-12)	Column 1 Total Number Schools	Column 2 Percent of Total	Column 3 Total Responses	Column 4 % of Responses by Total No. of Schools
Small (0-500)	242	52.1	141	58.2
Medium (500-2000)	177	38.1	117	66.1
Large (2000+)	45	8.8	26	57.5
TOTAL	464	100.0	284	

These figures indicate that the majority of common schools in Oklahoma (52 percent) are small schools with student enrollments of less than

500, and that over 90 percent of them have total enrollments of less than 2000. This suggests that most schools in Oklahoma are capable of providing only a limited offering of vocational programs, which in turn suggests greater planning requirements to more adequately meet their needs.

The responses received from the return of the questionnaire (284) represented 61 percent of the total study population. The figures in column four of Table I indicate that the return on the questionnaire by school size was generally very representative. Only the responses from the medium size schools were significantly different from the population that it represents.

Table II contains a summary of the frequency and percent of responses by level of experience of superintendents. As is indicated in Table II, there was a broad representation from all three levels of experience.

TABLE II

EXPERIENCE LEVEL OF SUPERINTENDENTS
FREQUENCY OF RESPONSE AND
PERCENT OF TOTAL

Experience Level	Frequency	Percent
0-5 years	90	31.9
5-15 years	110	39.0
15 years or greater	82	29.1

In an effort to assess the level of planning expertise of superintendents at all levels of experience and school size, a self-rating scale was established. Superintendents were asked to rate themselves as to their perceived level of planning expertise on a likert-type scale. The Likert scale ranged from poor to excellent, 1 to 7 respectively.

The figures in Table III indicate a broad response with the highest frequency being slightly above average. The mean response was 5.2 with a standard deviation of 1.15. As is indicated by these figures, superintendents, in general, perceive themselves as being above average in their knowledge of planning with only a very small deviation from the mean. Because of the small standard deviation, no attempt was made to establish a relationship between level of planning expertise and level of experience or school size.

Part 2--Statistical Analysis of Objective Data

Section 1--Availability of Planning Resources

Table IV lists the frequency ratios by school size and experience level of superintendents, as well as the totals for each of the fifteen planning resources. The responses listed are in response to the general question, "Is [planning resource] available to you in planning for vocational programs?" The purpose of which was simply to determine if the planning resources are available. No attempt was made to determine the degree of availability.

TABLE III

PERCEIVED PLANNING EXPERTISE OF SUPERINTENDENTS
FREQUENCY OF RESPONSE AND PERCENT OF TOTAL

Level of Planning Expertise		Frequency	Percent
Poor	1	2	0.73
	2	4	1.5
	3	12	4.4
	4	46	16.9
	5	99	36.3
	6	76	27.9
Excellent	7	34	12.4
TOTAL		273	100.0

$\overline{X}$ = 5.2
Sd = 1.15

As shown in the total column of Table IV, all planning resources were seen as being more available than less available except for planning resources numbers 7, employer satisfaction information; 10, graduate satisfaction information; 11, financial resources; and 15, data assimilation equipment. Planning resource number 15, data assimilation equipment, was viewed as the least available of all planning resources listed. Planning resources 7, 10, and 11, employer satisfaction information, graduate satisfaction information, and financial resources for planning, respectively, showed only a slightly larger less available over available totals.

TABLE IV

RATIO OF AVAILABILITY AND NON-AVAILABILITY OF PLANNING RESOURCES BY SCHOOL SIZE AND EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	School Size			Experience Level			Total Mean Ratio
	Small	Medium	Large	0-5 Years	5-15 Years	15 Years	
1. External Technical Assistant	5.8	10.8	25.0	7.9	9.9	7.9	8.0
2. Time	5.9	6.8	12.5	7.2	9.9	4.1	6.6
3. Staff Assistance	2.4	6.2	12.5	2.7	4.9	4.1	3.8
4. Initial Cost Information	2.4	3.2	26.0	2.6	2.8	4.1	3.0
5. Maintenance Cost Information	1.4	2.0	8.0	1.7	1.7	2.3	1.9
6. Program Addition Requirements	2.6	4.2	8.0	2.8	3.7	4.1	3.5
7. Employer Satisfaction Information	-1.3	-1.0	1.6	-1.4	1.0	-1.1	-1.1
8. Teacher Availability Information	2.5	3.4	7.6	2.6	3.5	3.2	3.1
9. Staff Organization	1.3	2.0	12.0	1.3	2.0	2.3	1.8
10. Graduate Satisfaction Information	-1.5	1.0	-1.2	-1.3	-1.1	-1.2	-1.2
11. Financial Resources	-1.8	-1.1	2.2	2.5	1.1	1.0	-1.3
12. Employment Opportunity Information	1.4	2.2	8.0	1.1	2.3	2.9	1.9
13. Student Interest Information	2.5	3.0	5.7	2.0	3.7	3.3	2.9
14. Planning Expertise on Staff	-1.3	1.2	5.7	-1.1	1.1	1.4	1.1
15. Data Assimilation Equipment	-3.6	-3.0	1.7	-3.3	-2.7	-2.1	-2.7

Planning resources seen as being most available in order of their highest degree of availability to lowest were: (1) external technical assistance; (2) time for planning; (3) staff personnel; (4) program addition requirement information; (5) teacher availability information; (6) initial vocational program cost information; (7) student interest information; (8) maintenance cost information; (9) employment opportunities information; (10) staff organization; and (11) planning expertise on staff.

An interesting aspect of the availability of planning resources is the relative difference by school size. Examination of Table IV indicates that for all 15 planning resources (except one), a larger ratio score was attained for larger schools than for medium and small schools. Likewise, medium size schools attained a larger ratio score than small schools. In essence, it would appear that the larger the school, the more available the planning resources.

A comparison of the figures under experience level in Table IV shows a similar (although not as complete) relationship to exist. Superintendents with the lowest level of experience (0-5 years), for all planning resources, showed an availability ratio score equal to or less than the medium (5-15 years) and higher (15 years) experience levels. No similarly apparent direction of the relationship exists, however, with respect to medium and higher levels of experience. Here the trend is toward a greater ratio of availability at medium levels of experience than for higher levels of experience.

Table V contains the frequency and statistical analysis of the data concerning the relationship between the availability of planning resources and school size. Statistical analysis of the data consists

TABLE V

FREQUENCIES AND STATISTICAL ANALYSIS OF THE AVAILABILITY OF PLANNING RESOURCES BY SCHOOL SIZE

Planning Resources	Frequency								Statistical Analysis			
	School Size											
	Small		Medium		Large		Total		X^2	dF	Significance Level	Contingency Coefficient
	A	NA	A	NA	A	NA	A	NA				
1. External Technical Assistance	116	20	108	10	25	1	249	31	4.0114	2	.10<P<.25	0.1188
2. Time	118	20	102	15	25	2	245	37	1.0103	2	P>.50	0.0597
3. Staff Assistance	97	40	100	16	25	2	222	58	12.2970	2	.001<P<.0025	0.2051
4. Initial Cost Information	95	40	89	28	26	1	210	69	8.1936	2	.010<P<.025	0.1689
5. Maintenance Cost Information	81	56	79	39	24	3	184	98	9.0714	2	.010<P<.025	0.1765
6. Program Addition Requirements	98	37	93	22	24	3	215	62	4.6366	2	.05<P<.10	0.1283
7. Employer Satisfaction Information	58	77	56	58	16	10	130	145	3.2853	2	.10<P<.25	0.1087
8. Teacher Availability Information	98	39	90	26	23	3	211	68	3.8109	2	.10<P<.25	0.1161
9. Staff Organization	78	59	76	37	24	2	178	98	12.5790	2	.0010<P<.0025	0.2088
10. Graduate Satisfaction Information	55	80	58	58	12	14	125	152	2.1723	2	.25<P<.50	0.0882
11. Financial Resources	47	86	54	61	18	8	119	155	11.1712	2	.0025<P<.005	0.1979
12. Employment Opportunity Information	78	56	79	36	24	3	181	95	10.2185	2	.005<P<.01	0.1889
13. Student Interest Information	96	38	85	28	23	4	204	70	2.2268	2	.25<P<.50	0.0898
14. Planning Expertise on Staff	59	76	63	52	23	4	145	132	15.9884	2	P<.0010	0.2336
15. Data Assimilation Equipment	29	105	29	87	17	10	75	202	19.8683	2	P<.0010	0.2587

A = Available
NA = Not Available

of a computed significance level through the use of chi-square and degrees of freedom. Correlation of the data was achieved through the calculation of a contingency coefficient.

As indicated in Table V, all planning resources achieved a significance level of .10 or greater except for numbers 3, staff assistance; 10, graduate satisfaction information; and 13, student interest information. Significance at the .05 level was achieved for nine of the fifteen planning resources. These figures suggest that the frequencies for all three school sizes depart significantly from chance expectation. Because no arbitrary significance level was chosen (as previously discussed), no level of significance can be arbitrarily rejected. However, for planning resources 3, 10, and 13, it can be seen that the chance probability approaches the 50 percent level or near chance, and thus allows for an extremely low confidence level.

The contingency coefficient, which shows the magnitude of the relationship between school size and availability of planning resources, indicates that a relationship does exist for all planning resources. However, due to the relatively low scores (ranging from .0597 to .2587), the magnitude of this relationship is generally low.

The relative differences in the contingency coefficients for each of the planning resources relative to school size are listed in descening order of C and grouped as follows:

I. $C \leq .2$

1. Data assimilation equipment
2. Planning expertise on staff
3. Staff organization
4. Staff assistance

II. $C \leq .1$

1. Financial resources
2. Employment opportunity information
3. Maintenance cost information
4. Initial cost information
5. Program addition requirements
6. External technical assistance
7. Teacher availability information

III. $C \geq .1$

1. Student interest information
2. Graduate satisfaction information
3. Time

Table VI contains the frequency and statistical analysis of the data concerning the relationship between the availability of planning resources and experience level of superintendents. As indicated in Table VI, only six (6) of the fifteen planning resources achieved a significance level of .10 or greater, two of which were equal to or greater than .10, two were equal to or greater than .01, and two were equal to or greater than .0025. Other significance levels were extremely low indicating little or no relationship.

A cursory examination of the contingency coefficients supports the lack of an existing significant relationship. Only for planning resources numbers 11, financial resources and 12, employment opportunity information, were contingency coefficients greater than .2.

Summary. In summary, it may be said that all planning resources are more available than less available except for number 7, employer satisfaction information; number 10, graduate satisfaction information;

TABLE VI

FREQUENCIES AND STATISTICAL ANALYSIS OF THE AVAILABILITY OF PLANNING RESOURCES BY EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	Frequency								Statistical Analysis			
	Experience Level											
	Small		Medium		Large		Total		X^2	dF	Significance Level	Contingency Coefficient
	A	NA	A	NA	A	NA	A	NA				
1. External Technical Assistance	79	10	99	10	71	10	249	30	0.5188	2	P>.50	0.0431
2. Time	79	11	99	10	66	16	244	37	4.4776	2	.01<P<.25	0.1252
3. Staff Assistance	66	24	89	18	66	16	221	58	2.9917	2	.01<P<.25	0.1030
4. Initial Cost Information	63	24	80	29	66	16	209	69	1.7810	2	.25<P<.50	0.0798
5. Maintenance Cost Information	56	33	70	40	57	25	183	98	0.9925	2	P>.50	0.0593
6. Program Addition Requirements	64	23	85	23	65	16	214	62	1.2146	2	P>.50	0.0662
7. Employer Satisfaction Information	37	50	55	53	37	42	129	145	1.3663	2	P>.50	0.0704
8. Teacher Availability Information	64	25	85	24	61	19	210	68	1.0081	2	P>.50	0.0601
9. Staff Organization	50	39	71	35	56	24	177	98	4.0234	2	.10<P<.25	0.1201
10. Graduate Satisfaction Information	37	49	51	58	36	45	124	152	0.2863	2	P>.50	0.0322
11. Financial Resources	25	63	54	51	40	40	119	154	12.2082	2	.0010<P<.0025	0.2069
12. Employment Opportunity Information	45	42	76	33	59	20	180	95	11.1084	2	.0025<P<.005	0.1970
13. Student Interest Information	58	29	85	23	60	18	203	70	4.0382	2	.10<P<.25	0.1207
14. Planning Expertise on Staff	41	47	57	51	46	34	144	132	2.0245	2	.25<P<.50	0.0853
15. Data Assimilation Equipment	20	67	29	79	26	55	75	201	1.7684	2	.25<P<.50	0.0798

A = Available
NA = Not Available

number 11, employment opportunity information; and number 15, data assimilation equipment. The range of ratio scores extended from a low of -2.7 to a high of 8.0 when comparing available to non-available planning resources for each of the planning resources.

In attempting to determine if there was a relationship between available planning resources and school size, it was found that for most planning resources, availability increased with an increase in school size. Only a few positive relationships exist between availability and experience level. Among these are student interest information and planning expertise on staff.

Section 2--Analysis of Available Planning Resources

Table VII shows the frequency ratio between superintendents who said they would use and those who would not use the planning resources that they had previously indicated were available to them. Ratios are listed for each of the fifteen planning resources by school size and experience level, and a mean ratio is given for each of the planning resources.

As shown by the mean ratio column of Table VII, superintendents indicated that they used all the planning resources listed that are available to them by greater than a 5 to 1 margin. The least used planning resources were (1) data assimilation equipment and (2) program addition requirements information. Among the most used planning resources were (1) student interest information, (2) staff assistance, and (3) planning expertise on their staffs. The most notable mean

TABLE VII

RATIO OF USE AND NON-USE OF AVAILABLE PLANNING RESOURCES BY SCHOOL SIZE AND EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	School Size			Experience Level			Mean Ratio %
	Small	Medium	Large	0-5 Years	5-15 Years	15 Years	
1. External Technical Assistance	7.3	12.5	11.5	5.6	8.9	34.5	9.4
2. Time	7.3	15.7	25.0	6.0	10.0	62.0	11.0
3. Staff Assistance	30.3	30.3	25.0	15.0	43.0	66.0	35.5
4. Initial Cost Information	10.7	10.1	24.0	11.6	7.8	20.7	11.2
5. Maintenance Cost Information	8.8	8.8	11.0	10.0	6.7	13.2	9.1
6. Program Addition Requirements	4.7	7.5	7.0	6.8	3.5	15.2	5.9
7. Employer Satisfaction Information	10.6	27.0	4.0	11.3	6.9	36.0	11.9
8. Teacher Availability Information	5.8	8.0	10.0	5.2	7.5	8.8	7.0
9. Staff Organization	14.6	17.5	22.0	11.2	16.7	26.5	16.6
10. Graduate Satisfaction Information	12.7	18.3	2.0	11.3	5.4	36.0	10.4
11. Financial Resources	10.7	9.6	17.1	7.3	7.8	39.0	10.8
12. Employment Opportunity Information	14.0	18.7	22.1	10.0	23.7	18.3	16.7
13. Student Interest Information	96.0	84.1	23.0	58.0	84.0	60.0	203.0
14. Planning Expertise on Staff	57.0	30.0	22.0	18.5	27.5	46.0	34.7
15. Data Assimilation Equipment	6.2	4.8	4.7	9.0	4.8	4.2	5.2

ratio figure was 203.0 recorded for the planning resource, "student interest information."

There was an apparent trend for superintendents employed in larger schools and with more experience to indicate a higher degree of usage. This relationship was not consistent for all planning resources, however, and was even in reverse of that trend for some planning resources.

Table VIII shows the frequency data from which the statistical analysis was made as well as totals for each of the planning resources. Statistical analysis was conducted for eleven of the fifteen planning resources. Data from the remaining four planning resources did not meet the criteria for chi-square testing due to an insufficient N distribution and thus were eliminated from the table.

Results of the analysis of data revealed that only three of the eleven statistically tested planning resources were significant above the .10 level. They were number 7, employer satisfaction information, equal to or greater than .10; number 2, time, equal to or greater than .05; and number 10, graduate satisfaction information, equal to or greater than .005. Other probabilities were near or below the probability of chance.

The contingency coefficients further support the lack of a significant relationship. Only three of the eleven planning resources tested showed a C equal to or greater than .10.

As in Table VIII, Table IX gives a frequency distribution and statistical treatment of the data. Table IX, however, substitutes experience levels of superintendents for school size. Analysis of the data reveals that significance above the .10 level was achieved for seven of the fifteen planning resources. This suggests that a

TABLE VIII

FREQUENCIES AND STATISTICAL ANALYSIS OF THE USE AND NON-USE OF AVAILABLE PLANNING RESOURCES BY SCHOOL SIZE

Planning Resources	School Size								Statistical Analysis			
	Small		Medium		Large		Total					
	WU	WNU	WU	WNU	WU	WNU	WU	WNU	X^2	dF	Significance Level	Contingency Coefficient
1. External Technical Assistance	102	14	100	8	23	2	225	24	1.4811	2	.25<P<.50	0.0769
2. Time	100	14	94	6	25	0	219	20	5.2903	2	.05<P<.10	0.1472
3. Staff Assistance	91	3	97	3	25	0	213	6				
4. Initial Cost Information	86	8	81	8	24	1	191	17	0.6733	2	P>.50	0.0568
5. Maintenance Cost Information	71	8	71	8	22	2	164	18	0.0752	2	P>.50	0.0203
6. Program Addition Requirements	80	17	82	11	21	3	183	31	1.3304	2	P>.50	0.0786
7. Employer Satisfaction Information	53	5	54	2	12	3	119	10	4.5765	2	.10<P<.25	0.1851
8. Teacher Availability Information	81	14	80	10	20	2	181	26	0.8230	2	P>.50	0.0629
9. Staff Organization	73	5	71	4	22	1	166	10	0.1706	2	P>.50	0.0311
10. Graduate Satisfaction Information	51	4	55	3	8	4	114	11	10.1103	2	.005<P<.010	0.2736
11. Financial Resources	43	4	48	5	17	1	108	10	0.2607	2	P>.50	0.0470
12. Employment Opportunity Information	70	5	75	4	22	1	167	10	0.2696	2	P>.50	0.0390
13. Student Interest Information	96	0	84	1	23	0	203	1				
14. Planning Expertise on Staff	57	1	60	2	22	1	139	4				
15. Data Assimilation Equipment	25	4	24	5	14	3	63	12				

WU = Would Use
WNU = Would Not Use

TABLE IX

FREQUENCIES AND STATISTICAL ANALYSIS OF THE USE AND NON-USE OF AVAILABLE PLANNING RESOURCES BY EXPERIENCE LEVEL OF THE SUPERINTENDENT

Planning Resources	Experience Level								Statistical Analysis			
	0-5 Yr.		5-15 Yr.		15 Yr.		Total					
	U	NU	U	NU	U	NU	U	NU	X^2	dF	Significance Level	Contingency Coefficient
1. External Technical Assistance	67	12	89	10	69	2	225	24	6.6131	2	.025<P<.05	0.1608
2. Time	66	11	90	9	62	0	218	20	9.2103	2	.005<P<.010	0.1930
3. Staff Assistance	60	4	86	2	66	0	212	6	4.8688	2	.05<P<.10	0.1478
4. Initial Cost Information	58	5	70	9	62	3	190	17	2.1818	2	.25<P<.50	0.1021
5. Maintenance Cost Information	50	5	60	9	53	4	163	18	1.3299	2	P>.50	0.0854
6. Program Addition Requirements	55	8	66	19	61	4	182	31	8.0199	2	.010<P<.025	0.1905
7. Employer Satisfaction Information	34	3	48	7	36	0	118	10	4.8999	2	.05<P<.10	0.1920
8. Teacher Availability Information	52	10	75	10	53	6	180	26	1.0699	2	P>.50	0.0719
9. Staff Organization	45	4	67	4	53	2	165	10	0.9871	2	P>.50	0.0749
10. Graduate Satisfaction Information	34	3	43	8	36	0	113	11	6.4614	2	.025<P<.05	0.2225
11. Financial Resources	22	3	47	6	39	1	108	10	2.7949	2	.10<P<.25	0.1521
12. Employment Opportunity Information	40	4	71	3	55	3	166	10	1.3482	2	P>.50	0.0872
13. Student Interest Information	58	0	84	1	60	0	202	1				
14. Planning Expertise on Staff	37	2	55	2	46	0	138	4	2.1941	2	.25<P<.50	0.1234
15. Data Assimilation Equipment	18	2	24	5	21	5	63	12	0.7709	2	P>.50	0.1009

U = Use
NU = Non-Use

relationship may exist between experience levels of superintendents and use and non-use of planning resources numbers 1, external technical assistance; 2, time; 3, staff assistance; 6, program addition requirements; 7, employer satisfaction information; 10, graduate satisfaction information; and 11, financial resources.

Superintendents who had previously indicated that the planning resources were available to them and that they had or did use them were asked to assign a value to same. The value scale ranged from one (extremely valuable) to seven (no value) with 4.0 being the mean. Numerical frequency distribution and percentages were recorded for each level of value for each planning resource.

As indicated by the mean values in Table X, all planning resources were seen by superintendents as being of above average value. Mean value scores ranged from a higher 2.9 to a low of 3.5 with a grand mean of 3.1. The highest values (2.9 for each) were given to (1) initial cost information, (2) employer satisfaction information, (3) student interest information, and (4) planning expertise on their staff. Lowest value (3.5 for each) was placed on (1) time for planning and (2) graduate satisfaction information.

Table XI is intended as a continuation of Table X. It lists the mean value and standard deviation for the total population as well as the mean value for each of the three school sizes and experience levels.

As indicated by the figures in Table VII, the general trend was for superintendents in larger schools to place a higher value in planning resources that they had used than did small school superintendents. This relationship, however, was not consistent for all planning resources. The most noticeable reversal to this trend dealt with

TABLE X

VALUE OF PLANNING RESOURCES WHEN AVAILABLE FREQUENCY
OF RESPONSE AND PERCENT OF TOTAL

Planning Resources	Extremely Valuable 1		2		3		4		5		6		No Value 7		$\bar{X}$	Sd
	F	%	F	%	F	%	F	%	F	%	F	%	F	%		
1. External Technical Assistance	25	11.1	5	2.2	123	54.7	9	4.0	61	27.1	2	0.9	0		3.3	1.07
2. Time	26	11.9	8	3.7	93	42.6	14	6.4	75	34.4	1	0.5	1	0.5	3.5	1.35
3. Staff Personnel	44	20.6	11	5.2	99	46.5	9	4.2	49	23.0	1	0.5	0		3.1	1.37
4. Initial Cost Information	50	26.3	8	4.2	83	43.7	5	2.6	44	23.1	0		0		2.9	1.43
5. Maintenance Cost Information	25	15.3	6	3.7	71	43.5	8	4.9	51	31.3	1	0.6	1	0.6	3.3	1.41
6. Program Addition Requirements	49	26.8	12	6.5	67	36.6	6	3.3	44	24.0	4	2.2	1	0.5	2.9	1.56
7. Employer Satisfaction Information	18	15.1	6	5.0	48	40.3	3	2.5	41	34.4	2	1.7	1	0.8	3.4	1.45
8. Teacher Availability Information	52	28.7	13	7.2	68	37.6	3	1.6	41	22.6	2	1.1	2	1.1	3.1	1.57
9. Staff Organization	32	19.4	12	7.3	77	46.7	3	1.8	40	24.2	1	0.6	0		3.0	1.37
10. Graduate Satisfaction Information	17	15.2	4	3.6	41	36.6	3	2.7	46	41.1	0		1	0.9	3.5	1.47
11. Financial Resources	26	24.3	4	3.7	47	44.9	4	3.7	25	23.4	1	0.9	0		3.0	1.44
12. Employment Opportunity Information	39	23.3	9	5.4	70	41.9	7	4.2	42	25.1	0		0		3.0	1.31
13. Student Interest Information	45	22.2	11	5.4	92	45.3	7	3.4	48	23.6	0		0		2.9	1.39
14. Planning Expertise on Staff	32	23.0	8	5.7	59	42.4	6	4.3	34	24.5	0		0		2.9	1.53
15. Data Assimilation Equipment	10	16.1	4	6.4	23	37.1	3	4.8	19	30.6	2	3.2	1	1.6	3.4	1.53

F = Frequency

TABLE XI

MEAN VALUE OF AVAILABLE PLANNING RESOURCES BY SCHOOL SIZE AND EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	Mean Value	Mean Value by School Size			Mean Value by Experience Level		
		Small	Medium	Large	0-5 Yr.	5-15 Yr.	15 Yr.
1. External Technical Assistance	3.3	3.6	3.2	2.9	3.6	3.4	3.4
2. Time	3.5	3.9	3.4	3.2	3.4	4.1	3.2
3. Staff Personnel	3.1	3.2	3.1	3.0	3.0	3.2	2.8
4. Initial Cost Information	2.9	3.1	2.8	2.5	3.3	3.1	2.6
5. Maintenance Cost Information	3.3	3.5	3.3	3.0	3.3	3.7	3.2
6. Program Addition Requirements	2.9	3.3	2.8	2.6	3.0	3.2	2.7
7. Employer Satisfaction Information	3.4	3.5	3.4	3.2	3.5	3.6	3.2
8. Teacher Availability Information	3.1	2.7	3.0	3.2	2.9	3.3	3.6
9. Staff Organization	3.0	3.2	2.8	3.1	2.9	3.3	2.8
10. Graduate Satisfaction Information	3.5	3.8	3.6	3.0	3.7	3.9	3.0
11. Financial Resources	3.0	3.2	2.8	3.0	3.2	3.3	2.5
12. Employment Opportunity Information	3.0	3.1	3.2	2.4	2.9	3.2	2.9
13. Student Interest Information	2.9	3.2	3.0	2.3	2.9	3.2	2.8
14. Planning Expertise on Staff	2.9	3.2	2.9	2.6	3.0	3.3	2.6
15. Data Assimilation Equipment	3.4	4.0	3.0	3.0	3.4	3.6	3.2
GRAND MEAN	3.1	3.3	3.1	2.9	3.1	3.4	2.9

the value placed on teacher availability information. Superintendents in large schools saw this planning resource as being among the least valuable, while superintendents in small schools saw it as being among the most valuable.

When one analyzes the value of planning resources in relation to experience level, the trend again appears to be more experience equals higher value. Superintendents with the highest level of experience consistently placed higher values on all planning resources than did low and medium experienced superintendents. The one notable exception dealt with teacher availability information (identical to the one mentioned in the previous paragraph).

Low experienced superintendents on the average did not, however, attach the lowest level of value to planning resources as might be expected. As is indicated by the grand mean totals, low experienced superintendents placed a slightly higher value to available planning resources than did medium experienced superintendents.

Superintendents who had indicated that the planning resources were available to them, but that they did not use them, were asked to give a reason(s) for non-use. Table XII gives a breakdown of the results by frequency and percent of responses. No attempt was made to correlate the data with school size and experience level because of an insufficient number of responses.

Superintendents responding to this question were given the following choices and were asked to check as many as are applicable: (1) too costly, (2) unreliable, (3) insufficient quantity, (4) unusable form, and (5) other (reason).

TABLE XII

REASON FOR NON-USE OF AVAILABLE PLANNING RESOURCES
FREQUENCIES AND PERCENTAGES

Planning Resources	Too Costly		Unreliable		Insufficient Quantity		Unusable Form		Other		Total
	F	%	F	%	F	%	F	%	F	%	
1. External Technical Assistance	4	17.3			1	4.3	2	8.7	16	69.5	23
2. Time	5	27.8	1	5.6	3	16.7	3	16.7	6	33.3	18
3. Staff Personnel	2	40.0					3	60.0			5
4. Initial Cost Information	4	25.0	1	6.2	1	6.2			10	62.5	16
5. Maintenance Cost Information	2	11.8	1	5.9	2	11.8	1	5.9	11	64.7	17
6. Program Addition Requirements	7	25.0			1	3.6	1	3.6	19	67.8	28
7. Employer Satisfaction Information	1	9.0	2	18.2	2	18.2			6	54.5	11
8. Teacher Availability Information	3	12.5	1	4.2			44	16.6	16	66.7	24
9. Staff Organization	1	14.3	1	14.3	2	28.6	2	28.6	1	14.3	7
10. Graduate Satisfaction Information			1	9.1	2	18.2	1	9.1	7	63.6	11
11. Financial Resources	1	10.0			2	20.0	1	10.0	6	60.0	10
12. Employment Opportunity Information			1	9.1	4	36.4	1	9.1	5	45.4	11
13. Student Interest Information	1	50.0							1	50.0	2
14. Planning Expertise on Staff	1	25.0					1	25.0	2	50.0	4
15. Data Assimilation Equipment					3	27.3	3	27.3	5	45.4	11
TOTAL	32		9		23		23		111		

A cursory examination of Table XII reveals that the column most frequently checked was the "other" category. For those superintendents who checked the "other" category, the most frequently stated reasons were that they did not need the planning resource because of various limitations on their ability to add new vocational programs. These limitations ranged from lack of finances and student enrollment to no desire because the AVTS's were meeting their vocational needs.

Summary. For those planning resources that were available, superintendents indicated an extremely high degree of usage. Ratios for all planning resources ranged from a low of 5.9 for program addition requirements information to a high of 203 for student interest information.

Statistical analysis of the data, however, revealed an extremely low relationship between school size and use and non-use for most of the planning resources. Exceptions were planning resources numbers 2, time; 7, employer satisfaction information; and 10, graduate satisfaction information.

In attempting to relate experience levels to use and non-use, again only relatively small relationships could be found. The highest correlations, however, were identical to those found for school size, i.e., 2, 7, and 10.

Mean value ratings for all planning resources that were used were above average, indicating that all planning resources listed were valuable. Reasons for non-use of available planning resources varied widely, but were generally concentrated in the "other" category. The most generally stated reason for those who checked the "other" category was: "No need for the planning resource."

Section 3--Analysis of Non-Available Planning Resources

Section 3 deals with those planning resources that were considered by superintendents to be not available. The question then became, "Would you use it if it were made available?" A positive response to this question led to the question, "What is your perceived value of the planning resource?" A negative response led to reason(s) for non-use.

Because of the low number of responses (most planning resources were available), the data in the tables in section three were arranged in a slightly different manner; i.e., frequency and mean ratios were replaced by frequency counts and percent totals. As in previous tables, X^2 and C were eliminated when the N was insufficient to preclude statistical analysis; where possible, frequency counts for school size were collapsed in an attempt to gain sufficient N for X^2 analysis.

As indicated by the percent totals in Table XIII, superintendents, by a wide margin, said that they would use all planning resources if they were made available. The range of positive responses was from 76 percent to 99 percent, with a mean percent of 89.1.

Those planning resources receiving a 90 percent or greater total perceived use rating were:

(1) 13. Student interest information . . . . . 99 percent

(2) 12. Employment opportunity information . . . . . 97 percent

(3) 10. Graduate satisfaction information . . . . . 95 percent

(4) 7. Employer satisfaction information . . . . . 95 percent

(5) 14. Planning expertise on staff . . . . . 93 percent

(6) 4. Initial cost information . . . . . 92 percent

(7) 2. Time . . . . . 91 percent

TABLE XIII

FREQUENCY OF PERCEIVED USE AND NON-USE OF NON-AVAILABLE PLANNING RESOURCES IF MADE AVAILABLE BY SCHOOL SIZE AND EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	School Size						Experience Level						Total		Total
	Small		Medium		Large		0-5 Years		5-15 Years		15 Years		Total		
	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	% A
1. External Technical Assistance	16	3	9	1	1	0	9	1	8	1	8	2	26	4	87
2. Time	16	2	14	1	2	0	9	1	9	1	14	1	32	3	91
3. Staff Personnel	32	6	14	2	2	0	21	2	14	4	13	2	48	8	86
4. Initial Cost Information	33	4	27	1	1	0	19	4	27	1	15	0	61	5	92
5. Maintenance Cost Information	46	7	35	3	3	0	27	4	34	5	23	1	84	10	89
6. Program Addition Requirements	30	5	31	1	3	0	19	3	22	1	13	2	54	16	77
7. Employer Satisfaction Information	66	6	57	0	8	1	45	3	47	4	39	0	131	7	95
8. Teacher Availability Information	32	5	25	1	2	1	21	3	21	3	17	1	59	7	89
9. Staff Organization	41	13	35	1	2	1	28	7	28	6	22	1	78	14	85
10. Graduate Satisfaction Information	71	6	56	1	14	0	45	2	52	5	44	0	141	7	95
11. Financial Resources	67	15	54	6	8	0	55	6	37	13	36	2	129	21	86
12. Employment Opportunity Information	53	3	37	0	3	0	40	1	52	2	19	0	90	3	97
13. Student Interest Information	36	1	28	0	4	0	27	1	23	0	18	0	68	1	99
14. Planning Expertise on Staff	66	5	47	4	4	0	41	3	45	4	32	2	117	9	93
15. Data Assimilation Equipment	71	28	68	16	7	1	50	15	50	24	45	6	146	45	76

A = Available
NA = Not Available

$\bar{X}$ 89.1

Those planning resources with an 80 percent or less total perceived use rating were:

(1) 6. Program addition requirements information . 77 percent

(2) 15. Data assimilation equipment . . . . . 76 percent

Because of the extremely high percentage of positive responses, a relationship between school size and use and non-use was difficult or impossible to establish. By collapsing the three school sizes into two (See Table XIV), it was possible to conduct a statistical analysis of eleven of the fifteen planning resources. Only four of the eleven showed a significance level of equal to or greater than .10, one of which, however was equal to or greater than .005. All significant relationships were positive, indicating that large schools would use the planning resources more than smaller schools. The strongest relationship (C = .2820) dealt with planning resource number 9, staff organization.

Table XV shows the results of the statistical analysis of the use of planning resources in relation to experience levels of superintendents. As may be seen from the table, significance at the .10 level was achieved for only six of the fifteen planning resources, i.e., planning resources numbers 4, initial cost information; 7, employer satisfaction information; 9, staff organization; 10, graduate satisfaction information; 11, financial resources, and 15, data assimilation equipment. The magnitude of the relationships remained relatively low, however, with the exception of planning resource number 11, financial resources, with a C = 0.2413. The direction of existing relationships were generally positive in nature, indicating that superintendents with

TABLE XIV

FREQUENCIES AND STATISTICAL ANALYSIS OF THE PERCEIVED USE OF PLANNING RESOURCES BY SCHOOL SIZE

Planning Resources	School Size								Statistical Analysis			
	Small		Medium		Large		Total					
	WU	WNU	WU	WNU	WU	WNU	WU	WNU	X^2	dF	Significance Level	Contingency Coefficient
1. External Technical Assistance	16	3	9	1	1	0	26	4	0.2705	1	P>.50	0.0945
2. Time	16	2	14	1	2	0	32	3	0.3050	1	P>.50	0.0929
3. Staff Assistance	32	6	14	2	2	0	48	8	0.2183	1	P>.50	0.0623
4. Initial Cost Information	33	4	27	1	1	0	61	5	1.2586	1	.25<P<.50	0.1368
5. Maintenance Cost Information	46	7	35	3	3	0	84	10	0.8437	1	.25<P<.50	0.0943
6. Program Addition Requirements	30	5	21	1	3	0	54	6	1.7143	1	.10<P<.25	0.1667
7. Employer Satisfaction Information	66	6	57	0	8	1	131	7				
8. Teacher Availability Information	32	5	27	2	2	1	59	7	0.7508	1	.25<P<.50	0.1061
9. Staff Organization	41	13	37	1	2	1	78	14	7.9486	1	.005<P<.0025	0.2820
10. Graduate Satisfaction Information	71	6	56	1	14	0	141	7				
11. Financial Resources	67	15	54	6	8	0	129	21	3.3547	2	.10<P<.25	0.1477
12. Employment Opportunity Information	53	3	37	0	3	0	90	3	2.0482	1	.10<P<.25	0.1468
13. Student Interest Information	36	1	28	0	4	0	68	1				
14. Planning Expertise on Staff	66	5	47	4	4	0	117	9				
15. Data Assimilation Equipment	71	28	68	16	5	1	146	45	2.7192	2	.25<P<.50	0.1185

WU = Would Use
WNU = Would Not Use

TABLE XV

NUMERICAL FREQUENCIES AND STATISTICAL ANALYSIS OF THE PERCEIVED USE OF PLANNING RESOURCES BY EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	Experience Level								Statistical Analysis			
	0-5 Yr.		5-15 Yr.		15 Yr.		Total					
	WU	WNU	WU	WNU	WU	WNU	WU	WNU	X^2	dF	Significance Level	Contingency Coefficient
1. External Technical Assistance	9	1	8	1	8	2	25	4	0.4994	2	P>.50	0.1301
2. Time	9	1	9	1	14	1	32	3				
3. Staff Assistance	21	2	14	4	13	2	48	8	1.5240	2	.25<P<.50	0.1628
4. Initial Cost Information	19	4	27	1	15	0	61	5	5.0355	2	.05<P<.10	0.2662
5. Maintenance Cost Information	27	4	34	5	23	1	84	10	1.4200	2	.25>P>.50	0.1220
6. Program Addition Requirements	19	3	22	1	13	2	54	6	1.3248	2	P>.50	0.1470
7. Employer Satisfaction Information	45	3	43	4	39	0	131	7	3.0353	2	.10<P<.25	0.1467
8. Teacher Availability Information	21	3	21	3	17	1	59	7	0.6659	2	P>.50	0.0999
9. Staff Organization	28	7	28	6	22	1	78	14	2.8823	2	.10<P<.25	0.1743
10. Graduate Satisfaction Information	45	2	52	5	44	0	141	7	4.2748	2	.10<P<.25	0.1675
11. Financial Resources	55	6	37	13	36	2	128	21	9.2148	2	.005<P<.01	0.2413
12. Employment Opportunity Information	40	1	32	2	19	0	90	3				
13. Student Interest Information	37	1	23	0	18	0	68	1				
14. Planning Expertise on Staff	41	3	45	4	32	2	117	9	0.1422	2	P>.50	0.0336
15. Data Assimilation Equipment	50	15	50	24	45	6	145	45	7.1153	2	.025<P<.05	0.1905

WU = Would Use
WNU = Would Not Use

more experience would use the planning resources more if they were made available.

Perceived value ratings for each of the fifteen planning resources were above average, as is indicated in Table XVI. The mean value range extended from a low of 3.7 ($\overline{X}$ = 4.0) to a high of 2.3. Among the highest value ratings were planning resources 11, financial resources; 13, student interest information; 12, employment opportunity information; and 5 and 6, initial and maintenance cost information. The lowest relative mean perceived value rating was given to external technical assistance.

Table XVII gives a mean perceived value rating breakdown for both school size and experience level of superintendents. As is indicated in the table, all except four of the planning resources showed an increase in perceived value with increased school size. The four exceptions, teacher availability information, staff organization, employment opportunity information, and data assimilation equipment reversed the trend with smaller schools giving the higher or equal ratings.

No general trend or relationship could be found between the mean perceived value and experience level of superintendents. Those superintendents with less than five years experience viewed the following planning resources as being the most valuable: 4, initial cost information; 7, employer satisfaction information; 9, staff organization; 10, graduate satisfaction information; 11, financial resources; 12, employment opportunity information; 14, planning expertise on staff; and 15, data assimilation equipment. Superintendents with medium levels of experience (5-15 years) placed highest relative values on 1, external technical assistance; 3, staff personnel; and 8, teacher availability

TABLE XVI

NON-AVAILABLE PLANNING RESOURCES PERCEIVED VALUE OF PLANNING RESOURCES IF MADE AVAILABLE

Planning Resources	Extremely Valuable 1		2		3		4		5		6		No Value 7		$\bar{X}$	Sd
	F	%	F	%	F	%	F	%	F	%	F	%	F	%		
1. External Technical Assistance	1	3.8	0		14	53.8	1	3.8	9	34.6	0		1	3.8	3.7	1.25
2. Time	5	15.6	1	3.1	16	50.0	2	6.2	7	28.9	1	3.1	0		3.1	1.36
3. Staff Personnel	8	17.0	2	4.2	19	40.4	1	2.1	16	34.0	0		1	2.1	3.3	1.51
4. Initial Cost Information	18	29.5	4	6.5	25	41.0	2	3.3	12	19.7	0		0		2.6	1.43
5. Maintenance Cost Information	27	32.1	5	5.9	29	34.5	2	2.4	21	25.0	0		0		2.7	1.91
6. Program Addition Requirements	12	22.2	1	1.8	26	48.1	3	5.5	11	20.4	1	1.8	0		2.9	1.40
7. Employer Satisfaction Information	33	25.3	4	3.1	55	42.3	3	2.3	34	26.1	1	0.8	0		2.9	1.48
8. Teacher Availability Information	18	30.5	0		21	35.6	3	5.0	16	27.1	1	1.7	0		3.2	1.59
9. Staff Organization	17	22.1	7	9.1	32	41.5	4	5.2	17	22.1	0		0		3.1	1.39
10. Graduate Satisfaction Information	27	19.4	5	3.6	64	46.0	3	2.1	37	26.6	1	0.7	2	1.04	3.2	1.47
11. Financial Resources	48	37.5	6	4.7	52	40.6	4	3.1	17	13.3	1	0.8	0		2.3	1.41
12. Employment Opportunity Information	35	39.3	3	3.4	32	35.9	1	1.1	18	20.2	0		0		2.6	1.50
13. Student Interest Information	28	41.8	3	4.5	22	32.8	1	1.5	13	19.4	0		0		2.5	1.51
14. Planning Expertise on Staff	33	28.2	6	5.1	41	35.0	3	2.6	33	28.2	1	0.8	0		3.0	1.55
15. Data Assimilation Equipment	32	21.9	7	4.8	53	36.3	5	3.4	49	33.6	0		0		3.3	1.50

F = Frequency

TABLE XVII

NON-AVAILABLE PLANNING RESOURCES MEAN PERCEIVED VALUE OF PLANNING RESOURCES IF MADE AVAILABLE BY SCHOOL SIZE AND EXPERIENCE LEVEL OF SUPERINTENDENTS

Planning Resources	Mean Value	Mean Value by School Size			Mean Value by Experience Level		
		Small	Medium	Large	0-5 Yr.	5-15 Yr.	15 Yr.
1. External Technical Assistance	3.7	4.2	3.2	3.0	4.3	3.6	3.7
2. Time	3.1	3.7	2.9	2.0	3.4	3.7	3.0
3. Staff Personnel	3.3	3.4	3.8	2.5	3.4	3.3	3.5
4. Initial Cost Information	2.6	2.8	2.7	2.0	2.6	2.7	2.9
5. Maintenance Cost Information	2.7	2.9	2.8	2.0	2.8	2.8	2.7
6. Program Addition Requirements	2.9	3.2	2.9	2.0	3.0	3.2	2.9
7. Employer Satisfaction Information	2.9	3.0	3.0	2.4	2.8	3.0	3.2
8. Teacher Availability Information	3.2	3.2	2.7	4.0	3.0	2.7	3.8
9. Staff Organization	3.1	2.7	3.2	3.5	2.9	3.0	3.0
10. Graduate Satisfaction Information	3.2	3.1	3.4	3.0	2.9	3.5	3.1
11. Financial Resources	2.3	2.7	2.5	1.2	2.0	2.9	2.6
12. Employment Opportunity Information	2.6	2.5	2.7	3.2	2.6	2.8	2.8
13. Student Interest Information	2.5	3.3	2.6	2.0	2.3	2.9	2.0
14. Planning Expertise on Staff	3.0	3.0	3.0	3.0	2.9	3.1	3.0
15. Data Assimilation Equipment	3.3	3.1	3.3	3.8	3.0	3.4	3.3

information. The most experienced superintendents (15 years and over) placed the highest value on 2, time; 3, maintenance cost information; and 13, student interest information. The highest single mean perceived value rating for all levels of experience was 2.0 for both financial resources and student interest information.

Table XVIII offers a frequency and percentage distribution of the reasons given for perceived non-use of planning resources if they were made available. Because of the extremely low N for each of the planning resources, no single reason could be found for the perceived non-use of all planning resources. The largest total frequencies, however, occurred in the "too costly" category, with the frequency for financial resources being the largest single frequency within that category.

Summary

In summary it was found that nearly all superintendents would use all of the planning resources listed if they were made available to them. The most used planning resource would be student interest information and the least used would be data assimilation equipment. Definitive relationships between perceived use and school size exists for only four of the fifteen planning resources and were generally positive and of a low magnitude. Definitive relationships between perceived use and experience level were also small in number (only six) and were likewise generally positive and of a low magnitude. Perceived value ratings were above average for all planning resources with the highest rating given to financial resources and the lowest given to external technical assistance. Perceived value generally increased with an increase in school size, but no directional relationship could be found

TABLE XVIII

NON-AVAILABLE PLANNING RESOURCES REASON FOR NON-USE
IF MADE AVAILABLE BY FREQUENCIES AND PERCENTAGES

Planning Resources	Too Costly		Unreliable		Insufficient Quantity		Unusable Form		Other	
	F	%	F	%	F	%	F	%	F	%
1. External Technical Assistance	2	50.0					2	50.0		
2. Time	1	50.0							1	50.0
3. Staff Personnel	5	71.4			1	14.3	1	14.3		
4. Initial Cost Information	2	50.0							2	50.0
5. Maintenance Cost Information	2	25.0	1	12.5			1	12.5	4	50.0
6. Program Addition Requirements	4	66.7							2	33.3
7. Employer Satisfaction Information	2	28.6	1	14.3	2	28.6	1	14.3	1	14.3
8. Teacher Availability Information	3	37.5					1	12.5	4	50.0
9. Staff Organization	8	61.5			2	15.4	1	7.7	2	15.4
10. Graduate Satisfaction Information	2	33.3	1	16.7	1	16.7	1	16.7	1	16.7
11. Financial Resources	12	63.1	1	5.3	2	10.5	1	5.3	3	15.8
12. Employment Opportunity Information							2	100.0		
13. Student Interest Information										
14. Planning Expertise on Staff	3	42.8			2	28.6			2	28.6
15. Data Assimilation Equipment										

for experience level. Reasons for non-use of planning resources, if made available, were generally too small and varied to determine a generalizable trend.

CHAPTER V

FINDINGS, SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the findings of the study, followed by a summary of those findings, conclusions, and recommendations. The findings of the study are presented separately for each of the fifteen planning resources. Included within each planning resource is a percentage and frequency breakdown for each of the seven variables and all sub-variables. Correlation of the data, by school size and experience level of superintendents, is presented for the availability, use and non-use, perceived use and non-use for each of the planning resources. Where definite relationships exist, they are reported as such, along with the direction of the relationship and its magnitude. (A positive relationship indicated that the variable increases as the size of the school or experience level of the superintendent increases.)

Findings of the Study

The following is a summary of the findings for each of the fifteen planning resources.

Planning Resource Question Number 1

> Technical assistance for planning is often available from sources outside of the local school systems; such as, state department officials, universities, private consultants, etc.
>
> Is external technical assistance available to you in planning for vocational programs?

Of the 280 superintendents responding to the question, 88.9 percent (N = 249) indicated that external technical assistance was available. Of this 88.9 percent, 90.3 percent (N = 225) indicated that they used it and that it had a mean value of 3.3 (s.d. = 1.00) or slightly above average. The 9.7 percent who indicated that they did not use it listed their reasons as follows: 17.3 percent, too costly; 4.3 percent, insufficient quantity; 8.7 percent, unusable form; and 69.5 percent, other.

For the 11.1 percent of superintendents who said that external technical assistance was not available to them, 86.7 percent indicated that they would use it if it were made available and gave it a mean perceived value of 3.7 (s.d. = 1.25) or very slightly above average. The following reasons are given for the 13.3 percent who indicated that they would not use external technical assistance if it were made available: 50 percent, too costly and 50 percent, unusable form.

Correlation of the data by school size and experience level of superintendents indicated the following:

- that the availability of external technical assistance was positively correlated with school size (i.e., larger school equals greater availability), but that the magnitude of the relationship was small.
- that no true relationship exists between the availability of external assistance and experience level of superintendents.

- that no true relationship exists between the use and non-use of external technical assistance and school size.
- that there is a positive relationship between the use and non-use of "external technical assistance" and experience level of superintendents (i.e, more experience equals greater use), but that the magnitude of the relationship is small.
- that no definitive relationship exists between the perceived use and non-use of external technical assistance if it were made available and either school size or experience level of superintendents.

Planning Resources Question Number 2

Is time available to you in planning for the addition or deletion of vocational programs?

Of the 282 superintendents responding to the question, 86.9 percent (N = 245) indicated that time was available. Of this 86.9 percent, 91.6 percent (N = 219) indicated that they used it and that it had a mean value of 3.5 (s.d. = 1.35) or slightly above average. The 8.4 percent who indicated that they did not use "time" listed their reasons as follows: 27.8 percent, too costly; 5.6 percent, unreliable; 16.7 percent, insufficient quantity; 16.7 percent, unusable form; and 33.3 percent, other.

For the 13.1 percent (N = 39) of the superintendents who said that time was not available to them, 91.4 percent indicated that they would use it if it were made available and gave it a mean perceived value of 3.1 (s.d. = 1.36) or moderately high. The following reasons were given for the 8.6 percent who said that they would not use "time" if it were available: 50 percent, too costly and 50 percent, other.

Correlation of the data by school size and experience level of superintendents indicated the following:

- that no definitive relationship exists between the availability of time and school size.
- that there is a definite (although small) relationship between the availability of time and experience level of superintendents; and, that availability increased in the following ascending order: high, low and medium levels of experience.
- that a definite positive relationship exists between the use and non-use of available time and both school size and experience level of superintendents (i.e., increased school size and increased experience levels equals greater use).
- that no true relationship exists between the perceived use and non-use of time if it were made available and either school size or experience level of superintendents.

Planning Resources Question Number 3

Are staff personnel available within your school to assist in the planning process?

Of the 280 superintendents responding to this question, 79.2 percent (N = 222) indicated that staff personnel were available. Of this 79.2 percent, 97.3 percent (N = 213) indicated that they used it and that it had a mean value of 3.1 (s.d. = 1.37) or moderately above average. The 2.7 percent who indicated that they did not use staff personnel listed the following reasons: 40 percent, too costly and 60 percent, unusable form.

For the 20.7 percent (N = 58) of superintendents who said that staff personnel were not available to them, 85.7 percent indicated that they would use it if it were made available and gave it a mean perceived value of 3.3 (s.d. = 1.51) or slightly above average. Reasons for non-use were listed as follows: 71.4 percent, too costly; 14.3 percent, insufficient quantity; and 14.3 percent, unusable form.

Correlation of the data by school size and experience level of superintendents revealed:

- that a relatively strong positive relationship exists between the availability of staff personnel and school size (i.e., larger school equals greater availability).
- that a definite relationship exists between the availability of staff personnel and experience level, although of a lower magnitude and of a mixed direction. Availability of staff personnel increased in the following ascending order: low, high, medium levels of experience.
- that no relationship exists between the use and non-use of available staff personnel and school size.
- that a definite positive relationship exists between the use and non-use of available staff personnel and experience level of superintendents, although of a relatively low magnitude (C = 0.1478).
- that little or no relationship exists between the perceived use and non-use of available staff personnel if made available and either school size or experience level of superintendent.

Planning Resources Question Number 4

Is information available to you concerning the initial cost of various vocational programs?

75.3 percent (N = 210) of the 279 superintendents responding to this question indicated that initial cost information was available to them. Of this 75.3 percent, 91.8 percent (N = 191) indicated that they would use it and gave it a relatively high mean value of 2.9 (s.d. = 1.43). The following reasons were given for non-use of initial cost information when it was available: 25 percent, too costly; 6.2 percent, unreliable; 6.2 percent, insufficient quantity, and 62.5 percent, other.

For the 24.7 percent (N = 69) of the superintendents who said that initial cost information was not available, 92.4 percent indicated that they would use it if it were made available. The mean perceived value given was 2.6 (s.d. = 1.43), indicating an extremely high value on a relative basis. Reasons for non-use of initial cost information were: 50 percent, too costly and 50 percent, other.

Correlation of the data by school size and experience level of superintendents indicates:

- that a definite positive relationship exists between the availability of initial cost information and school size.
- that no definite relationship exists between the availability of initial cost information and experience level of superintendents.
- that no definite relationship exists between the use and non-use of available initial cost information and either school size or experience level of superintendents.
- that no definite relationship exists between the perceived use and non-use of initial cost information and school size.

- that a relatively strong relationship exists between the perceived use and non-use of initial cost information and experience level of superintendents. The direction of the relationship in ascending order of use was: high, low, medium levels of experience.

Planning Resources Question Number 5

Is information available to you concerning the maintenance cost of various vocational programs?

Of the 282 superintendents responding to this question, 65.2 percent (N = 184) indicated that maintenance cost information was available to them. Of this 65.2 percent, 90.1 percent (N = 164) indicated that they used it and gave it a moderately high mean value rating of 3.3 (s.d. = 1.41). The reasons given for the non-use of available maintenance cost information were: 11.8 percent, too costly; 5.9 percent, unreliable; 11.8 percent, insufficient quantity; 5.9 percent, unusable form; and 64.7 percent, other.

For the 34.7 percent (N = 98) of the superintendents who said that maintenance cost information was not available to them, 89.4 percent (N = 84) indicated that they would use it if it were made available. The mean perceived value rating given was 2.7 (s.d. = 1.91) indicating an (extremely) high value on a relative basis. Reasons for non-use if maintenance cost information were made available included: 25 percent, too costly; 12.5 percent, unreliable, 12.5 percent, unusable form; and 50 percent, other.

Correlation of the data by school size and experience level of superintendents indicates:

- that a definite positive (although small) relationship exists between the availability of maintenance cost information and school size.
- that no definite relationship exists between the availability of maintenance cost information and experience level of superintendents.
- that no definitive relationship exists between the use and non-use of available maintenance cost information and either school size or experience level of superintendents.
- that no definitive relationship exists between the perceived use and non-use of maintenance cost information if made available and either school size or experience level of superintendent.

Planning Resources Question Number 6

> Requirements for adding various vocational programs to the curriculum may include a variety of things; such as, certain equipment, facilities, business work stations, etc.
>
> Is information available to you concerning the requirements for adding various vocational programs?

For the 277 superintendents responding to this question, 77.6 percent (N = 215) indicated that program addition requirements information was available to them. Of this 77.6 percent, 85.5 percent (N = 183) indicated that they used it and gave it a mean rating of a relatively high 2.9 (s.d. = 1.56). Reasons given for the 14.5 percent (N = 31) who indicated that they did not use the information when it was available were: 25 percent, too costly; 3.6 percent, insufficient quantity; 3.6 percent, unusable form; and 67.8 percent, other.

Of the 22.4 percent (N = 62) who indicated that program addition requirements information was not available to them, 90 percent (N = 54)

said that they would use it if it were made available. A relatively high mean perceived value of 2.9 (s.d. = 1.40) was given it. Reasons for non-use include: 66.7 percent, too costly and 33.3 percent, other.

Correlation of the data by school size and experience level of superintendents indicated:

- that a definite positive (although low magnitude) relationship exists between the availability of program addition requirements and school size ($\alpha \geq .05$, C = 0.1283).
- that no definitive relationship exists between the availability of program addition requirements information and experience level of superintendents.
- that no definitive relationship exists between the use and non-use of available program addition requirements information and school size.
- that a definite relationship exists between the use and non-use of available program addition requirements information and experience level of superintendents ($\alpha \geq .01$, C = 0.1905); and that order ascending use is: medium, low, and high levels of experience.
- that a relationship exists between the perceived use and non-use of program addition requirements information and school size. This relationship holds true, however, only when medium and large schools are combined. With that exception granted, the relationship is positive ($\alpha \geq .10$, C = 0.1667).

Planning Resources Question Number 7

Is information available to you concerning employer satisfaction with graduates who have completed training in various vocational programs?

For the 275 superintendents responding to this question, only 47.3 percent (N = 130) indicated that employer satisfaction information was available to them. Of that percentage, 92.2 percent (N = 119) indicated that they used it and considered its value to be a mean of a moderately high 3.4 (s.d. = 1.45). The 7.7 percent (N = 10) of the superintendents who indicated that they did not use it when it was available gave the following reasons: 9.0 percent, too costly; 18.2 percent, unreliable; 18.2 percent, insufficient quantity; 54.5 percent, other.

Of the 52.7 percent (N = 145) superintendents who said employer satisfaction information was not available to them, 94.9 percent (N = 131) indicated that they would use it if it were made available. The mean perceived value was a relatively high 2.9 (s.d. = 1.48). Reasons for non-use include: 28.6 percent, too costly; 14.3 percent, unreliable; 28.6 percent, insufficient quantity; 14.3 percent, unusable form; and 14.3 percent, other.

Correlation of the data by school size and experience level of superintendents indicated:

- that an extremely low positive relationship exists between availability of employer satisfaction information and school size ($\alpha \geq .10$, C = 0.1087).
- that no definitive relationship exists between the availability of employer satisfaction information and experience level of superintendents.

- that a relationship exists between the use and non-use of available employer satisfaction information and school size ($\alpha \geq .10$, C = 0.1851).
- that a definite relationship exists between the use and non-use of available employer satisfaction information and experience level of superintendents ($\alpha \geq .05$, C = 0.1920). The direction of the relationship in ascending order of use was: medium, low, high levels of experience.
- that no definitive relationship exists between the perceived use and non-use of employer satisfaction information, if made available, and school size.
- that a low magnitude relationship exists between the perceived use and non-use of employer satisfaction information and experience level of superintendents ($\alpha \geq .10$, C = 0.1417).

Planning Resources Question Number 8

Is information available to you concerning the availability of teachers for various vocational programs?

For the 279 superintendents responding to this question, 75.6 percent (N = 211) indicated that teacher availability information was available to them. Of that percentage, 87.4 percent (N = 181) said that they used the information and that its mean value was 3.1 (s.d. = 1.57). The 12.6 percent (N = 26) who did not use it, offered the following reasons: 12.5 percent, too costly; 4.2 percent, unreliable; 16.6 percent, unusable form; and 66 percent, other.

For the 24.4 percent (N = 68) who had previously indicated that teacher availability information was not available, 89.4 percent (N = 59) indicated that they would use it if it were made available. A mean

rating of 3.2 (s.d. = 1.59) was given to its perceived value. The 10.6 percent (N = 7) who indicated that they would not use it, listed the following reasons for non-use: 37.5 percent, too costly; 12.5 percent, unusable form; and 50 percent, other.

Correlation of the data by school size and experience level of superintendents indicated:

- that a definite positive (although low magnitude) relationship exists between the availability of teacher availability information and school size ($\alpha \geq .10$, C = 0.1181).
- that no definite relationship exists between the availability of teacher availability information and experience level of superintendents.
- that no definitive relationship exists between the use and non-use of teacher availability information and either school size or experience level of superintendents.
- that no definitive relationship exists between the perceived use and non-use of teacher availability information and either school size or experience level of superintendents.

Planning Resources Question Number 9

Do you have the proper staff organization to enhance the planning effort?

For the 276 superintendents responding to this question, 64.5 percent (N = 178) indicated that staff organization was available. Of that 64.5 percent, 94.3 percent (N = 166) indicated that they used it and felt that it had a mean value of 3.0 (s.d. = 1.37). The 5.7 percent (N = 10) who did not use staff organization when it was available, listed the following reasons for non-use: 14.3 percent, too costly; 14.3

percent, unreliable; 28.6 percent, insufficient quantity; 28.6 percent, unusable form; and 14.3 percent, other.

For the 35.5 percent (N = 98) who had indicated that staff organization was not available to them, 84.8 percent (N = 78) indicated that they would use it if it were available. A mean 3.1 (s.d. = 1.39) was given as its perceived value. Reasons for non-use include the following: 61.5 percent, too costly; 15.4 percent, insufficient quantity; 7.7 percent, unusable form; and 15.4 percent, other.

Correlation of the data by school size and experience level of superintendent indicated:

- that a definite positive relationship of a relatively high magnitude exists between the availability of staff organization and school size ($\alpha \geq .001$, C = 0.2088).
- that a small, positive relationship exists between the availability of staff organization and experience level of superintendents ($\alpha \leq .10$, C = 0.1201).
- that no definitive relationship exists between the use and non-use of staff organization and either school size or experience level of superintendents.
- that a relatively high magnitude positive relationship exists between the perceived use and non-use of staff organization and school size ($\alpha \leq .005$, C - 0.2820). Because large and medium schools are combined, the relationship is true for only two school sizes--small and large.
- that a definite positive relationship exists between the perceived use and non-use of staff organization and experience level of superintendents ($\alpha \leq .10$, C = 0.1743).

Planning Resources Question Number 10

Is information available to you concerning graduate satisfaction with various vocational programs?

For the 277 superintendents responding to the question, 45.1 percent (N = 125) indicated that graduate satisfaction information was available to them. Of that percentage, 91.2 percent (N = 114) indicated that they used it and considered its mean value to be 3.5 (s.d. = 1.47). Reasons given for the 8.8 percent (N = 11) of superintendents who indicated they did not use graduate satisfaction information when it was available were: 9.1 percent, unreliable; 18.2 percent, insufficient quantity; 9.1 percent, unusable form; and 63.6 percent, other.

For the 54.9 percent (N = 152) who indicated that graduate satisfaction information was not available to them, 95.3 percent (N = 141) indicated that they would use it if it were made available. The mean perceived value given it was 3.2 (s.d. = 1.47). Perceived reasons for non-use were: 33.3 percent, too costly; 16.7 percent, unreliable; 16.7 percent, insufficient quantity; 16.7 percent, unusable form; and 16.7 percent, other.

Correlation of the data by school size and experience level of superintendents indicated:

- that no definitive relationship exists between the availability of graduate satisfaction information and either school size or experience level of superintendents.
- that a definite relationship of relatively high magnitude exists between the use and non-use of graduate satisfaction information and school size. The direction of the relationship in ascending order of use is: large, small, medium ($\alpha \geq .005$, C = 0.2736).

- that a definite relationship exists between the use and non-use of available graduate satisfaction information and experience level of superintendents ($\alpha \leq .025$, C = 0.2225). The direction of the relationship in ascending order of use is: medium, low, and high levels of experience.
- that no definitive relationship exists between the perceived use and non-use of graduate satisfaction information and school size.
- that a definite relationship exists between the perceived use and non-use of graduate satisfaction information and experience level of superintendents ($\alpha \leq .10$, C = 0.1743).

Planning Resources Question Number 11

Do you have financial resources necessary to support the planning process?

For the 274 superintendents responding to this question, only 43.4 percent (N = 119) indicated that financial resources were available to them. Of that percentage, 91.5 percent (N = 108) indicated that they used them and felt that their value was a mean of 3.0 (s.d. = 1.44). The following reasons were given for the 8.5 percent (N = 10) who indicated that they did not use financial resources when they were available: 10 percent, too costly; 20 percent, insufficient quantity; 10 percent, unusable form; and 60 percent, other.

For the 56.6 percent (N = 155) who indicated that financial resources were not available to them, 86 percent (N = 129) indicated that they would use them if they were made available. An extremely high mean rating of 2.3 (s.d. = 1.41) was given for its perceived value. Reasons for non-use include: 63.1 percent, too costly; 5.3 percent,

unreliable; 10.5 percent, insufficient quantity, 5.3 percent, unusable form; and 15.8 percent, other.

Correlation of the data indicated:

- that a definite (relatively high) positive relationship exists between the availability of financial resources and both school size and experience level of superintendents. (School size $\alpha \leq .0025$, C = 0.1979; Experience level $\alpha \leq .001$, C = 0.2069).
- that no definitive relationship exists between the use and non-use of financial resources and school size.
- that a relatively low positive relationship exists between the use and non-use of financial resources and experience level of superintendents ($\alpha \leq .10$, C = 0.1521).
- that a low positive relationship exists between the perceived use and non-use of financial resources and school size ($\alpha \leq .10$, C = 0.1479).
- that a relatively high magnitude relationship exists between the perceived use and non-use of financial resources and experience level of superintendents ($\alpha \leq .005$, C = 0.2413). The direction of the relationship in ascending order of use is: medium, low, high levels of experience.

Planning Resources Question Number 12

Is information available to you concerning employment opportunities in your area for various vocational skills?

For the 276 superintendents responding to this question, 65.6 percent (N = 181) indicated that employment opportunities information was available to them. Of that percentage, 94.3 percent (N = 167) indicated that they used it and that it had a mean value of 3.0 (s.d. = 1.31).

Reasons for non-use of available employment opportunities information were: 9.1 percent, unreliable; 36.4 percent, insufficient quantity; 9.1 percent, unusable form; and 45.4 percent, other.

For the 34.4 percent (N = 95) who indicated that employment opportunity information was not available to them, 96.7 percent (N = 90) said that they would use it if it were made available. The mean value rating given it was a relatively high 2.6 (s.d. = 1.50). The only reason stated for non-use was unusable form.

Correlation of the data by school size and experience level of superintendents indicated:

- that a definite positive relationship exists between the availability of employment opportunity information and both school size and experience level of superintendents (School size $\alpha \geq .005$, C = 0.1889; Experience level $\alpha \geq .0025$, C = 0.1970).
- that no definitive relationship exists between the use and non-use of available employment opportunity information and either school size or experience level of superintendents.
- that a definite positive relationship exists between the perceived use and non-use of employment opportunity information and school size ($\alpha \geq .10$, C = 0.1479). This relationship is true, however, only when large and medium size schools are combined.
- that no definitive relationship exists between the perceived use and non-use of employment opportunity information and experience level of superintendents.

Planning Resources Question Number 13

Is information available to you concerning student interest in vocational programs?

For the 274 superintendents responding, 74.4 percent (N = 204) indicated that student interest information was available to them. Of that figure, 99.5 percent (N = 203) indicated that they used it and assigned it a relatively high mean value of 2.9 (s.d. = 1.39). The only reason given for non-use was other.

For the 70 superintendents who said that student interest information was not available to them, 98.5 (N = 68) indicated that they would use it if it were made available. An extremely high mean perceived value (on a relative basis) of 2.5 (s.d. = 1.51) was assigned to it. No reason was given for the single respondent who indicated that he would not use student interest information if it were made available.

Correlation of the data by school size and experience level of superintendents indicated:

- that no definitive relationship exists between the availability of student interest information and school size.
- that a definite relationship exists (although of low magnitude) between the availability of student interest information and experience level of superintendents ($\alpha \geq .10$, C = 0.1207).
- that no definitive relationship exists between the use and non-use of available student interest information and either school size or experience level of superintendents.
- that no definitive relationship exists between the perceived use and non-use of student interest information and either school size or experience level of superintendents.

Planning Resources Question Number 14

Do you have planning expertise available to you within your staff?

Of the 277 responses to this question, 52.3 percent (N = 145) indicated that planning expertise on staff was available to them. Of that figure, 97.2 (N = 139) said that they used it and assigned it a relatively high mean value rating of 2.9 (s.d. = 1.53). The 2.8 percent (N = 4) who indicated non-use, gave the following reasons: 25 percent, too costly; 25 percent, unusable form; and 50 percent, other.

For the 47.6 percent (N = 132) who indicated that planning expertise on staff was not available, 92.8 percent (N = 117) said that they would use it if it were made available. The mean perceived value rating given was 3.0 (s.d. = 1.55). The following perceived reasons were given for non-use (7.1 percent responding): 42.8 percent, too costly, 28.6 percent, insufficient quantity; and 28.6 percent, other.

Correlation of the data by school size and experience level of superintendents indicated:

- that a definite and relatively high positive relationship exists between the availability of planning expertise on staff and school size ($\alpha \geq .001$, C = 0.2336).
- that no definitive relationship exists between the availability of planning expertise on staff and experience level of superintendents.
- that no definitive relationship exists between the use and non-use of planning expertise on staff and either school size or experience level of superintendents.

- that no definitive relationship exists between the perceived use and non-use of planning expertise on staff and either school size or experience level of superintendents.

Planning Resources Question Number 15

Data assimilation equipment used in planning may range from simple calculators to sophisticated computers.

Is data assimilation equipment available to you for planning purposes?

Of the 277 responses to this question, only 27.1 percent (N = 75) indicated that data assimilation equipment was available. Of that percentage, 84 percent (N = 63) indicated that they used it and considered its value to be a mean of 3.4 (s.d. = 1.53). The remaining 16 percent (N = 12) listed the following reasons for non-use: 27.3 percent, insufficient quantity; 27.3 percent, unusable form; and 45.4 percent, other.

For the 72.9 percent (N = 202) who indicated that data assimilation equipment was not available, 76.4 percent (N = 146) said that they would use it if it were made available. The mean perceived value given was 3.3 (s.d. = 1.50). A relatively large number 23.6 percent (N = 45) indicated that they would not use data assimilation equipment and gave the following reasons: 66 percent, too costly; 2.4 percent, unreliable; 14.3 percent, insufficient quantity; 2.4 percent, unusable form; and 14.3 percent, other.

Correlation of the data by school size and experience level of superintendents revealed:

- that a definite and relatively high positive relationship exists between the availability of data assimilation equipment and school size ($\alpha \geq .001$, C = 0.2587).

- that no definitive relationship exists between the availability of data assimilation equipment and experience level of superintendents.
- that no definitive relationship exists between the use and non-use of available data assimilation equipment and either school size or experience level of superintendents.
- that no definitive relationship exists between the perceived use and non-use of data assimilation equipment and school size.
- that a definite relationship exists between the perceived use and non-use of data assimilation equipment and experience level of superintendents ($\alpha \geq .025$, C = 0.1905). Direction of the relationship in order of ascending use is: medium, low, high levels of experience.

Summary

The purpose of this study was to determine the availability, use, value, and reasons for non-use of planning resources at the local level and to determine if a relationship exists between these factors and both school size and experience level of superintendents.

Specific objectives of the study were:

1. To identify the resources available to local administrators in planning for vocational programs;
2. To determine the use and non-use of available planning resources;
3. To determine the value of available planning resources when used;

4. To determine the reason for non-use of available planning resources;
5. To determine the perceived use and non-use of planning resources if made available;
6. To determine the perceived value of non-available planning resources if they were made available;
7. To determine the perceived reason for non-use if the planning resources were made available;
8. To determine the relationship between the above variables and school size; and
9. To determine the relationship between the above variables (1-7) and experience level of administrators.

In an attempt to satisfy these objectives, data were collected and analyzed through the use of a planning resources questionnaire. The questionnaire consisted of background information concerning school size, experience level, and level of planning expertise as well as fifteen specific planning resources questions. Each planning resource question was composed of seven variables arranged in a forced choice systematic model designed to gather the required information. The chi-square test and contingency coefficient were used to relate the background information (school size and experience level of superintendent) to the responses for each of the planning resource questions.

Conclusions resulting from the analysis of data are presented in the following section.

Conclusions

Conclusions drawn from the study are as follows:

1. All planning resources identified in the study were seen as being more available than less available except for employer satisfaction information, graduate satisfaction information, financial resources, and data assimilation equipment. The availability of planning resources generally increases with increased school size, but not with increased experience level of superintendents.
2. Nearly all superintendents used all of the planning resources that are available to them in planning for vocational programs. Use of available planning resources generally increases with increased school size and with increased experience levels of superintendents.
3. All planning resources identified in the study were considered by superintendents to have an above average value when used. Among the most valuable planning resources were: initial cost information, student interest information, and planning expertise on staff. Value ratings tended to increase with both increased school size and increased experience level of superintendents.
4. Reasons for non-use of available planning resources varied widely for each planning resource and no generalized conclusions could be drawn. However, on a total frequency basis, superintendents tended to favor their reasons as "too costly" and/or "other." Those choosing "other" generally stated

their reason for non-use simply as "no need for the planning resource."

5. Superintendents who do not have the planning resources available to them indicated an extremely high degree of use if they were made available. Perceived use tended to increase with both increased experience levels of superintendents and increased school size.

6. Superintendents generally perceived the value of the planning resources that are not available to them to be relatively high. All mean value ratings listed for all planning resources were above average. Perceived value ratings generally increased with increased school size but not with increased experience levels of superintendents. The only significant exception was for teacher availability information where a negative relationship was shown.

7. No definitive conclusions could be drawn as to the perceived reasons for non-use of planning resources if they were made available. This was due primarily to the extremely low number of superintendents responding to the question. Responses that were received were generally the same as those discussed in conclusion number four.

The general conclusion drawn from this study was that superintendents in Oklahoma either have available or would use if they were made available all of the planning resources listed in the study.

Recommendations

On the basis of data obtained for the study, certain general recommendations were developed and are presented as follows:

1. State Department of Vocational and Technical Education officials should provide additional leadership and assistance to local administrators in planning for vocational programs. These efforts should be concentrated on information gathering techniques, especially concerning graduate and employer satisfaction information. The additional leadership and assistance should be directed more toward the smaller schools and lesser experienced superintendents.
2. Additional study should be conducted to investigate other aspects of planning which may result in an improved planning effort.

Discussion

The following observations and suggestions are offered to the reader in the belief that they may be of assistance in attacking the problem of educational planning at the local level. They were developed throughout the conduct of the study but are not necessarily restricted to, or limited by, the data obtained from this study.

1. The state's educational administrator training institutions should offer, as a regular part of their curricula, course work in educational planning. This course work should include training in surveying techniques and information integration procedures, specifically designed to meet the needs of public school administrators.

2. The State Department of Vocational and Technical Education should consider moving from their primary role as director of vocational programs toward a more service-oriented function. This would allow for greater flexibility at the local level and assist in creating a greater partnership attitude in planning for vocational education. By so doing it is believed that local education units would be encouraged to assume greater responsibility in a comprehensive planning effort. As it now exists, local educational units are reluctant to conduct comprehensive planning because of their limited power to actually effect needed changes.
3. Educational planning, and particularly vocational educational planning, should be based on student need and more directly involve those whom the educational system is designed to assist. In this respect, the needs assessment program, in conjunction with educational accountability, instituted in Oklahoma in 1973, is seen as a step in the right direction. These efforts should, however, be continued and strengthened.

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APPENDIX A

March 22, 1976

Dear Superintendents:

As you know, educational planning has gained increasing emphasis in recent years due to increasing costs and public demand for greater efficiency. This is evidenced by such legislation as the 1968 vocational education amendments, which calls for increased vocational program planning at both the state and local levels.

It is our desire to keep vocational-technical programs as up-to-date as possible by remaining responsive to change and by making prudent plans for the future. It is recognized, however, that in order to conduct sound planning one must have the means with which to plan.

This study being conducted by Mr. Len Tontz is an effort to identify the planning resources that are available to you and to determine their value in planning for vocational programs. Hopefully, the information you provide will lead us toward more efficient vocational planning.

It would be appreciated if you would spend a few minutes responding to the enclosed questionnaire. If you have any questions related to the study, please contact Mr. Tontz at (405) 377-2000, x280. If you are interested in the results of this study, we would be happy to provide a final copy upon request.

Sincerely,

Francis Tuttle

Francis Tuttle, Director
Vocational and Technical Education

Enclosure

LT/XAZ-01/14

PLANNING RESOURCES QUESTIONNAIRE

This study is an endeavor to identify the availability of certain planning resources considered to be necessary to decision-makers for vocational education planning. Additionally, the study is designed to measure the use and value of those resources.

The questions provide an opportunity for you to examine the planning needs in your school district and to make those needs known to state level planners. The information gained from the questionnaire will provide a basis from which more efficient planning can take place on a state-wide basis.

Please return the completed questionnaire as soon as practicable in the self-addressed envelope provided. Your willingness to provide your judgment in this matter is sincerely appreciated.

DIRECTIONS

The initial background data section asks that you identify your current school size, years of experience as a superintendent, and perceived level of planning expertise by circling the appropriate response.

Questions 1 through 15 lists various planning resources and ask that you determine:

1) If they are available to you
2) If you did or would use them
3) Their value in planning if used, or
4) Your reason for non-use

Responses are made by following the correct arrows and checking the appropriate responses. Columns 1 and 3 concerning the value of resources are on a continuous scale and require only one response. Columns 2 and 4 concerning the reasons for non-use require that you check as many responses as are applicable. A qualification sentence is provided immediately above questions 1, 6, and 15 to assist in understanding the question.

NOTE: Pilot testing of this questionnaire revealed that the average time for completion was 12 minutes.

Background Data

1) Size of School (K-12) - (Circle one)

Small	Med.	Large
500 or less 2	500 to 2000	2000 or greater

2) Your total years experience as a superintendent.

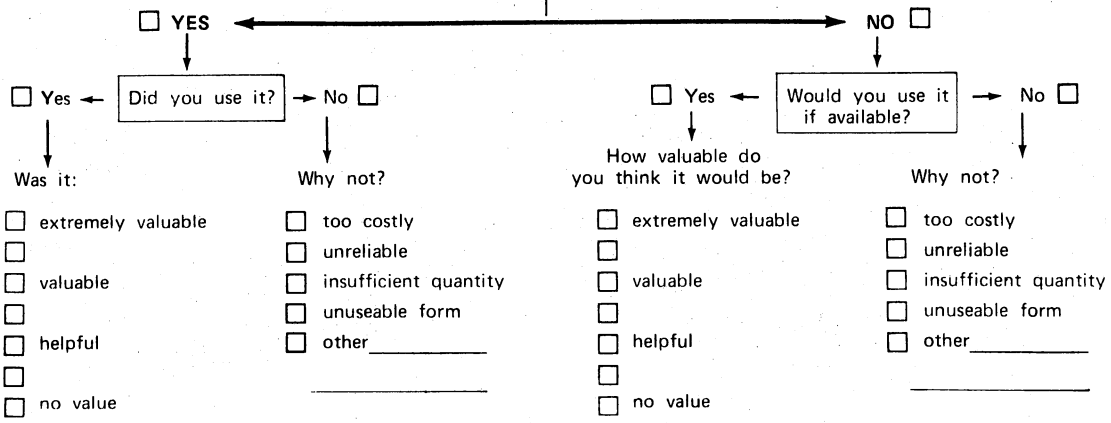
5 yr. or less	5 yr. to 15 yr.	15 yr. or greater

3) How would you rate your level of planning expertise on the following scale (Circle one)

Poor 1 2 3 4 5 6 7 Excellent

Technical assistance for planning is often available from sources outside of the local school systems; such as, state department officials, universities, private consultants, etc.

1. Is external technical assistance available to you in planning for vocational programs?



2. Is time available to you in planning for the addition or deletion of vocational programs?

☐ YES → Did you use it?

- ☐ Yes → Was it:
  - ☐ extremely valuable
  - ☐
  - ☐ valuable
  - ☐
  - ☐ helpful
  - ☐
  - ☐ no value
- No ☐ → Why not?
  - ☐ too costly
  - ☐ unreliable
  - ☐ insufficient quantity
  - ☐ unuseable form
  - ☐ other____________ ____________

NO ☐ → Would you use it if available?

- ☐ Yes → How valuable do you think it would be?
  - ☐ extremely valuable
  - ☐
  - ☐ valuable
  - ☐
  - ☐ helpful
  - ☐
  - ☐ no value
- No ☐ → Why not?
  - ☐ too costly
  - ☐ unreliable
  - ☐ insufficient quantity
  - ☐ unuseable form
  - ☐ other____________ ____________

3. Are staff personnel available within your school to assist in the planning process?

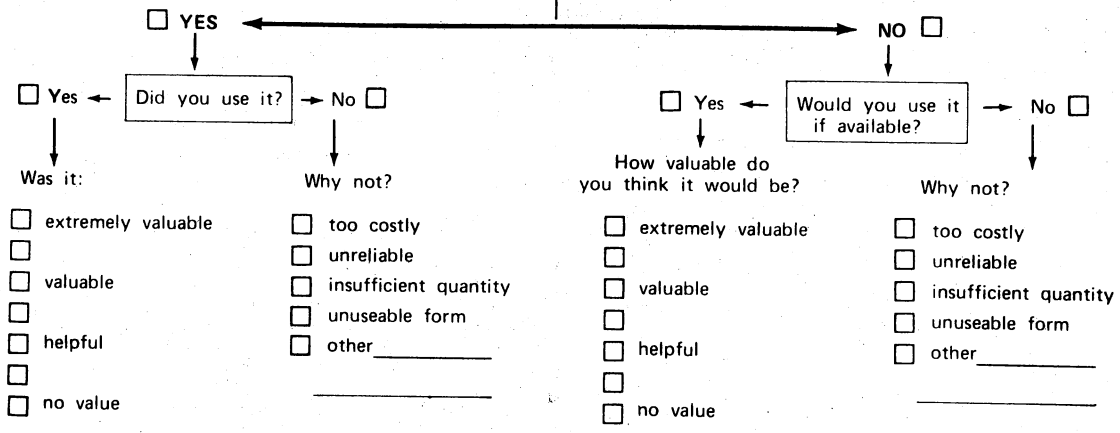
☐ YES → Did you use it?

- ☐ Yes → Was it:
  - ☐ extremely valuable
  - ☐
  - ☐ valuable
  - ☐
  - ☐ helpful
  - ☐
  - ☐ no value
- No ☐ → Why not?
  - ☐ too costly
  - ☐ unreliable
  - ☐ insufficient quantity
  - ☐ unuseable form
  - ☐ other____________ ____________

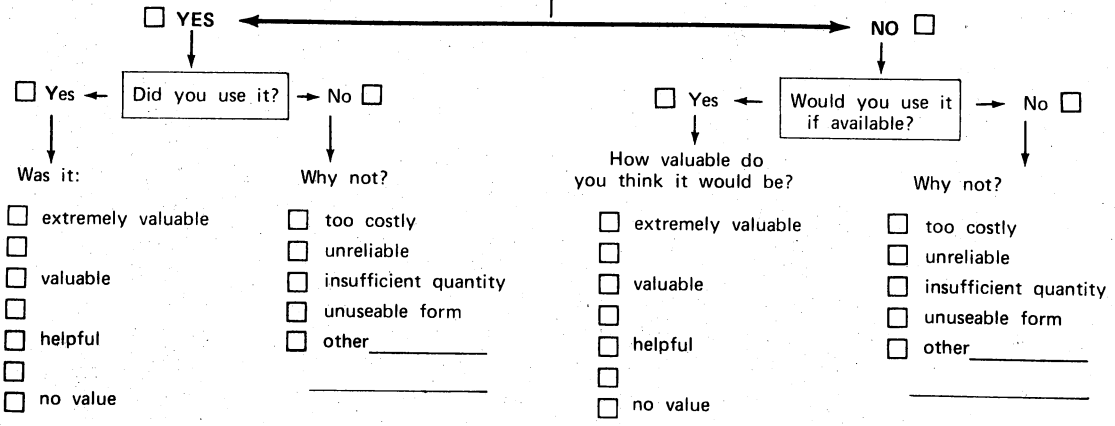
NO ☐ → Would you use it if available?

- ☐ Yes → How valuable do you think it would be?
  - ☐ extremely valuable
  - ☐
  - ☐ valuable
  - ☐
  - ☐ helpful
  - ☐
  - ☐ no value
- No ☐ → Why not?
  - ☐ too costly
  - ☐ unreliable
  - ☐ insufficient quantity
  - ☐ unuseable form
  - ☐ other____________ ____________

4. Is information available to you concerning the initial cost of various vocational programs?



5. Is information available to you concerning the maintenance cost of various vocational programs?



Requirements for adding various vocational programs to the curriculum may include a variety of things; such as, certain equipment, facilities, business work stations, etc.

6. Is information available to you concerning the requirements for adding various vocational programs?

☐ YES

☐ Yes ← Did you use it? → No ☐

Was it:

- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

NO ☐

☐ Yes ← Would you use it if available? → No ☐

How valuable do you think it would be?

- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

7. Is information available to you concerning employer satisfaction with graduates who have completed training in various vocational programs?

☐ YES

☐ Yes ← Did you use it? → No ☐

Was it:

- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

NO ☐

☐ Yes ← Would you use it if available? → No ☐

How valuable do you think it would be?

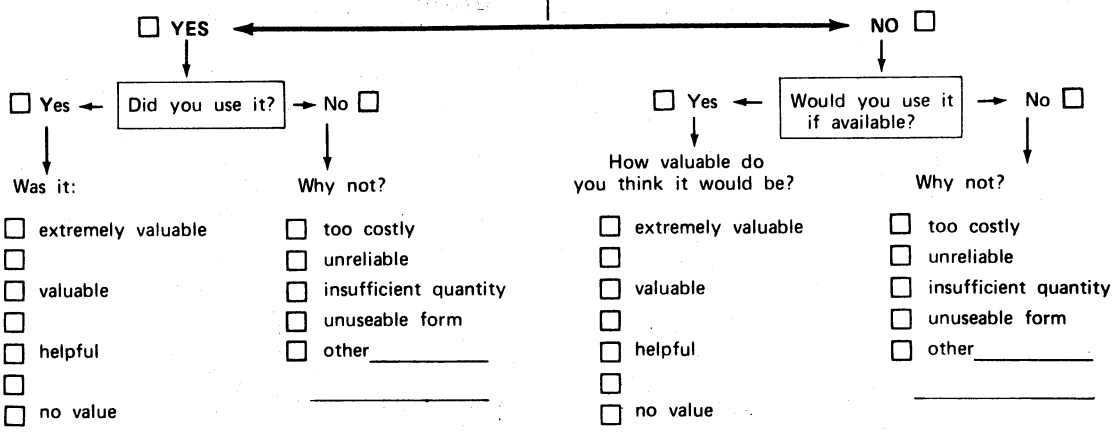
- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

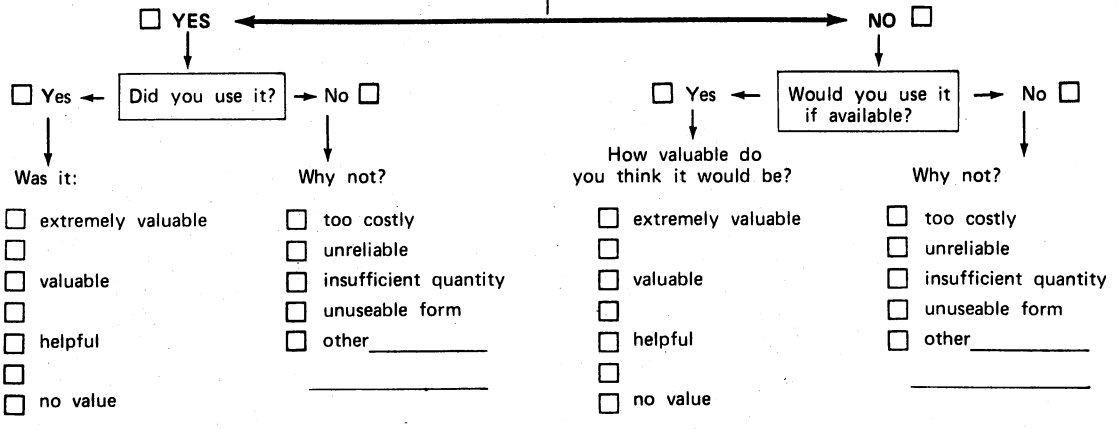
- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

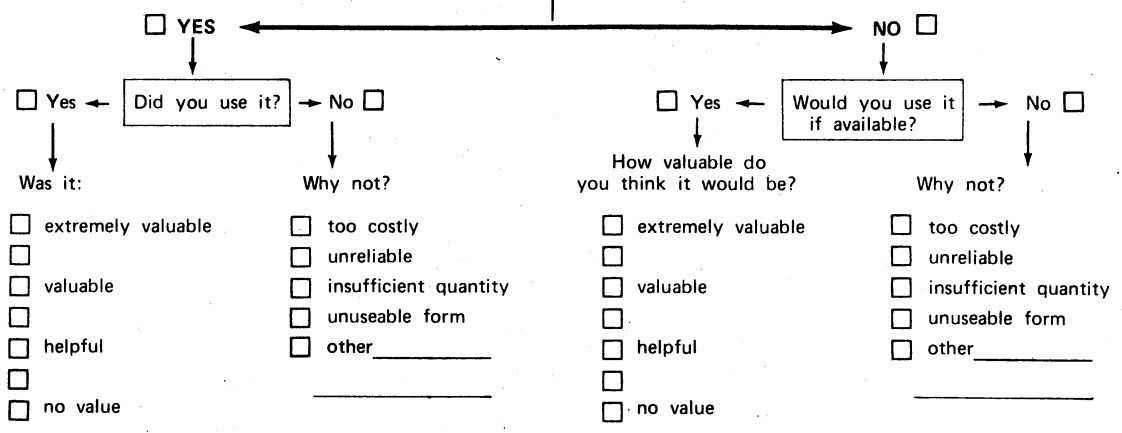
8. Is information available to you concerning the availability of teachers for various vocational programs?



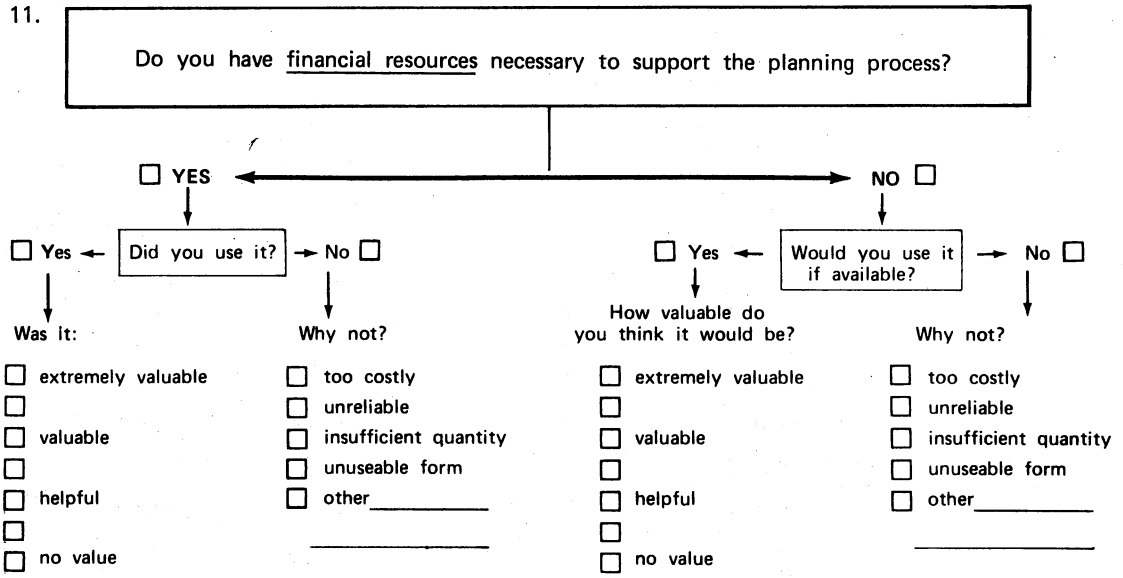
9. Do you have the proper staff organization to enhance the planning effort?



10. Is information available to you concerning graduate satisfaction with various vocational programs?



11. Do you have financial resources necessary to support the planning process?



12. Is information available to you concerning employment opportunities in your area for various vocational skills?

☐ YES

☐ Yes ← Did you use it? → No ☐

Was it:

- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

NO ☐

☐ Yes ← Would you use it if available? → No ☐

How valuable do you think it would be?

- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

13. Is information available to you concerning student interest in vocational programs?

☐ YES

☐ Yes ← Did you use it? → No ☐

Was it:

- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

_____

NO ☐

☐ Yes ← Would you use it if available? → No ☐

How valuable do you think it would be?

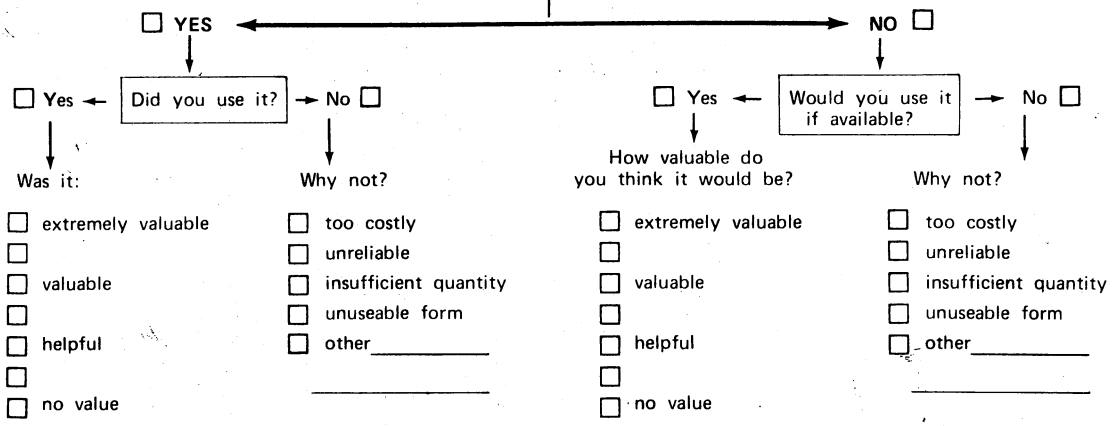
- ☐ extremely valuable
- ☐
- ☐ valuable
- ☐
- ☐ helpful
- ☐
- ☐ no value

Why not?

- ☐ too costly
- ☐ unreliable
- ☐ insufficient quantity
- ☐ unuseable form
- ☐ other_____

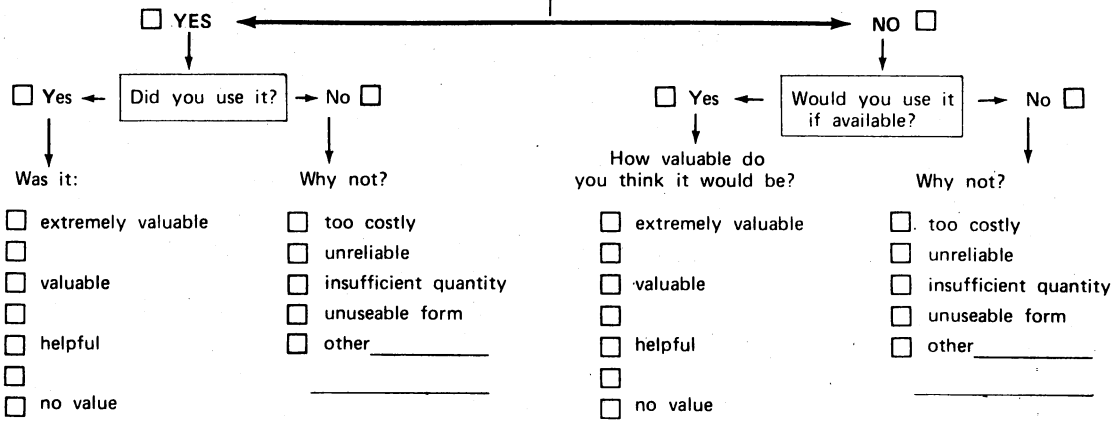
_____

14. Do you have planning expertise available to you within your staff?

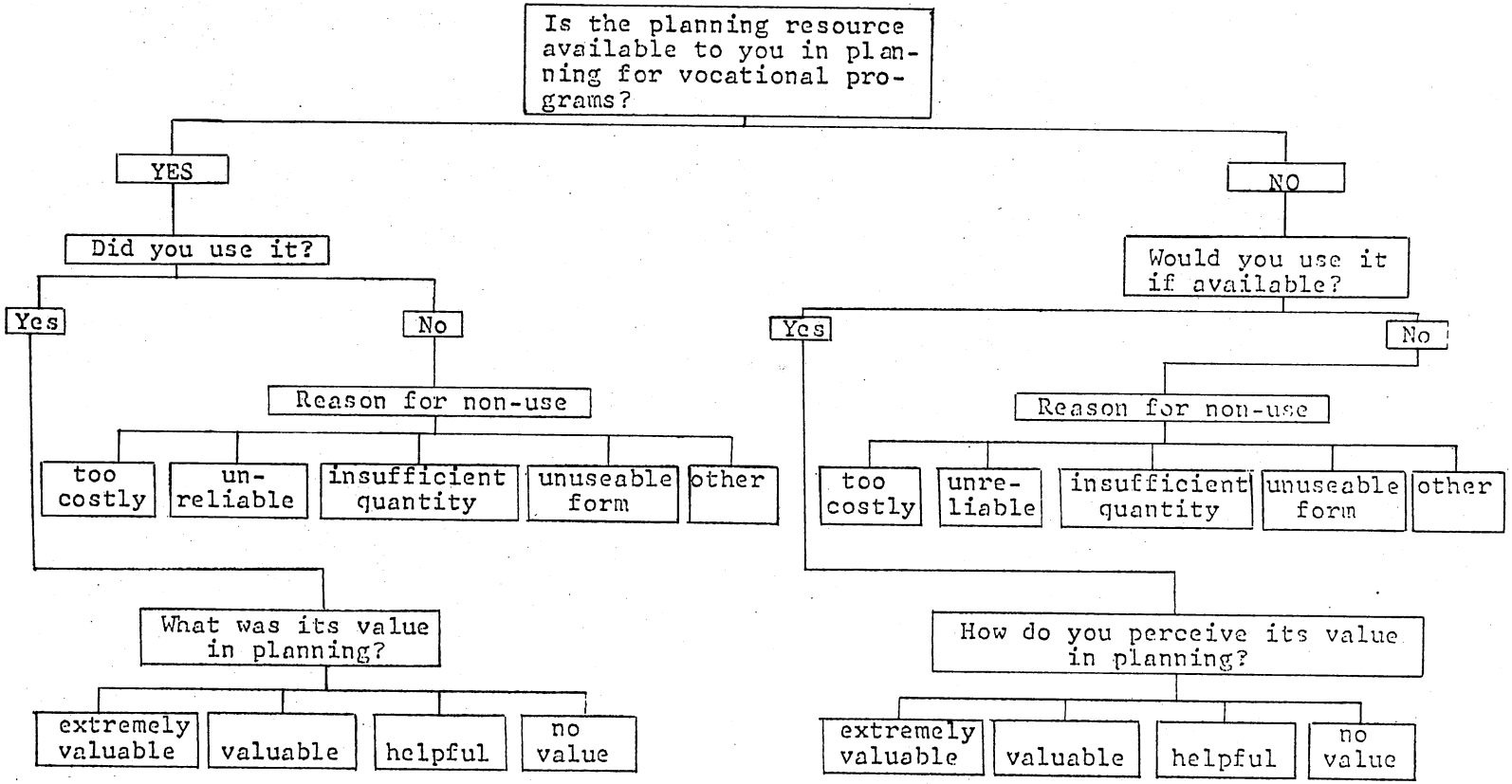


Data assimilation equipment used in planning may range from simple calculators to sophisticated computers.

15. Is data assimilation equipment available to you for planning purposes?



CONCEPTUAL MODEL



VITA

Len Elmer Tontz

Candidate for the Degree of

Doctor of Education

Thesis: A SURVEY OF PLANNING RESOURCES AVAILABLE TO LOCAL ADMINISTRATORS IN PLANNING FOR VOCATIONAL EDUCATION PROGRAMS

Major Field: Educational Administration

Biographical:

Personal Data: Born in Logan County, Oklahoma, November 5, 1943, the son of Leonard and Edna Tontz.

Education: Graduated from Crescent High School, Crescent, Oklahoma, in May, 1961; received the Bachelor of Science degree in Biological Sciences from Central State University, Edmond, Oklahoma, in June, 1965; received the Master of Science degree in Science Education from Oklahoma State University, in August, 1973; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1976.

Professional Experience: Officer in the United States Marine Corps, 1965 to 1968, attaining the rank of Captain; Laboratory Analysis, Kerr-McGee Corporation, 1968 to 1969; Secondary Science Teacher, Guthrie Public Schools, Guthrie, Oklahoma, 1970 to 1974; Administrative Intern and Research Assistant, Oklahoma State Department of Vocational and Technical Education, Stillwater, Oklahoma, January, 1975 to present.

Professional Organizations: Phi Delta Kappa; Oklahoma Education Association; Logan County Education Association; Marine Corps Reserve Officers Association.