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ABSTRACT

The purpose of the research project was to develop a comprehensive evaluation model that could be used to revise and improve adult education programs. The Jefferson County School System was selected for testing the model, and the problem was to determine how adequately the system provided quality adult education programs to meet the needs of the citizens of that community. The model developed contained a contextual (community needs) component and a program evaluation component. Research activities were organized into three phases. Phase one was a literature review to develop evaluation criteria and phase two consisted of an evaluation of programs by randomly selected samples of adult education teachers and currently enrolled students via mailed questionnaires. Additional data collection methods employed in phase three were: a general community survey, an employer survey, a secondary data analysis of community needs by review of census and employment data, and an educational census of all educational opportunities available to adults from other local education agencies. Based on an analysis of survey findings, recommendations were made for curriculum development, future research, and expanding the operating components of the model to include cost benefit and product evaluations. Appended are a bibliography, the survey instruments and cover letters, and results of the secondary data analysis. (RG)

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ED126302

FINAL REPORT

Project Number: V28810-06

Kentucky Resources Development Unit

A Model for the Evaluation and Revision of Adult  
Vocational and Non-Vocational Programs

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U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

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DEDICATION

This research is dedicated to Steven and Robyn who gave up a lot of their time with Dad so that he could finish this work.

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My special thanks is also given to my family for their patience and support during the course of the research.

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## CHAPTER I: THE MODEL

### Introduction

With the advent of the concept of life-long education for personal improvement and satisfaction, new emphasis is being placed on the development and revision of adult education programs. However, these research and development activities have been held back because of a paucity of suitable evaluation models.

Norton (1970) recognized that evaluation of programs was an important prerequisite for improving them:

Before existing programs can be improved, and before access to programs of high quality can be insured, adequate systems and techniques of evaluation must be developed and implemented. The use of quick and often highly subjective devices for appraising the quantity, quality, and cost-effectiveness of programs will not suffice. Educators are gradually recognizing the importance and complexity of the evaluation process, but have not yet taken the necessary steps to fully develop and operationalize effective evaluation programs (p. 1).

Ray (1973) after an extensive review of the evaluation literature found that the methods employed varied dramatically:

The methods of evaluation differ widely, they include general checklists, questionnaires, interviews, follow-up analyses, and standardized test results. (p. 21).

Norton and Ray express views that are important for an understanding of the current controversies concerning program evaluation. As Norton points out most educators seem to recognize the need for adequate systems

and techniques of evaluation; but as Ray said, "the methods used vary widely."

This author's review of the literature also revealed a lack of standardized instruments and procedures suitable for use in the evaluation of adult education programs. In addition, the review also confirmed the need for a better methodological approach, which would incorporate input from a variety of sources, and effectively utilize the existing knowledge in the field. With this in mind, this project was begun in an effort to develop and test a comprehensive model for the evaluation and revision of adult education programs.

### Rationale for the Model

#### Process Component

A review of the literature revealed that the methods and procedures used to evaluate educational programs differed widely, but the methodology employed in most cases was process evaluation. In this approach organizational structures, educational processes, equipment and facilities are judged against preset standards. This type of evaluation has been used for accreditation and many other purposes, including the allocation of resources (Starr, 1970).

This method usually involves a comprehensive self-evaluation, and an on-site visit by a team of professionals. Members of the team are usually drawn from the ranks of state department personnel, teacher-educators, and educational administrators.

Despite the prevalence of this approach, the literature also contained many sources who proposed only a self-evaluation, because they

felt it was easier and more economical to conduct (Byram, 1965; Starr, 1970; Ray, 1973; Wallace, 1973). Furthermore, it was found that many authors believed on-site visits to be complicated in nature, and time-consuming. They also require considerable human and financial resources and are believed by some to be basically inconclusive (Starr, 1970; Byram, 1965).

Critics of the self-administered process evaluation, conducted without a subsequent on-site visit, believe that the results of such a study would be biased and that only an on-site visit would validate the self-study and suggest further improvements (AVA, 1971). Despite such objections, this author believed that savings in time and money were strong arguments for the use of a self-evaluation, particularly when it is recognized that effective evaluation must be continuous and on-going. Additionally, several success examples of the use of this approach had been reported in the literature (Ray, 1973, 1974; Wallace, 1973).

All of the above factors were considered, and it was decided that this project would utilize a self-administered process evaluation, without an on-site visit by a team of professionals. The approach used was similar to the one proposed by Ray (1973), and featured the following components:

1. A student evaluation--information obtained from current students. This form assessed perceptions dealing with the quality of the educational process, the interests and needs of the student, motives for enrolling, suggestions concerning educational priorities, and basic demographic data.
2. A teacher evaluation--this form solicited information similar to the student evaluation, however, it was

broader in scope. It obtained additional information on the administration of adult programs, adequacy of budgets, and other information of a professional nature.

### Needs Component

The review of the literature also raised some doubts as to the ability of process evaluations to give adult education administrators all the information needed for proper program revisions. It was believed that these leaders needed more data on the effectiveness of their programs in meeting the needs of their constituents. Nava (1969) recognized the importance of analyzing needs, and called for a thorough and continuing study of the community. Neylan and Verner (1966) also pointed out that:

A comprehensive curriculum evaluation and revision model will increase support for and participation in adult programs, because the curriculum will be related to real life problems, interests, and needs (p. 59)

This author felt that if information on community needs was to be useful it had to be collected on a systematic and continuous basis for the express purpose of improving and modifying programs. This viewpoint was based on the belief that adult education, perhaps more than any other type, must be flexible and responsive. Therefore, its curriculum must be amenable to revision, and relevant to present and future students. In order to insure flexibility and responsiveness, it was felt that information from a variety of sources was needed. But the review of the literature indicated that only the Context-Input-Process-Product (CIPP) model proposed by Stufflebeam (1974) focused on the needs of the community (contextual dimension). This lack of attention reinforced the necessity of a need component in the current model.

The evaluation of community needs was viewed as a complex and difficult problem. A review of the literature revealed that the most commonly used method of collecting this information was the questionnaire survey, but the development of a suitable form was found to be a formidable task. Foremost among these measurement problems was the diversity of the clientele. Many adults were known to have weaknesses in the basic educational skills, while others had four or more years of college. These differing abilities prohibited the use of a questionnaire as the sole source of information. It was felt that differences in verbal ability made it probable that only the more articulate would respond to a survey questionnaire.

The widely differing content of adult education classes was also viewed as a problem. Some courses were known to be taught for the enjoyment of the student, while others attempted to improve and/or upgrade basic educational and vocational skills. These widely differing purposes compounded the measurement problem, and limited the usefulness of a questionnaire. It was felt that certain kinds of information relating to basic educational and vocational needs could best be obtained from specialized secondary sources, while data on personal interest and improvement courses could best be obtained from the general public. These beliefs led to the construction of separate forms for use in collecting data from secondary and primary sources.

Furthermore, a relevance problem was feared. The writer's past research indicated that the wishes and desires of actual and potential students differed greatly from their abilities, aptitudes, and motives. It was felt that the stated preference of a respondent for a particular

class would not insure that he could, or would, enroll and complete it successfully. This discrepancy between expressed and actual behavior cast a shadow over the relevance of the information which would be obtained in a single questionnaire study. In order to reduce the chance of acting on irrelevant information, inputs were solicited from a number of sources within the community.

The measurement problems were evaluated, and the following information was collected:

1. A general community survey--a questionnaire sent to a representative sample of citizens to determine their perceptions of their own individual interests and needs, their priorities for offering classes to meet these interests and needs, suggestions for new courses, and basic demographic data.
2. An employer survey--a questionnaire sent to a representative sample of local employers to determine their perceptions of the educational and vocational training needs of their organization; their priorities for offering classes to meet these needs, and basic organizational data.
3. A secondary data analysis of community needs--a formal review of census and employment data was undertaken. Information on the educational level, age, occupation, unemployment rates, and local occupational employment projections were selected as the minimum inputs.
4. An evaluation of the educational opportunities available to adults from other local education agencies.

### Conclusions

It was assumed that adult programs could be improved by determining the perceived educational needs of the community, and by evaluating the effectiveness of the programs established to meet these needs. While it was recognized that this approach was not truly comprehensive, it was believed that it would facilitate the development of a relevant

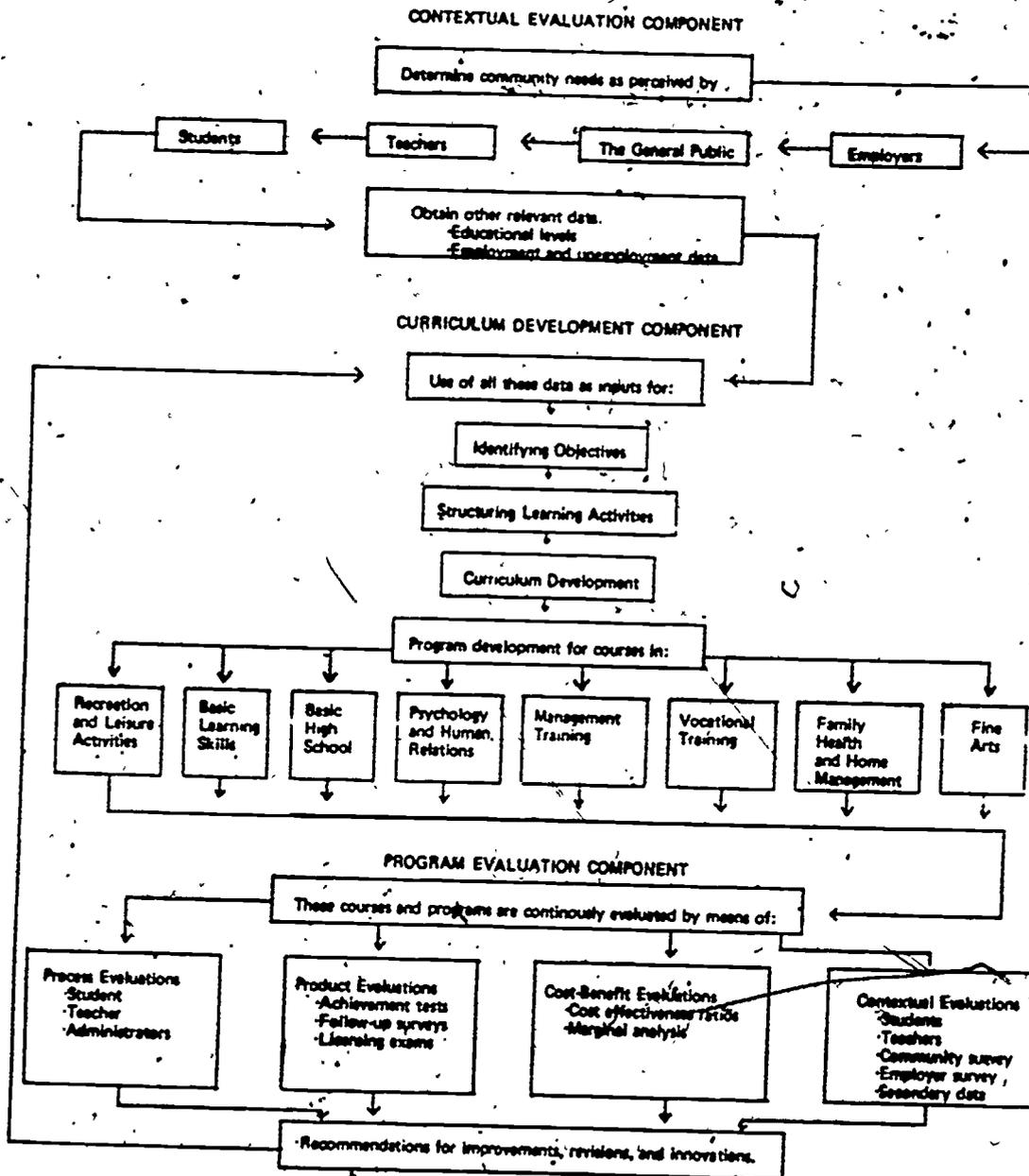
curriculum, insure the maintenance of that curriculum in adult programs, and serve as the basis for a more comprehensive analysis in the future.

The development of this project was influenced by the program planning model proposed by Durston (1969). His method consisted of the following steps:

1. Determine the needs, interests, and problems of the adults in the community (contextual evaluation);
2. Identify educational objectives;
3. Structure the learning activities;
4. Establish an evaluation procedure. (Writer's note: preferably with process, product, and cost-benefit components.)

This project emphasized the first and fourth elements of the Durston Model. Procedures and instruments were developed for the assessment of community needs, and for the self-evaluation of the process elements of adult programs (see Figure 1). Unfortunately, time and funding constraints prevented the logical extension of the research into curriculum development (items 2 and 3 of the Durston model), and the development of cost-benefit and product evaluation techniques to supplement the process and contextual evaluation components (see review of literature).

**A MODEL FOR THE EVALUATION AND REVISION  
OF ADULT EDUCATION PROGRAMS**  
(figure 1)



## CHAPTER II: THE PROBLEM AND THE PROCEDURE

### Background

A review of the literature had indicated:

1. The need for the evaluation of adult programs along several dimensions.
2. A variety of methods and instruments were currently in use.
3. A need for an evaluation model which would permit evaluation and revision of adult programs based on community needs.
4. That no model had been reported, which featured both process and need components.

Since evaluation was one of the top priorities in Kentucky, the proposed model was brought to the attention of the State Department of Education, and funding was arranged through the Bureau of Vocational Education.

The largest adult education program in Kentucky was conducted by the Jefferson County School System. This system was chosen as the site for the testing of the model.

The Jefferson County System was independent of the Louisville City System at the time this research was conducted, and the latter also conducted adult education programs. The University of Louisville, the University of Kentucky Community College System, and various private colleges also offered courses in adult and continuing education.

The county system was faced with the prospect of merger with the city system, and a corresponding increase in their responsibility for

the delivery of adult education services. Because of its current and future commitments, officials of the Jefferson County System were especially interested in the project. William Aiken, director of vocational education, and Curtis Whitman, director of continuing education were especially helpful during the entire project.

Testing of the model took place during the spring and summer of 1974.

#### Statement of the Problem

The problem was defined as follows:

"How adequately does the adult education program in the Jefferson County School System supply quality adult education programs to meet the needs of the citizens of that community?"

#### Purposes and Objectives

This research was descriptive in nature. As such it was difficult to make statements about expected outcomes. Instead, the purposes of the project were specifically delineated by the following information objectives, or questions to be answered by the research:

1. What should be the criteria for evaluating adult education programs?
2. How should adult program areas be defined and classified?
3. What were the adult education opportunities available to the adults of Jefferson County?
4. What were the areas where adult programs provided duplication of services? If duplication existed, was it warranted?

5. What was the present status of the existing adult education programs in Jefferson County? How adequate were these programs?
6. How did past-participants in the Jefferson County program feel about the effectiveness of these courses? Are recommendations for improvement to be made based on these evaluations?
7. What was the current educational level of the adults in Jefferson County (by census tract)?
8. What were perceived educational needs of the citizens of Jefferson County?
9. What were the professional and occupational aspirations of the citizens of Jefferson County?
10. What were the educational requirements of the business and industry organizations of Jefferson County?
11. Based on the demand for classes and the adequacy of existing programs what recommendations can be made concerning: course revisions? deletions? additions?
12. What recommendations can be made to standardize terminology and clearly identify adult program areas?
13. How do adult education program preferences differ among teachers, students, employers, and the general public?
14. How do vocational training preferences differ among students, employers and the general public?
15. Is there a significant difference between the evaluation of teachers and students when rating adult education programs in Jefferson County?
16. What is the relationship between selected students demographic variables and the vocational preferences, adult program preferences, program evaluation, teacher and class evaluations, and the adult motivation index?

#### Definitions

For purposes of this study the following definitions were adopted:

1. Adequacy - As a factor for evaluation was considered a positive response to the following questions:
  - (a) Do

we have enough programs of a sufficient quality to satisfy the educational needs of our adults? (b) Are these programs conducted by instructors and administrators who can provide relevant and meaningful instruction? (c) Is the curriculum broad enough to include all areas of interest to the community? (d) Do we have enough facilities, equipment, and supplies of a proper quality available for adult programs? (e) Do the methods of instruction take into consideration the characteristics of adult learners? (f) Do the present and prospective adult learners receive the guidance and counseling they need to be successful?

2. Quality--A quality adult education program is one that will enroll an interested, qualified student, regardless of his mental or physical capabilities, in a program of study designed to meet his personal needs and/or desires. Quality programs will always strive to offer a curriculum that will meet the needs of the community.
3. Adult Programs (adopted from DeCrow & Loagne, 1967)--(a) Adult basic education, (b) Literacy and secondary education, (c) Psychology and human relations, (d) Continuing education in vocational-technical and professional areas, (e) Management and supervisory training, (f) Family health and home management, i.e., occupational training of adults for home, family, consumer and parental roles, (g) Recreation and/or leisure time activities, i.e., arts, crafts, and recreation, (h) The fine arts (music, creative writing, drama).
4. Community--For purposes of this study, the community included both Jefferson County and the City of Louisville. In addition, the term also referred to several publics within this geographical area: (a) Students--participants in adult education programs during the fall and spring of 1974, (b) General public--potential students residing in the community, (c) Business organizations and public institutions which were both suppliers of students and employers of graduates, (d) Teachers in adult education programs during 1974.
5. Adult Education--Instruction offered day or evening to adults or out-of-school youth, over 16 years of age, who are not seeking a two- or four-year degree at a college, university, junior college, technical school, or other institutions of this type.
6. Evaluation--The process of obtaining, and providing useful information for judging decision alternatives to individuals charged with the responsibility for improving the quality of education (Stufflebeam, 1974, p. 267, and Norton, 1970, p. 138).

7. Accreditation--A method of periodic educational evaluation, which assumes that if certain standards are met, quality education is the outcome (Brown, p. 3). Based on the information collected, decisions are made on the ability of the educational agency to supply quality educational services.
8. Program Evaluation--The continuous process of collecting valid and reliable data for the purposes of comparing program outcomes with program objectives. The process is conducted to provide useful information for making sound educational decisions. Educational decisions refer to making a choice among alternatives for action in response to educational needs and limited resources (Norton, 1970, p. 1). The most commonly used form of program evaluation is the process evaluation, but other types include product, cost-benefit, and contextual evaluations.
9. Process Evaluation--The procedure by which organizational structures, educational processes, equipment, and facilities are judged against preset standards. This evaluation methodology (normally) includes a self-evaluation, plus an extensive local school visitation by state level personnel to secure evaluation data about programs, equipment and facilities (Starr, 1970, pp. 4-5).
10. Self-evaluation; or Self-administered Checklist Evaluation--A comprehensive procedure by which the staff of a local education agency, or school, examines their programs by means of a rating scale type of checklist furnished by a higher authority. The checklist gathers data on the quality aspects of the program, as perceived by local staff.
11. On-site Visiting Team--A panel of experienced educators who visit and evaluate a local adult program. The group could have members drawn from one, or more, of the following types of professionals: state staff, teacher-educators, advisory council members, business and industry volunteers, and knowledgeable citizens.
12. Contextual Evaluations--Research that will aid planning decisions by identifying unmet needs, unused opportunities, unsolved problems, which affect various segments of the population. The results are used as the basis for curriculum and program development.
13. Product Evaluations--Research that assesses the quality of the performance of the graduates of adult programs.

14. Cost-benefit Evaluations--A marginal form of economic analysis in which the benefits to the community are compared with the dollars spent for adult education (costs). In theory, as long as the dollar value of the benefits exceeds the expenditure, society should assume those costs.

### Research Design and Field Work

#### A Conceptual Framework

This study was organized into three phases.

1. Phase One--Based on a review of the literature, evaluative criteria, i.e., standards for the process evaluation, were developed. These evaluation components were (see Table 1):

- (a) Instructional materials
- (b) Non-instructional services
- (c) Curriculum
- (d) Facilities
- (e) School Reorganization

Using existing courses, and DeCrow and Loagne's (1967) taxonomy, the following standardized categories of program areas were developed:

- (a) Adult basic education
- (b) Literacy and secondary education
- (c) Psychology and human relations
- (d) Vocational/technical training
- (e) Management and supervisory training
- (f) Family health and home management
- (g) Recreation and leisure time activities
- (h) The fine arts

TABLE 1

A Conceptual Model of the Research Design  
(Phase 1)

Area of Study	Population/Sample	Data Requirements	Data Collection
A. Evaluative Criteria	N/A	<ol style="list-style-type: none"> <li>1. Behavioral Objectives.</li> <li>2. Standards</li> </ol>	<ol style="list-style-type: none"> <li>1. Literature review</li> <li>2. Panel of experts</li> </ol>
B. Taxonomy of Program Areas	N/A	<ol style="list-style-type: none"> <li>1. Existing class offerings</li> </ol>	<ol style="list-style-type: none"> <li>1. Literature review</li> <li>2. Panel of experts</li> </ol>

2. Phase Two--In this phase, comprehensive self-evaluations were conducted by mail. The primary purpose of this research was to determine the status of adult education in Jefferson County. It was conducted in three primary areas (see Table 2):

(a) A Self-study--A random sample of 100 adult education teachers from various schools and programs were asked to complete a self-rating process evaluation form. It was based on the components identified in Phase One. The respondents were also asked to give a contextual evaluation of the relative importance of the various adult program areas. (See Appendix A) About 70% of the teachers participated in the evaluation.

(b) Student Evaluation--Three hundred adult students were randomly selected from the rosters of the fall and spring classes of the 1973-74 school year. They were contacted by mail and asked to participate. Information was obtained on their perceptions of the quality of adult education programs, classes, and teachers. Additional information was obtained on the students' interests, needs, and priorities concerning adult education. Students were also asked to volunteer information concerning their motives for enrolling in an adult program. About 53% of the sample returned the forms. A copy of this evaluation instrument is included as Appendix B.

TABLE 2

A CONCEPTUAL MODEL OF THE RESEARCH DESIGN

(PHASE TWO AND THREE)

Area of Study	Population/Sample	Data Requirements	Data Collection
<p>A. Self-Study Process Evaluation</p>	<ol style="list-style-type: none"> <li>1. A random sample of teachers in all 12 adult learning centers in Jefferson Co.</li> <li>2. Approximately 100 teachers were contacted</li> </ol>	<ol style="list-style-type: none"> <li>1. Evaluation in terms of established standards</li> <li>2. Ranking of priorities for adult education</li> <li>3. Perceived importance of adult program areas</li> </ol>	<ol style="list-style-type: none"> <li>1. Two stage mail survey</li> <li>2. Obtained a 70% return</li> </ol>
<p>B. Evaluation by students</p>	<ol style="list-style-type: none"> <li>1. All students enrolled in the fall and spring of the 1973-74 school year</li> <li>2. A random sample of 300 students in the various programs</li> </ol>	<ol style="list-style-type: none"> <li>1. Evaluation of the quality of adult programs</li> <li>2. Interests &amp; needs of the students</li> <li>3. Motives for enrollment</li> <li>4. Ranking of priorities for adult education</li> <li>5. Basic demographic data</li> </ol>	<ol style="list-style-type: none"> <li>1. Two stage mail survey</li> <li>2. Obtained a 53% return</li> </ol>

3. Phase Three--Contextual evaluations were conducted by mail with four target groups: teachers and students (see Appendices A and B), the general community (see Appendix D), and employers (see Appendix E). Certain elements of the forms were the same for all groups and this made it possible to compare the perceptions of several research populations (see Table 3).

- (a) The teacher and student evaluations have already been discussed in an earlier section; the contextual elements were merely separate sections of the same forms.
- (b) General Community Survey--Three hundred families were randomly selected from the Greater Louisville Street Directory. About 48% of the respondents returned the forms. They were asked to identify vocational training priorities, rank the eight adult program areas according to their importance, and make suggestions for new courses.
- (c) Employers Survey--Three hundred employers were selected from the Dunn and Bradstreet commercial listings, which included all types of business (retail, service, manufacturing, etc.). Only 20% returned the forms.
- (d) Secondary Data Search--In addition to the surveys a comprehensive review of the published data in the community was summarized by means of Appendix F. This information included data on educational levels, unemployment, employment, and other pertinent community data.

TABLE 3  
A CONCEPTUAL MODEL OF THE RESEARCH DESIGN  
(PHASE TWO AND THREE)

Area of Study	Population/Sample	Data Requirements	Data Collection
<p>A. Educational Census</p>	<p>1. A census of all institutions, open to the public, who are involved in programs of adult education (see definition)</p>	<p>1. A listing of courses taught</p> <p>2. Classify each course into an adult program area</p>	<p>1. Personal and telephone interview</p>
<p>B. Secondary Data Collection</p>	<p>1. Educational levels, age, unemployment rates and occupations of adults in Jefferson County</p>	<p>1. Census data on educational levels, age, unemployment rates, and occupations of adults in Jefferson Co.</p>	<p>1. U.S. Bureau of Census 2. U.S. Dept. of Labor 3. Ky. State Employment Office</p>
<p>C. Employers Survey</p>	<p>1. All businesses listed in the Dunn &amp; Bradstreet listings</p> <p>2. A random sample of 300 was selected</p>	<p>1. Rankings of adult education program areas</p> <p>2. Vocational training preferences</p>	<p>1. Two stage mail survey 2. Received a 20% return</p>
<p>D. General Community Survey</p>	<p>1. All adults 16 years or older who are not candidates for an academic degree (see definition)</p> <p>2. A sample of approximately 300 selected from the Louisville Directory</p>	<p>1. Personal data (age, educational level, employment status, occupation)</p> <p>2. Future aspirations</p> <p>3. Interest areas &amp; needs</p> <p>4. Ranking of adult education program areas according to perceived importance</p> <p>5. Curriculum recommendations</p>	<p>1. Two stage mail survey 2. Received a 48% return</p>

## Instrumentation

### Teacher and Student Self-Evaluation Forms

These sections of the forms consisted of a series of ratings based on these five essential components of an educational program:

1. Instructional materials
2. Non-instructional services
3. Curriculum
4. Facilities
5. School re-organization

Each of these forms were designed to be simple and easy to use. It was intended that they be brief enough for practical use.

During the development of the instruments it was assumed that self-evaluations were influenced by the attitudes and opinions of the rater. This led to the conclusion that the instrument should be developed in a way consistent with most other attitude measuring devices. The technique employed was similar to the one proposed by Likert (1932). The scoring and interpretation of these forms is given in Tables 4 and 5.

Likert advocated the use of questions worded both positively and negatively with respect to the phenomena being rated. Respondents were asked to complete such a questionnaire. Favorable questions were scored as follows:

Strongly agree = 4

Agree = 3

Disagree = 2

Strongly disagree = 1

This type of scoring allows people having the most favorable attitudes to obtain the highest total score. A summary of the scoring and interpretation of these forms is presented in Tables 4 and 5.

The reliability of the forms was determined by means of a split-halves test, which was adjusted by means of the Spearman-Brown "Prophecy Formula" (Spearman, 1910). The coefficients of reliability were .73 for the teachers' instrument and .80 for the students' form.

#### A Student, Teacher and Class Evaluation Form

This section also featured a four point Likert scale, much like the one described in the above paragraphs. Scoring and interpretation of this section is summarized in Table 6. The adjusted split-halves reliability coefficient was .94.

#### Adult Education Program Preferences

This section was used in all of the forms. It consisted of a simple ranking of the importance of each of the eight adult program areas. The respondents' answers were assigned a numerical value, which would emphasize programs that were considered not important. Thus, the nearer a response is to four, the maximum weight, the lower the perceived importance of that program area to the rater.

#### Student Motivation Index

This section of the form was designed to determine what factors influenced people to enroll in adult classes. The adjusted split-halves reliability of this section was .94.

#### Concluding Remarks

The other parts of the forms are self explanatory, and were included to supplement and expand the primary sections. They included

such things as respondent demographics, vocational preferences,  
and suggestions for new adult classes.

TABLE 4

Adult Education Teacher Evaluation Scoring Sheet

<u>Question No.</u>	<u>Component</u>	<u>Scoring</u>
1	Instructional Material	1-4
2	"	4-1
3	Non-instructional Services	4-1
4	"	4-1
5	Curriculum	4-1
6	"	1-4
7	"	4-1
8	"	1-4
9	"	4-1
10	"	4-1
11	Facilities	1-4
12	"	1-4
13	"	1-4
14	"	1-4
15	"	1-4
16	"	1-4
17	School Reorganization	4-1
18	"	1-4
19	Instructional Materials	1-4
20	"	4-1
21	Curriculum	1-4
22	Facilities	4-1
23	School Reorganization	1-4
24	"	4-1
25	"	4-1
26	"	1-4
27	"	1-4
28	"	4-1
29	"	1-4

TABLE 5

ADULT EDUCATION STUDENT PROGRAM EVALUATION SCORING SHEET\*

<u>Question Number</u>	<u>Component</u>	<u>Scoring</u>
1.	Instructional Material	1 - 4
2.	" "	4 - 1
3.	Non-instructional Services	4 - 1
4.	" "	4 - 1
5.	Curriculum	4 - 1
6.	"	1 - 4
7.	"	4 - 1
8.	"	1 - 4
9.	"	4 - 1
10.	"	4 - 1
11.	Facilities	1 - 4
12.	"	1 - 4
13.	"	1 - 4
14.	"	1 - 4
15.	"	1 - 4
16.	"	1 - 4
17.	School Reorganization	4 - 1
18.	" "	1 - 4

\*These questions are the same as the first 18 on the form used by teachers.

TABLE 6

ADULT EDUCATION TEACHER AND CLASS SCORING SHEET

<u>Question Number</u>	<u>Component</u>	<u>Scoring</u>
1.	Class	1 - 4
2.	Teacher	4 - 1
3.	Teacher	1 - 4
4.	"	4 - 1
5.	"	1 - 4
6.	"	4 - 1
7.	"	1 - 4
8.	"	4 - 1
9.	"	1 - 4
10.	"	1 - 4
11.	Class	4 - 1
12.	"	1 - 4
13.	"	4 - 1
14.	"	1 - 4
15.	"	4 - 1
16.	"	1 - 4

## CHAPTER III: A REVIEW OF THE EVALUATION LITERATURE

### Introduction

This review is divided into the two major sections listed below, and for the convenience of the reader a summary of each is presented.

#### Evaluative Criteria

Evaluation is not possible without preset standards, or norms. Criteria are based on goals and objectives. One frequently mentioned goal is quality.

#### Types and Methods of Evaluation

There are a number of types in current useage, but the most commonly used is the process evaluation. This type of research is a necessary part of a total evaluation program, but other important elements are: product evaluations, cost-benefit evaluations, and community needs evaluations (contextual). Each of these can properly be classified as different forms of program evaluation.

Process evaluations are useful for stimulating action to improve programs, and to maintain minimum standards. But, they are not very useful for measuring the amount and effectiveness of the material learned (product evaluation). Nor, can they help to justify the costs of educating students. Furthermore, they usually do not provide the information necessary to determine if the community's needs are being met.

Process evaluations analyze the total educational system in terms of pre-selected quality standards. The normal procedure involves a self-study, which is followed by an on-site visit by a committee of experts. However, many authors believe that a self-evaluation is sufficient. These writers feel that self-ratings are particularly useful for on-going types of evaluations designed to improve programs, and that on-site visits are "costly and time consuming."

Very few process evaluations include an analysis of community needs, their prime concern being the quality of existing programs, but several authors have advocated a contextual (needs) dimension for program evaluations.

Students, teachers, advisory committees, administrators and the general public were all found to figure prominently in both contextual and process evaluations.

### Conclusions

The review of the literature revealed that the proposed model was consistent with the prevailing thought in the field. It also demonstrated that there were at least four separate dimensions to program evaluation:

1. Process Evaluations--self-ratings, with, or without, an on-site visit.
2. Product Evaluations--test scores, job success, emotional stability and personal satisfaction measurements.
3. Cost-Benefit Evaluations--marginal analyses of the benefits obtained from each additional dollar spent.
4. Contextual Evaluations--perceived needs in the community (surveys of advisory committees, the general public, students, teachers, and employers).

The search also indicated that there appears to be a scarcity of empirical data in the literature dealing with postsecondary program evaluations. What little data that is available treats the process evaluation of two-year community colleges, and only Baker (1973) mentions adult programs in his postsecondary evaluation model. Obviously, there is a need for further research in the area of adult program evaluation.

### Evaluative Criteria

Evaluative criteria have been defined as "measures against which something is judged (rules, standards, norms, objectives, or conditions)" (Steele and Moss, 1970). It has been generally conceded that evaluation is not possible without these criteria. In fact, Croft Educational Services, an evaluation consulting business, in a recent brochure, stated:

The term criteria has long been equated with precise measurements in the field of evaluation. One formulates goals, analyzes them into performance objectives, and then establishes levels of performance or standards, which are called criteria. . . . Criteria are the bases on which choices are made (p. 4).

The key concept in establishing evaluative criteria is the establishment of goals and objectives. One goal that seems to be mentioned more than any other is quality (AVA, 1971; Ray, 1973).

The approach proposed by Ray and the AVA calls for the development of a list of characteristics of quality programs, and quality outcomes. Educational programs are then evaluated in light of these characteristics.

Squires (1969) proposed that an evaluation should examine the quality characteristics of these program components:

1. Instructional staff
2. Curriculum
3. Supervision and administration
4. Facilities
5. ~~Equipment~~ and supplies
6. Methods of instruction
7. Guidance and counseling
8. Instructor training
9. Program development

Researchers at the University of Kentucky developed self-evaluation forms for parents and teachers, and they identified the following quality criteria:

1. Instructional materials needs
2. Non-instructional services
3. School reorganization
4. Curriculum
5. Physical facilities
6. Community involvement

Stutz studied seven two-year postsecondary institutions in New York to determine the conditions under which programs succeed. He based his criteria on these elements:

1. Administrative and fiscal support
2. Curriculum
3. Staffing patterns

4. Counseling
5. Instruction and placement
6. Regional relations
7. Attitudes toward the program

Blai (1970) conducted self-evaluations in two-year postsecondary vocational, academic and adult programs. He examined:

1. Admissions procedures
2. Counseling
3. Student personnel services
4. Placement
5. Program planning and evaluation

#### Summary

In each of these studies, organizational factors, curriculum, facilities, non-instructional services, and instructional materials were identified most frequently as evaluative criteria components.

#### Program Evaluation: Types, Methods, and Procedures

##### Rationale for Program Evaluation

Harris (1967) has identified the purposes of state agency program evaluation:

1. To stimulate action (within local educational agencies) about evaluation.
2. To maintain an atmosphere conducive to the improvement of instruction throughout the schools of the commonwealth.
3. Provide a means of promoting improvement in the operation of school programs.
4. Focus attention upon the pupils, their needs, the offerings and instructional programs, and teaching effectiveness (p. 3).

A similar view is advanced by Barraclough (1973), who stated that program evaluation enables administrators:

. . . to determine the merits of existing programs, and the need for new ones. It can lead to additions, revisions, deletions, or the inception of new programs (p. 1).

However, Brown (1970) cautions:

Evaluation of the total program is . . . satisfactory for external (summative) administrative evaluation, where the administrator only needs to decide whether or not he should keep on funding this, or similar programs (p. 1).

McCracken (1972) reminded us that program evaluation should be continuous and ongoing if it is to be of value. Fincher (1973), after an extensive examination of the current approaches to program evaluation in postsecondary education, agreed. He felt that program evaluation was a management imperative, and its purposes were "to measure the effects of a program against the goals it sets out to accomplish" (p. 10).

The same author also established guidelines for future evaluations:

1. An increased emphasis on tests, and (other similar) measurements.
2. An increased attention to applied, practical, problem solving research, as opposed to theory based research.
3. A decreased emphasis on experimental research, but increased attention to action research (p. 11).

It appears that the rationale for program evaluation rests on the need for administrators to have objective information on the degree to which an educational program meets the needs of those it serves. It is also clear that any evaluation procedure that aids this goal, and there are several as we shall see in the next section, could properly be called program evaluation.

However, as Starr (1970) and Barraclough (1973) indicate, most program evaluations would be classified as process evaluations (a self-evaluation, which is followed by an on-site visit).

Furthermore, Starr (1970) and Moss (1968) also pointed out that the process evaluations conducted to date have been of questionable usefulness, because they were not quantifiable. Through the work of Starr, Moss, and Ray (1973, 1974) success has been made in developing a quantitative approach to process evaluation.

### Types of Evaluation

"Educational evaluation has grown up within the general field of educational research, and it is only recently that efforts have been made to distinguish between the two" (Eisner, 1972, p. 585). These efforts have been stimulated by legislative actions, such as the Vocational Education Acts of 1968 and 70.

However, as the National Association of Secondary School Principals (1972) indicates:

In the realm of public education, evaluation is in the most archaic state imaginable. Program, process, and personnel evaluations are nearly non-existent (pp. 17-19).

That association suggested a Planning-Programming-Budgeting System (PPBS), with data inputs for planning, operations, evaluation, and accountability built in. The primary goal of such a system would be program improvement by means of the following procedures:

1. Description of content (program skills).
2. Development of measurable program objectives.
3. Statement of performance criteria.

4. The use of achievement tests as a part of the evaluation process.
5. The gathering of cost data, and development of cost-benefit ratios (ibid., pp. 14-15).

Robertson (1969) also proposed a systems analysis approach.

Kaufman (1969) suggested a cost-effectiveness systems model that is very promising. Unfortunately, there are few of these systems models in current operation. Despite the difficulties of implementing a systems model, Brown (1969) suggested that most educational agencies could undertake the following types of program evaluation:

1. Accreditation visits.
2. Follow-up of graduates--the success of the program would be determined by the employment record of the graduates.
3. Standardized tests of cognitive and conative skills.
4. Licensing examination success rates for various occupations.
5. Unemployment rates, and discharge rates of graduates.

It should be noted that Brown's model features only one element of process evaluation--the accreditation visit; the other items refer to product evaluations.

Another author (Denton, 1973) also recognized that there are many forms of program evaluation, but he suggested a comprehensive approach which featured:

1. The use of demographic variables for students and teachers.
2. Achievement tests.
3. Criterion referenced tests.
4. Survey questionnaires.
5. Direct and unobtrusive observations
6. Follow-up studies.
7. Cost-effectiveness data:

Bruhns (1968) believed that the field of educational evaluation had two dimensions: qualitative, and quantitative. He also identified the following consensus evaluation devices:

1. Testing--either teacher made, or standardized.
2. Interviews with graduates before they leave school to develop data on their perceptions of the program.
3. Career follow-up of graduates to monitor their occupational success.
4. Achievement testing.
5. State and national licensing examinations.
6. Visits and/or reports made by an advisory council.
7. Systems approach (PPBS mentioned earlier is an example).
8. Accreditation visits.
9. Self-initiated evaluations.
10. Measures of personality change (pp. 1-17).

Bruhns maintained that there were at least three separate sets of evaluative criteria that could be employed in an evaluation. He identified them as:

1. Structural--an evaluation of the quality of the physical facilities, plant, and equipment used to carry out the program.
2. Process--an evaluation of the quality of the entire educational process, including facilities, faculty, content, method, etc.
3. Product--an evaluation of the quality of the performance of the graduates of a program (1968, pp. 1-17).

In contrast, Squires (1969) recognized only two key areas:

1. Accountability requirements--enrollment, student data, and follow-up.
2. Program evaluation

Moss (1971) indicated that the scope and methods employed in evaluations varied widely, and he felt that a more rational classification would be based on the reason for the procedure. He proposed three types:

1. Those required to obtain quantitative information for reports to bureaus, United States Office of Education, advisory councils, etc. In these evaluations the only data usually required is the number and type of students.
2. Those necessary to develop new curriculum and measure its success (sometimes called formative evaluations).
3. Those necessary to make decisions about the quality of the curriculum (sometimes called summative) (p. 3).

The preceding paragraphs should have demonstrated to the reader that the types of evaluation to be investigated in this report are only part of a total evaluation system. The other procedures identified by Brown and Bruhns are equally important, and each could supply valuable information for improving the quality of adult education programs.

However, Stevenson and Ward (1973) suggested that a total evaluation system may be too expensive to be practical. They based this view on a review of over 350 evaluation related reports, and they proposed these criteria for evaluating evaluation systems:

1. How accurately does the data collected by the system reflect the true situation?
2. What are the effects, or impact, of the information generated by the system on the local program?
3. Is the system too expensive?

Perhaps because of its simplicity, and ease of organizing, the process evaluation is used most often. As Starr (1970) has noted:

The evaluation methodology which has been used most by states . . . is process evaluation, in which organizational structures, educational processes, equipment, and facilities are judged against preset standards (p. 4).

Using Bruhns taxonomy of evaluation methods (structure, process, product) we find the most commonly used procedure is the process evaluation. On the other hand, the least used is the product assessment.

What seems to be needed is a comprehensive evaluation system, encompassing more of the dimensions of both product and process. One promising approach, is described by Stufflebeam (1974) as the CIRP Model. This model was composed of four types of evaluations:

1. Context evaluation--it serves planning decisions by identifying unmet needs, unused opportunities and underlying problems, which prevent the meeting of needs, or the use of opportunities.
2. Input evaluation--it serves to structure decisions by projecting and analyzing alternative procedures and designs.
3. Process evaluation--it serves the implementation of decisions by monitoring project operations.
4. Product evaluation--it serves decision making by determining the degree to which objectives have been achieved, and by determining the cause of the obtained results (p. 268).

Another comprehensive program evaluation system has been developed in Massachusetts. Spiess (1969) identified the major components as:

1. A process-product evaluation
2. A cost-benefit evaluation
3. An impact study of the effects of vocational-technical education on the community.

Voelkner (1971) advocates a somewhat different approach. His model is almost entirely devoted to an analysis of the educational product. His approach was described as follows:

1. The development of behavioral objectives, these objectives are oriented to the students' success and are specific and measurable.
2. Experimental studies, especially for the evaluation of new approaches to teaching the subject matter.
3. Follow-up studies, covering such factors as:
  - (a) The time elapsed between graduation, and the first job.
  - (b) Employment security, as measured by the amount and frequency of time out of work because of lay-offs or dismissals.
  - (c) The length of time spent on the first job after graduation.
  - (d) Earnings, and earnings progression.
  - (e) Rate of advancement on the job.
4. Explanatory data, which is used to explain the differing affects of the various programs on their students.

#### Process Evaluation--Method and Procedure

The American Vocational Association (1971) recommended that a complete evaluation consist of a self-evaluation spread over a one year period, followed by an on-site visit (p. 13). The sequence indicated was:

1. An in-depth self-evaluation (subjective).
2. An in-depth audit by a team of qualified people outside the institution.
3. A review by an independent third group, who examined both the self-evaluation, and the team report, and made recommendations.

Pennsylvania has developed a Peer Evaluation Program (PEP), which features an objective self-evaluation, followed by an on-site visit by fellow educators (peers) (Grotzky, 1973).

A Program Analysis Questionnaire is employed in Rhode Island. This form is completed by administrators and staff, an on-site evaluation team, and by representatives of industry (Rhode Island State Department of Education, undated). Their model complies with the one suggested by the American Vocational Association. The Rhode Island evaluation form is divided into the following sections:

1. Administration and Guidance--this section is completed by local school personnel, the evaluation team guidance specialist, and an area school coordinator from a different district.
2. Curriculum--this section is completed by local school personnel, the evaluation team academic and curriculum specialists, and industry representatives.
3. Physical Facilities--this section is completed by local school personnel, the evaluation team facilities specialist, and industry representatives.
4. Instruction--this section is completed by local school personnel, the evaluation team academic specialist, and a visiting area school coordinator.

Edsall (1973) suggested that process evaluations should follow a ten step procedure:

1. Contact by the state department of education.
2. Decide how much will be evaluated.
3. Select the evaluation team.
4. Decide what to evaluate.
5. Orient the evaluating team.
6. Provide materials for the evaluation team.

7. Collect and record the data.
8. Report the results.
9. Use the results.
10. Write a follow-up report to the evaluation team.

The state of Georgia has established an evaluation system that solicits information from teachers, employers, students, and parents (Annual Evaluation Report, 1971).

In California, the Community College Occupational Program Evaluation System (COPES) has been developed (California Community Colleges, 1973).

This system calls for the following sequence:-

1. A decision is made to request an evaluation by an individual community college.
2. Preliminary arrangements and scheduling are arranged.
3. Selection of the visiting team is made (5-7 members are recommended).
4. An orientation visit is made to the college to explain the purpose of the study, and to distribute instruments.
5. The instruments are completed by the local staff.
6. The data is processed by computer.
7. The evaluation team makes an on-site visit, it has as its purpose the validation of the self-evaluation (the visit lasts three days).
8. A written report is prepared.

The COPES system employs A College Self-Appraisal, which is developed and signed by the president; A Perceptions of Occupational Education form, which is completed by teachers, department heads, and divisional chairmen; and a slightly different variation of the Perceptions of Occupational Education form is completed by Deans, counselors, and administrators.

According to Norton (1970) the institution that initiates the evaluation is a key element in determining the procedures which will be followed. He identified four possibilities:

1. State directed evaluation of statewide programs.
2. State directed evaluation of local programs.
3. State assisted evaluation of local programs.
4. Locally directed evaluations of local programs.

Byram (1970) favored local evaluation, and believed they should be conducted by those closest to the program. However, he did concede that the people who operate the program may be too close to sense needed changes. He favored these three strategies:

1. State initiated and/or state led.
2. State led.
3. Independent local evaluation.

The American Vocational Association (1971) recommended the following criteria for selecting a visiting team:

1. Include an expert in each field in which programs are offered.
2. Include a school administrator.
3. If the team member is to observe instructors, obtain individuals who are practitioners in the field that they will be evaluating (p. 20).

The Rhode Island Program Analysis evaluations, calls for an onsite committee consisting of a:

1. Vocational guidance specialist.
2. Vocational curriculum specialist.
3. Vocational Facilities specialist.
4. One area school coordinator from a different district.
5. One academic education specialist. (p. 1).

The responsibility for completing the evaluation forms varies from model to model. However, the Rhode Island Program Analysis Questionnaire approach appears quite logical. It was mentioned earlier that the form had four parts: administration and guidance, curriculum, physical facilities, and instruction. The responsibilities of the local school personnel are as follows:

1. The principal, area coordinator, and guidance counselor fill out all parts of the program analysis form for the total program. Teachers rate their own programs, but they omit the section on administration.
2. The evaluation team responsibilities vary. The overall program of administration is rated by the team leader, the vocational guidance specialist, and the visiting area coordinator. Individual programs are rated by the curriculum specialist, facilities specialist, and the visiting area coordinator. The overall curriculum is rated by the team leader, the academic specialist, and the visiting area coordinator. The overall physical facilities are rated by the team leader, and the facilities specialist. The overall program of instruction is rated by the team leader, the visiting area coordinator, and the academic specialist.
3. The industry representatives evaluate the facilities and curriculum for each individual program. There are usually two specialists for each program.

Harris (1967) identified the duties of the on-site visiting staff as:

1. To review materials submitted.
2. To hold a preliminary conference with the personnel involved.
3. To visit the program, and observe, question, etc.
4. To prepare and submit a written report.

#### Self-Evaluation--Method and Procedure

Starr, (1970, p. 4) and Wallace (1973, p. 22), after extensive reviews of the literature, concluded that throughout the published sources it was generally agreed that on-site visits were "a costly

and time consuming process." Because of this limitation, the above writers proposed a process evaluation based on a quantifiable self-evaluation.

Bruhns (1968) also agreed with the above position:

The self-evaluation of the accrediting procedure, should not be discounted. Without this procedure educators are frequently kept so busy "minding the store" that they do not voluntarily take time to examine it in detail (p. 3).

Another author after reviewing the literature, cites research that indicated a continuous self-evaluation by educators is necessary for program improvement (Barracough, 1973, p. 2).

Reynolds (1967), in a work on evaluative criteria, made this statement: "The best evaluation is carried on by the local school district as self-evaluation" (p. 3).

The type of self-evaluation employed is a matter of preference, because a process type of evaluation is not the only method available. For example, Rosenfeld (1967) proposed a self-evaluation by the school staff of an area vocational school, which used quantitative data on students as the main source of data. Information was collected on: actual vs. potential enrollments, the number of admission applications, the drop-out rate, and scores on aptitude, interest, and achievement tests. This self-rating approach is product oriented, and has an intuitive appeal because of its simplicity.

However, most self-evaluations are of the process variety. The most popular approach involves the local staff and administrators in a joint effort. Byram (1971) advocated this approach, in fact he stated:

(So called) outside experts may not have a feel for the concerns of the school staff, and of the people of the community - plus their advice may not be heeded (p. 3).

However, Byram advocated the use of consultants to introduce the self-rating forms to the local evaluators, and explain about their completion. He also called for an objective rating scale, and it was suggested that local staff committees consisting of: department heads, coordinators of cooperative education, director of guidance, director of adult education, and the placement coordinator complete the evaluation. Byram also suggested that the participants should have released time from their regular jobs to conduct the evaluation. He also presented a strategy and methodology for the self-evaluation of local vocational education programs (Byram, 1969).

In an earlier work, Byram (1965) recommended a self-evaluation by local leaders in conjunction with state evaluations. He further advocated that area vocational schools be involved in self-directed evaluations. Byram recognized the lack of trained evaluators, and called for greater efforts in training local leaders in the skills of evaluation.

Ray (1974) cautioned that self-evaluation should not be limited to the mere collection of data:

The value of a self-evaluation does not lie in the mean performance score, but rather in the uses a school program makes of the results. Used with other data the self-evaluation checklist can serve as a valuable tool for program improvement (p. 31).

The American Vocational Association (1971a) has published an extensive set of guidelines covering process and product self-evaluations. Four primary evaluation areas were identified:

1. Manipulative skills acquired.
2. Technical knowledge acquired.
3. Related theory acquired.
4. Auxiliary information acquired.

Byram (1968) identified the elements necessary for the success of a self-evaluation by a local school:

1. Administrative endorsement and support.
2. A good local leadership team.
3. A strong program of pre-service and in-service training in evaluation procedures.
4. A good evaluation program plan.
5. The development of staff committees with clearly defined responsibilities.
6. On-the-job time, released from other duties, to work on the evaluation committees.

#### Process Evaluation at the Postsecondary Level

Baker (1973) reports on the successful use of a self-evaluation approach. His methods were based on efforts of over 500 administrators and teachers, who developed a manual for the self-appraisal of adult supplementary programs, and adult secondary and postsecondary occupational and non-occupational programs. This manual aids administrators in establishing objectives, identifying evidence of attainment, and making inferences from the evidence.

Stutz (1972) reported another instance of the use of a self-evaluation procedure in his study of two-year postsecondary institutions. His procedures included a thorough literature search, interviews, requests for written information, and the use of a student questionnaire.

The student evaluation was used to estimate the perceived quality, and the other data was used to make recommendations concerning administrative and program changes.

Blai (1970) also reported on the use of a self-appraisal technique in junior college academic, vocational, and adult education programs. He also presented 16 evaluation needs and techniques.

The California Community College System has also developed a procedure based in part on a self-appraisal by local staff and a follow-up visit by a visiting team.

### Student Evaluations

The Ohio State Department of Vocational Education developed an instrument (PRIDE, 1970) to evaluate attitudes towards existing secondary vocational programs. It was used in a state-wide study involving 40,000 students and parents.

Ray (1973b, 1974) also used students as a key component in his secondary program evaluation model.

Webb (1970) reported the development of an instrument to evaluate the needs and expectations of students in an academic up-grading program. His approach appears to have great promise for the evaluation of the attitudinal dimensions of adult students. Wong (1973) advocated a similar approach, but her instrument was developed for use with students in area vocational schools.

### Contextual Evaluations

The importance of surveying community needs is frequently overlooked as an information element in program evaluation. This assessment

of community needs is the contextual element of a comprehensive evaluation (Stufflebeam, 1974). One outstanding example of this approach was the PRIDE (1970) study, which was developed by the Ohio State Department of Vocational Education. This project examined community attitudes about existing educational programs, and it inquired into the adequacy of the:

1. Curriculum
2. Guidance and Counseling
3. Finances
4. Facilities and Equipment
5. Instructional Staff

Another study, reported by Dobbs (1965) surveyed the community to determine what they perceived as adult education needs. His study covered the following general areas:

1. Personal characteristics of the respondents
2. Aspirations
3. Problems
4. Interests and Needs

A somewhat unique approach was advocated by Welch (1971), who argued for the development of community profiles. These profiles would establish the values and priorities of various localities. The Bureau of School Services (1971) at the University of Kentucky also suggested the use of community priority profiles. In the latter case, these profiles served as input into a comprehensive educational planning and evaluation model.

Intuitively, business and industry would also appear to be fruitful sources of community information for program evaluation, and curriculum design. However, a review of the literature uncovered very few authors that proposed any sort of model for obtaining information from business and industry. One author, Shoemaker (1965), proposed two approaches:

1. Advisory Committee Survey--It assumes a large and representative community advisory committee. Unfortunately, this approach is not feasible in areas where no such committee exists.
2. Citizens Survey--This is a community survey of employers covering such things as: (a) number of employees by industry, (b) number of employees in training, (c) employment practices by industry, (d) new jobs open, (e) level of skills required, (f) attitudes towards education, (g) attitudes towards cooperative education, (h) rate of employee turnover.

The Food, Drink, and Tobacco Industry Training Board (1969) proposed a comprehensive self-evaluation form for businesses. It was designed to assess the training needs of an organization. This instrument provided an organization with a logical, step-by-step, guide for forecasting future manpower training needs. Its use necessitates an examination of a company's future plans and problems, followed by an estimate of the people involved in these plans and their training needs. The instrument provides an opportunity for evaluation by merely answering key questions in the following areas:

- (a) Long and Short Range Planning
- (b) Anticipated Sales
- (c) Recruitment and Labor Turnover
- (d) Delegation of Authority

- (d) Delegation of Authority
- (e) Performance
- (f) Organizational Structure
- (g) Costs and Finances
- (h) Methods and Plant
- (i) Stocks and Materials
- (j) Quality and Hygiene
- (k) Industrial Relations
- (l) The Law
- (m) Safety

This approach forces the evaluator to look at the people involved in each area and to attempt to forecast their training needs. But, it not only forces an organization to examine their training needs, they must also compare their abilities and preferences about in-house training, with the supply of suitable training outside of the organization. It is quite comprehensive and could have many applications for educators wishing to survey employers.

#### Curriculum for Adult Programs

The literature surveyed seemed to indicate that adult learners are not very different from younger students (Lasson, 1970). In his research, Lasson identified the following characteristics of the adult learner:

- (a) Intelligence continues relatively unchanged until age 65.
- (b) Reaction time slows, and hearing and eyesight decline with age.
- (c) Health problems can slow down learning.

- (d) Adults must unlearn some things, and this can be a problem.
- (e) If learning is based on past experiences, adults can learn faster than younger people.
- (f) Adults dislike competitive classroom situations, and discipline.
- (g) Adults work better in an atmosphere of cooperation, which is non-evaluatory, and non-competitive.
- (h) Many adults initially feel a lot of insecurity.
- (i) These feelings of insecurity must be reduced.

Awareness of the characteristics of the adult learner leads one to adopt this strategy for curriculum development proposed by Mager (1962).

#### PREPARATION-----DEVELOPMENT-----IMPLEMENTATION

During the preparation phase the total community is examined.

One author (Tyler, 1969) proposed the following sources of curriculum information:

- (a) The Learner
- (b) Subject Matter Specialists
- (c) Local Educators
- (d) The Community
- (e) Psychological Factors

When Curriculum is being developed comprehensive program planning is needed. At least four steps (Durstun, 1969) must be followed in this planning stage:

- (a) Determine the needs . . . interests, and problems of the adults in the community.
- (b) Identify educational objectives.
- (c) Structure the learning activities.
- (d) Establish an evaluation procedure.

## CHAPTER IV: PRESENTATION OF FINDINGS

### Introduction

The data will be presented in six sections - each of which will be preceded by a narrative summary of the important findings. The six sections are:

1. The general community survey,
2. the community survey of employers
3. The student survey
4. The teacher survey
5. A between groups comparison of the data common to other groups
6. A secondary data survey of the community.

## RESULTS OF THE GENERAL COMMUNITY SURVEY

### Demographic Profile:

The survey respondents were not truly representative of the general population. They were older, had a higher income, were better educated, and more than three out of every ten of them were employed in a managerial or professional occupation.

### Awareness of Adult Education:

Nine out of ten of the respondents had seen, heard, or read about adult education. Newspapers, radio and T-V, and adult school catalogs were the media mentioned most often. Surprisingly, "word-of-mouth" communications was mentioned by almost one-third of the sample.

Forty percent of the respondents had enrolled in at least one adult class in the past.

### Adult Program Preferences:

Vocational training, family health and home management, the basic high school subjects, and human relations training were the program areas of greatest importance to the respondents.

Marital status was negatively related to the program preferences for the basic high school and fine arts subjects. Due to the coding system employed this would indicate that more single than married respondents felt these subjects were important, and vice-versa.

There was a significant positive relationship between income and preference for vocational education. An analysis of the data revealed that as income increases the perceived importance of vocational education decreases.

The number of years of school completed, and a preference for the fine arts were also significantly related. It appeared that the higher the educational level of the person the higher the preference for the fine arts.

#### Program Preference and Source of Information Concerning Adult Education:

A negative relationship was found between hearing about adult education on radio or television and a preference for the basic high school subjects. It appeared that those who felt the basic skills were important tended to learn about adult education by means of radio and television. A positive relationship was found between finding out about adult education from the school catalog and a preference for Psychology and human relations training.

#### Vocational Training Preferences:

No significant relationships were discovered between marital status and any of the vocational career fields, thus it was concluded that these variables are independent of each other.

Significant negative correlations were found between educational level and a preference for electronics and practical nursing. An analysis of the data indicated that the lower the educational level of the individual, the more likely their preference for training in these two occupations.

It was found that a preference for computer programming was significantly correlated with age. The correlation was negative, which meant that the younger the person the more likely it was that they would express a preference for this type of vocational training. The age of the respondent was also found to be significantly related to a preference for

training in plumbing installation and repair. The relationship was positive, which indicated that the older the person the more likely they were to prefer training in plumbing installation and repair.

Preference for training in auto body repair, carpentry, and plumbing installation and repair were all strongly related to income level. This significant positive relationship was interpreted to mean that the higher the person's income the stronger the chance that they would prefer training in these three areas.

## DEMOGRAPHIC PROFILE

<u>Occupation of Respondents</u>	<u>Census Data Totals*</u>	<u>Community Survey</u>
Professional	13.38%	23.94%
Manager/Self-Employed	7.43%	11.27%
Sales Worker	7.81%	4.93%
Craftsman/Foreman	14.13%	11.97%
Vehicle Operator/Manufacturing and Assembly Worker	20.79%	2.11%
Service Worker	10.78%	3.52%
Laborer (Non-Farm)	4.83%	2.11%
Farmer/Farm Manager	.15%	.70%
Housewife	----	32.39%
Clerical	18.59%	2.11%
Unemployed/Retired	----	4.93%
	100%	100% (N=142)

### Family Income Distribution

	Percentage
Under \$4,000	3.42%
\$4,000 to \$5,999	.69%
\$6,000 to \$9,999	14.38%
\$10,000 to \$14,999	21.23%
\$15,000 and over	60.27%

Median Income = More than  
\$15,000

\*Census Data: Median Income = \$9,814

\*Source: 1970 Census of Population and Housing,  
U. S. Department of Commerce, May, 1972.

Age

Average Age of Respondents

40.42 yrs.

Standard Deviation

13.22 yrs.

Educational Level

Average Number of Years of School  
Completed by Respondents

13.04

Standard Deviation

2.42

\*Census Data: Median Number of Years of School Completed = 11.6

\*Source: 1970 Census of Population and Housing, U.S. Department of  
Commerce, May, 1972

HAVE YOU EVER ATTENDED AN ADULT EDUCATION CLASS?

	<u>Married</u>	<u>Single</u>	<u>Total</u>
Yes	40.16%	45.15%	40.71%
No	<u>59.84%</u>	<u>54.85%</u>	<u>59.29%</u>
	100.00%	100.00%	100.00%
	(N=127)	(N=13)	(N=140)

HAVE YOU EVER READ A BROCHURE, SEEN AN AD, OR HEARD ANYONE TALK ABOUT ADULT EDUCATION?

	<u>Married</u>	<u>Single</u>	<u>Total</u>
Yes	89.31%	92.31%	89.58%
No	<u>10.68%</u>	<u>7.69%</u>	<u>10.42%</u>
	100.00%	100.00%	100.00%
	(N=131)	(N=13)	(N=144)

WHERE DID YOU SEE, READ OR HEAR ABOUT ADULT EDUCATION?

	<u>Total</u>
Newspaper	72.60%
Radio T.V.	38.36%
School Catalog	32.19%
A friend of mine	30.82%
My Employer	15.06%
Employment Service	<u>1.37%</u>
	(N=146)

\*Percentage will exceed 100 because many respondents gave more than one answer.

ADULT PROGRAM PREFERENCES OF THE GENERAL COMMUNITY

<u>Program Area</u>	<u>Mean</u>	<u>Number of Respondents</u>	<u>Standard Deviation</u>
The Basic Learning Skills	2.30	142	.96
Basic High School Subjects	2.07	142	.97
Psychology-Human Relations	2.12	142	.80
Vocational Training	1.87	142	.91
Recreation and Leisure Time Activities	2.24	142	.85
Family Health and Home Management	1.94	142	.75
Fine Arts	2.51	141	.86
Management and Supervisory Training	2.17	142	.87

Score Value

Rating

- (1) Extremely Important - A very large number of adults should enroll.
- (2) Important - Many adults should enroll.
- (3) Unimportant - Few adults should enroll.
- (4) Not Important at all - Almost no adults should enroll.

CORRELATION OF THE GENERAL COMMUNITY ADULT PROGRAM PREFERENCES

WITH SELECTED DEMOGRAPHIC VARIABLES

<u>Program Preference Ratings</u>	<u>Marital Status</u>	<u>Educational Level</u>	<u>Income</u>	<u>Age</u>
Basic Learning Skills	.10	.08	.05	.11
Basic High School Subjects	-.16	.10	.00	.11
Psychology and Human Relations	-.05	-.04	-.11	-.01
Vocational Training	.12	.00	.23*	-.05
Recreation-Leisure Time Activities	-.12	.06	-.09	-.03
Family Health and Home Management	.08	.00	.06	-.01
Fine Arts	-.20*	-.21*	-.04	.07
Management and Supervisory Training	.09	-.04	.01	.04

\*Significant @ the .05 level (rho  $\neq$  0)

NOTE: (Program preferences were scored from (1) to (4), with (1) representing a rating of very important.)

CORRELATION OF THE GENERAL COMMUNITY ADULT PROGRAM PREFERENCES

WITH SOURCES OF INFORMATION ON ADULT EDUCATION (N=146)

<u>Program Preference Ratings</u>	<u>School Catalog</u>	<u>News-paper</u>	<u>Em- ployer</u>	<u>Friend</u>	<u>Employment Service</u>	<u>Radio, TV</u>
Basic Learning Skills	.08	.12	.01	.06	-.04	-.13
Basic High School Subjects	.06	.13	-.03	.06	-.07	-.9*
Psychology and Human Relations	.18*	.03	-.06	-.05	-.02	-.06
Vocational Training	.07	-.12	.04	.03	.02	.00
Recreation and Leisure Time Activities	-.09	-.06	-.07	-.10	-.03	-.03
Family Health and Home Management	.01	-.11	-.01	.07	*.17	-.09
Fine Arts	-.07	.03	-.07	.00	-.14	.08
Management and Supervisory Training	-.04	-.06	-.04	.11	.04	.02

\*Significant @ the .05 level (rho ≠ 0)

CORRELATION OF THE GENERAL COMMUNITY VOCATIONAL PREFERENCE RATINGS

WITH SELECTED DEMOGRAPHIC VARIABLES

<u>Vocational Preferences</u>	<u>Marital Status**</u>	<u>Educational Level</u>	<u>Age</u>	<u>Income**</u>
Accounting-Bookkeeping	-.04	-.05	-.14	-.10
Computer Programming, Operation	.05	.11	-.21*	-.02
Shorthand	.04	.04	-.13	.08
Typing	.00	.01	-.07	.08
Business Machines	.08	-.07	-.03	-.04
Office Procedure	.02	-.10	-.04	.12
Real Estate	.09	.06	.02	-.06
Business Management	-.05	.03	-.10	-.11
Advertising	.03	.06	-.11	-.11
Salesmanship	.03	.04	-.10	-.02
Business Research	.03	-.02	-.06	-.11
Human Relations	.13	.04	.05	-.03
Auto Body Repair	.06	-.13	.06	.30*
Carpentry	-.09	.01	.03	.17*
Electronics	.14	-.16*	.07	.14
Bricklaying and Concrete Work	-.05	.02	-.06	.06
Residential Electrical Wiring	-.06	-.11	-.01	.10
Welding	-.05	.02	-.05	.06
Appliance Repair	.03	.01	.07	.14
Heating and Air-Conditioning	-.01	-.06	.05	.00
Floristry and Nursery Work	-.07	.00	-.06	-.01
Plumbing Installation and Repair	-.04	.06	.15*	.18*
Machine Shop	-.05	.00	-.02	-.07

Medical Secretary	.06	.04	-.07	.01
Dental Assistant	-.06	-.07	-.10	.08
Practical Nurse	-.09	-.18*	.07	.02

\*Significant @ the .05 level (rho = 0)

\*\*Dummy Variables (coded 0,1)

## RESULTS OF THE COMMUNITY SURVEY OF EMPLOYERS

### Company Profile:

The return rate was very disappointing, in fact only one out of every five companies selected actually returned the completed forms. However, of those participating 75% of the respondents companies had total sales of over \$100,000.

Almost 30% of the respondents were employed by a company who operated a retail business. About 20% of the respondents worked for manufacturers.

### Awareness of Adult Education:

Virtually all (96%) of the respondents had seen, or heard about adult education. Eight out of ten of the respondents obtained their information from the newspaper. School catalogs and radio-TV were cited as sources by 44% and 42% of the respondents respectively.

### Adult Program Preferences:

Management and supervisory training, along with psychology and human relations training, were clearly the areas in which most respondents felt adult education could best serve their employees' needs. The basic learning skills, family health and home management, and vocational education were also rated as important.

### Vocational Training Preferences:

Management, Sales, and Accounting were each listed by about 30% of the respondents.

### Employers Most Critical Need for Employees:

An analysis of the responses indicated that the most critical employee need of the survey participants was for skilled labor. They wanted employees with a high school diploma and related job training. Very little, if any, practical work experience was required by these types of employers.

WHAT WAS THE ~~AMOUNT~~ OF YOUR COMPANY'S TOTAL SALES  
IN CALENDAR YEAR 1973?

	<u>Percentage</u>
Less than 50,000	18.92%
50,000 to 99,999	5.41%
100,000 to 499,999	32.43%
500,000 or more	<u>43.24%</u>
	100.00%
	(N=37)

IN WHAT TYPE OF BUSINESS DOES YOUR COMPANY ENGAGE?

	<u>Percentage</u>
Manufacturing	19.15%
Retailing	27.66%
Wholesaling	8.51%
Warehousing	2.13%
Banks, Trust Companies, Savings and Loan	4.26%
Office Businesses and Professions (selling a service)	17.02%
Hotels and Restaurants	4.25%
Natural Resource Industry	---
Transportation and Communication	4.25%
Construction and Building	<u>12.77%</u>
	100.00%
	(N=47)

HAVE YOU EVER READ A BROCHURE, SEEN AN AD, OR HEARD ANYONE TALK  
ABOUT ADULT EDUCATION CLASSES?

	<u>Percentage</u>
Yes	96.00%
No	<u>4.00%</u>
	100.00%
	(N=50)

WHERE DID YOU READ, SEE, OR HEAR ABOUT AN ADULT EDUCATION CLASS?

	<u>Percentage</u>
Newspaper	84.00%
School Catalog	44.00%
Radio, TV	42.00%
Friend	28.00%
Employer	22.00%
Employment Service	<u>14.00%</u>
	*
	(N=50)

\*Percentages will not total 100% because many respondents gave more than one answer.

EMPLOYER ADULT PROGRAM PREFERENCES

<u>Program Area</u>	<u>Mean</u>	<u>Number of Respondents</u>	<u>Standard Deviation</u>
The Basic Learning Skills	2.80	46	1.24
Basic High School Subjects	2.96	45	1.26
Psychology-Human Relations	2.42	48	1.18
Vocational Training	2.85	41	1.24
Recreation and Leisure Time Activities	3.14	43	1.04
Family Health and Home Management	2.84	43	1.19
Fine Arts	3.19	42	1.04
Management and Supervisory Training	2.09	43	1.09

<u>Score Value</u>	<u>Rating</u>
(1)	Extremely Important
(2)	Important
(3)	Unimportant
(4)	Not Important at all

## EMPLOYERS VOCATIONAL TRAINING PREFERENCES

(N=50)

	<u>Percentage</u>
Business Management	44.00%
Salesmanship	34.00%
Office Procedure	32.00%
Human Relations in Business	30.00%
Accounting & Bookkeeping	28.00%
Advertising	20.00%
Typing	16.00%
Computer Programming & Operation	10.00%
Business Machines	10.00%
Real Estate Agent	8.00%
Business Research	8.00%
Electronics	6.00%
Residential Electrical Wiring	6.00%
Carpentry	4.00%
Brick Laying & Concrete Finishing	4.00%
Heating & Air Conditioning	4.00%
Floristry & Nursery Work	4.00%
Plumbing Installation & Repair	4.00%
Shorthand	4.00%
Practical Nurse	2.00%
Machine Shop	2.00%
Auto Body Repair	2.00%
Appliance Repair (including radio & TV)	---
Medical Secretary	---
Dental Assistant	---
Welding	---

\*Percentages will not total 100% because many respondents gave more than one answer.

WHAT ARE YOUR THREE MOST CRITICAL EMPLOYEE NEEDS?

<u>Training Need</u>	<u>Percentage who feel this is their Most Critical Need</u>	<u>Percentage who feel this is their 2nd Most Critical Need</u>	<u>Percentage who feel this is their 3rd Most Critical Need</u>
Sales	10.00%	2.04%	---
Science, Mathematics, or Engineering	6.00%	2.04%	---
Skilled Labor	24.00%	8.16%	2.00%
Service	4.00%	2.04%	---
Unskilled Laborers	10.00%	6.12%	4.00%
Foreman or Supervisors	4.00%	2.04%	2.00%
Cashier or Clerical	8.00%	12.25%	10.00%
Managers	4.00%	2.04%	2.00%
Technicians and Creative	8.00%		---
No Answer	<u>22.00%</u>	<u>63.27%</u>	<u>78.00%</u>
	100.00%	100.00%	100.00%
	(N=50)	(N=49)	(N=50)

AMOUNT OF TRAINING REQUIRED

	<u>Amount Required for the Most Critical Need</u>	<u>Amount Required for the 2nd Most Critical Need</u>	<u>Amount Required for the 3rd Most Critical Need</u>
College Degree	7.14%	7.69%	---
Some College	9.52%	15.39%	5.26%
High School and Related Job Training	40.48%	30.77%	21.05%
High School (no Job Training)	11.91%	7.69%	10.53%
Apprenticeship	11.91%	3.85%	---
Other Vocational Training	7.14%	3.85%	15.78%
No Answer	<u>11.91%</u>	<u>30.77%</u>	<u>47.37%</u>
	100.00%	100.00%	100.00%
	(N=42)	(N=26)	(N=19)

NUMBER OF YEARS OR RELATED WORK EXPERIENCE

<u>Number of Years</u>	<u>Number of Years Required for the Most Critical Need</u>	<u>Number of Years Required for 2nd Most Critical Need</u>	<u>Number of Years Required for 3rd Most Critical Need</u>
None	29.27%	33.33%	36.84%
One	19.51%	26.67%	10.53%
Two to three	26.83%	33.33%	10.53%
Four to five	7.32%	6.67%	---
Six or more	4.88%	---	5.26%
No answer	<u>12.19%</u>	<u>---</u>	<u>36.84%</u>
	100.00%	100.00%	100.00%
	(N=41)	(N= 5)	(N=19)

## RESULTS OF THE ADULT EDUCATION STUDENT EVALUATIONS

### Demographic Profile:

Adult students were generally more affluent and better educated than the average Jefferson County resident (Note: basic adult students were not included in this survey).

Students traveled an average of 5.41 miles (one way mileage) to attend their adult class. The average age of the students was 33 1/2 years.

### Adult Program Preferences:

These students felt that vocational education, the basic high school subjects, family health and home management, and the basic learning skills were the most important areas of adult programs.

Analysis of the data revealed a number of significant relationships between student demographic variables and adult program preferences. Females seemed to prefer the adult programs of: (a) family health and home management; (b) the fine arts:

No significant relationships were found between marital status and adult program preferences.

However significant relationships were found between the respondents' educational level and preferences for the basic learning skills, the basic high school subjects, recreation and leisure time activities, and the fine arts. It seems that as the educational level rises the preference for the basic skills and for high school courses decreases, but the preferences for the fine arts and recreational and leisure time activities increases.

### Vocational Preferences:

Analysis of the data revealed a number of significant relationships between sex and vocational preferences. However, the correlations were not surprising because the relationships tended to follow traditional sex stereotypes (e.g. men had a strong preference for carpentry and women a strong preference for typing).

A significant correlation was found between marital status and a preference for vocational training in computer programming. Single people seemed to have a stronger preference than married individuals.

When the educational level of the individual was used as the independent variable, several significant ~~negative~~ relationships were found. An analysis of the data indicated that as one's educational level increased their preference for training in shorthand, typing, practical nursing, and dental assisting decreased.

### Student Self-Rating Program Evaluations:

Due to the rating system used, a score of three or more indicated a favorable response, but one of two or less was unfavorable. A mean score between two and three was neither clearly favorable or unfavorable.

Using these standards only two of the evaluative criteria were clearly rated high by the students. They were: counseling services (question 3 - non-instructional services) and the cleaning and maintenance of the buildings used for adult education (question 14 - facilities).

None of the averages of the five component scores exceeded three. School reorganization, curriculum and the school facilities received the best ratings.

Significant positive relationships were found between: (a) teachers and counselors availability for counseling (question 3) and the sex of the

student (b) the level of noise in the building (question 15) and marital status. An analysis of the above relationships revealed that single individuals and males tended to rate these two criteria higher than females and married individuals.

Educational level and the one-way mileage from home to the adult program were negatively related to the criteria concerning the administration of personality, aptitude, achievement and occupational interest tests (question 4). Inspection of the data indicated that the higher the educational level of the respondent and/or the greater the distance from his home to the adult program the lower his rating of this criteria.

#### Student Evaluations of their Teacher and Class:

The rating system used in this portion of the report was similar to the one employed in the preceding section. The teacher and class ratings were consistently higher than the program evaluations and virtually all of them were rated favorably.

Several significant negative relationships were found when student demographic variables were correlated with ratings of teachers. Of particular importance were the relationships between: the rating of teacher effectiveness (question 2) and (a) the educational level of the respondents; (b) the distance from home to school. In both cases teacher effectiveness ratings appeared to decrease as educational level and one-way mileage increased.

Single students seemed to feel that their teachers did not give them enough chances to take part in classroom discussions (question 3).

Males and students with higher levels of education were more likely to rate their teacher as confusing and hard to understand (question 5).

These same two variables were also negatively related to the rating of the students' interest level (question 11). Apparently, males and students with higher levels of education were also more likely to find classes uninteresting (question 11).

Those students who had to commute long distances, and those who were males tended to rate their classes as too difficult for most of the students (question 12). These ratings were negatively related to both commuting distance and sex.

Analysis of the data also revealed that the further the students one-way commuting distance the more likely they were to believe that their class was not what they expected when they enrolled.

## Motivation Index of Students In Adult Program

Students listed the following factors as very important influences in their decision to enroll in adult classes:

1. I wanted to learn something new.
2. I enrolled to develop a hobby or leisure time activity.
3. I wanted exposure to new people and activities.
4. I wanted a change of routine.
5. I wanted to do my present job better.
6. I wanted to become a better citizen.

The desire to learn something new was found to have a significantly positive correlation with sex and educational level. An examination of the data revealed that females and individuals with little formal education rated this desire to learn as being very important to them when they enrolled.

A desire to develop a hobby or leisure activity was negatively related to the educational level of the respondent. It seems that the higher the educational level of the person, the greater the importance of this factor.

Females seemed to place more emphasis on being exposed to new people and activities than males. The responses of females respondents were also directly related to a perceived importance for a change of routine.

The educational level of the respondents and their desire to do their present job more efficiently were significantly related. It appears that the lower the level of education the greater the importance of this factor.

A relationship similar to the one found in the above paragraph was also revealed between the person's educational level and the following factors: (1) a desire to be a better citizen and (2) a higher level of perceived importance for training to obtain a different job.

A desire to (1) operate a home more economically and (2) to become a

better parent; was associated directly with the responses of females and married individuals.

## STUDENT DEMOGRAPHIC PROFILE

<u>Occupation of Respondents</u>	<u>Census Data Percentages*</u>	<u>Adult Student Survey Per.</u>
Professional	13.38%	32.03%
Manager/Self-Employed	7.43%	3.27%
Sales Worker	7.81%	9.92%
Craftsman/Foreman	14.13%	5.23%
Vehicle operator/Manufacturing and Assembly Worker	20.79%	3.27%
Service Worker	10.78%	9.80%
Laborer (Non-Farm)	4.83%	2.61%
Housewife	---	34.64%
Unemployed/Retired	---	34.92%
Clerical	18.59%	1.31%
Farmer/Farm Manager	.15%	---

### Family Income Distribution

	<u>Percentage</u>
Under \$4,000	6.54%
\$4,000 to \$5,999	9.15%
\$6,000 to \$6,999	12.42%
\$10,000 to \$14,999	30.07%
\$15,000 and over	41.83%

100.00%

(N=153)

Survey Median Income = \$13,641

Census Data \*Median Income = \$9,814

\*Source: 1970 Census of Population and Housing,  
U.S. Department of Commerce, May, 1972.

Age:

Average Age of Adult Students

33.57 years

Educational Level:

Average Number of Years of School  
Completed by Adult Education Students

13.11 years

(N=153)

Standard Deviation

2.72

Census Data\* Median Number of Years of School Completed = 11.6

Average Distance Traveled (One-Way Mileage)  
to Attend Adult Education Classes

5.4 miles

(N=150)

Standard Deviation

5.98

\*Source: 1970 Census of Population and Housing,  
U. S. Department of Commerce, May, 1972.

ADULT PROGRAM PREFERENCES

<u>Program Area</u>	<u>Mean</u>	<u>Number of Respondents</u>	<u>Standard Deviation</u>
The basic learning skills	1.83	155	.94
The basic high school subjects	1.68	157	.76
Psychology-Human Relations	2.04	158	.84
Vocational Training	1.53	158	.66
Recreation and leisure time	2.00	158	.66
Family Health and Home Management	1.81	158	.81
The Fine Arts	2.24	157	.81
Management and Supervisory Training	2.11	157	.82

<u>Score Value</u>	<u>Rating</u>
1.	Extremely Important
2.	Important
3.	Unimportant
4.	Not Important at all

CORRELATION OF STUDENT PROGRAM PREFERENCE  
WITH SELECTED DEMOGRAPHIC VARIABLES

(N=158)

<u>Program Preference</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Education Level</u>	<u>One-Way Mileage from Home to Adult Program</u>
Basic learning skills	-.11	-.10	.15*	.18*
Basic high school subjects	-.03	.03	.16*	.13
Psychology and Human Relations	-.04	.03	-.04	-.01
Vocational training	-.04	.12	.07	-.07
Recreation-Leisure Time Activities	.08	.07	-.22*	.06
Family Health and Home Management	.27*	-.03	.01	.07
Fine Arts	.16*	.00	-.23*	-.03
Management and Supervisory Training	.10	-.01	-.02	-.05

\*Significant @ the .05 level (rho ≠ 0)

NOTE: Program Preferences were scored (1) to (4), with (1) representing a rating of very important.

CORRELATION OF THE ADULT EDUCATION STUDENT'S VOCATIONAL  
PREFERENCE RATINGS WITH SELECTED DEMOGRAPHIC VARIABLES

(N=158)

<u>Vocational Preference</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Ed. Level</u>	<u>One-Way Mileage from Home to Adult Program</u>
Accounting & Bookkeeping	-.08	-.01	-.05	.00
Computer Programming & Operation	-.15	.20*	-.12	.04
Shorthand	-.26*	-.01	-.15*	-.20*
Typing	-.23*	-.06	-.27*	-.16*
Business Machines	-.22*	-.09	-.14	-.15
Office Procedure	-.08	.10	-.14	-.10
Real Estate Agent	-.04	.02	-.04	-.06
Business Management	.20*	-.09	.09	.02
Advertising	.08	.10	-.00	-.01
Salesmanship	.24*	-.09	.13	-.03
Business Research	.11	.00	.02	-.05
Human Relations in Business	.05	.12	.07	-.04
Auto Body Repair	.11	.07	-.01	.09
Carpentry	.20*	.01	-.04	.06
Electronics	.24*	.09	-.10	-.03
Brick Laying & Concrete Finishing	.17*	.00	.00	-.09
Residential Electrical Wiring	.24*	.03	-.13	-.06
Welding	.11	-.07	-.11	.09
Appliance Repair. (including radio and TV)	.16*	-.02	-.05	-.09
Heating & Air Conditioning	.15	-.08	-.09	-.06

<u>Vocational Preference</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Ed. Level</u>	<u>One-Way Mileage from Home to Adult Program</u>
Floristry & Nursery Work	-.11	-.05	-.02	.03
Plumbing Installation and Repair	.15	.05	.00	.06
Machine Shop	.10	.00	-.04	.18*
Practical Nurse	-.20*	.10	-.19*	-.10
Medical Secretary	-.22*	.05	-.13	-.10
Dental Assistant	-.19*	.07	-.16*	-.10

\*Significant @ the .05 level ( $\rho \neq 0$ )

STUDENT (SELF-RATING) PROGRAM EVALUATIONS

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
Instructional Materials* (Library and reference materials)	1	147	2.59	1.13
Instructional Materials (Audio-visual equipment)	2	139	2.50	1.13
Non-instructional Services (Counseling by teachers and Counselors)	3	150	3.07	.97
Non-instructional Services (Administration of personality, aptitude, achievement, and occupational interest tests)	4	157	2.26	1.08
Curriculum (Students learn at own pace)	5	154	2.88	.89
Curriculum (length of adult classes)	6	154	2.33	.93
Curriculum* (Size of adult classes)	7	154	2.91	.77
Curriculum* (Teacher and student input into course development)	8	145	2.59	.86
Curriculum (Community advisory committee input into course development)	9	149	2.51	.95
Curriculum (Input of formal research on community needs into course development)	10	152	2.80	.97
Facilities* (Vending machines and smoking facilities)	11	155	2.72	.93
Facilities* (Adequacy of security for students and teachers)	12	153	2.60	.85

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
Facilities* (Parking spaces)	13	157	2.00	.77
Facilities* (General housekeeping and maintenance of building)	14	155	3.15	.71
Facilities* (Level of noise in buildings used for adult education)	15	157	2.90	.71
Facilities* (climate control in buildings used for adult education)	16	157	2.88	.76
School reorganization (Student evaluations of teachers)	17	153	2.90	.75
School reorganization* (Teacher effectiveness)	18	151	2.76	.85

Scale

(4)

(3)

(2)

(1)

Rating

Strongly Agree

Agree

Disagree

Strongly Disagree

\*Unfavorable Question

Scale

(1)

(2)

(3)

(4)

Rating

Strongly

Agree

Disagree

Strongly Disagree

CORRELATION OF STUDENT SELF-RATING PROGRAM EVALUATIONS  
WITH SELECTED DEMOGRAPHIC VARIABLES

(N=158)

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Education Level</u>	<u>One-Way Mileage from Home to Adult Program</u>
Instructional materials (Library & reference materials)	1	.04	.01	-.09	.05
Instructional materials (Audio-visual equipment)	2	-.05	.06	.01	.01
Non-instructional Services (Counseling by teachers and counselors)	3	.18*	.15	.01	.03
Non-instructional Services (Administration of personality, aptitude, achievement, and occupational interest tests)	4	.01	.04	-.18*	-.18*
Curriculum (Students learn at own pace)	5	-.07	.02	.00	-.02
Curriculum (Length of adult classes)	6	-.06	.09	.00	-.12
Curriculum* (Size of Adult classes)	7	-.12	.08	-.03	-.07
Curriculum (Teacher & student input into course development)	8	-.06	.05	-.10	-.09
Curriculum (Community advisory committee input into course development)	9	.01	-.15	.08	.01
Curriculum (Input of formal research on community needs into course development)	10	-.06	.06	.06	-.10

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Education Level</u>	<u>One-Way Mileage from Home to Adult Program</u>
Facilities* (Vending machines & smoking facilities)	11	.03	-.01	-.10	.11
Facilities* (Adequacy of security for students and teachers)	12	.11	.05	-.05	.07
Facilities* (Parking spaces)	13	-.13	-.02	.09	-.09
Facilities* (General housekeeping & maintenance of building)	14	.13	.05	-.01	-.09
Facilities* (Level of noise in buildings used for adult education)	15	-.05	.18*	-.06	.07
Facilities (Climate control in buildings used for adult education)	16	.11	-.02	-.03	.11
School reorganization (Student evaluation of teachers)	17	.02	-.03	.05	-.08
School reorganization* (Teacher effectiveness)	18	-.05	-.02	.26*	-.13

MEAN PRIMARY COMPONENT SCORES FOR THE STUDENT

SELF-RATING PROGRAM EVALUATION

<u>Evaluation Component</u>	<u>Component Average</u>
Instructional Materials	2.55
Non-instructional services	2.67
Curriculum	2.67
Facilities	2.56
School reorganization	2.83

STUDENT EVALUATIONS OF THEIR ADULT TEACHER AND CLASS

<u>Evaluation Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
Introduction of the course of study*	1	155	3.36	.74
Teacher effectiveness	2	157	3.28	.81
Teacher's conduct of discussions*	3	154	3.15	.90
Teacher's methods of instructions	4	153	2.38	.99
Clarity of presentation*	5	157	3.08	.97
Teacher's appearance	6	157	3.32	.80
Teacher's knowledge of the course content	7	157	3.34	.87
Teacher's willingness to help students	8	155	3.32	.87
Teacher's punctuality in arriving to class*	9	157	3.36	.86
Teacher's punctuality in dismissing class	10	157	3.17	.85
Interest in the class	11	157	3.25	.86
Difficulty of the class*	12	157	3.22	.84

<u>Evaluation Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
Amount learned in class	13	156	3.22	.89
Organization of the class*	14	156	3.07	.97
Size of the class	15	157	2.97	.87
Satisfaction of perceived expectations	16	157	3.08	.94

<u>Scale Value</u>	<u>Rating</u>
(4)	Strongly agree
(3)	Agree
(2)	Disagree
(1)	Strongly Disagree

\*Unfavorable Question - It was scored as follows:

<u>Scale Value</u>	<u>Rating</u>
(1)	Strongly Agree
(2)	Agree
(3)	Disagree
(4)	Strongly Disagree

CORRELATION OF STUDENT EVALUATIONS OF THEIR ADULT TEACHER  
AND CLASS WITH SELECTED DEMOGRAPHIC VARIABLES

(N=158)

<u>Evaluation Criteria</u>	<u>Question Number</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Ed. Level</u>	<u>One-Way Mileage from Home to Adult Program</u>
Introduction of the course of study	1	-.04	.04	.00	-.04
Teacher effectiveness	2	-.02	.07	-.15*	-.20*
Teacher's conduct of discussions*	3	-.11	-.18*	.05	-.13
Teacher's methods of instructions	4	.06	-.04	-.02	-.11
Clarity of presentation*	5	-.17*	-.05	-.15*	-.11
Teacher's appearance	6	-.08	-.07	.02	-.08
Teacher's knowledge of the course content	7	-.04	-.15	.14	-.07
Teacher's willingness to help students	8	-.07	.00	.00	-.06
Teacher's punctuality in arriving to class	9	.00	-.04	.14	-.05
Teacher's punctuality in dismissing class*	10	-.06	-.05	.07	-.02
Interest in the class	11	-.15*	-.07	-.15*	-.11
Difficulty of the class*	12	-.23*	-.10	-.04	-.19*
Amount learned in class	13	.01	-.04	.08	-.06
Organization of the class*	14	-.10	-.01	.12	-.13
Size of the class	15	.04	.02	.05	.08
Satisfaction of perceived expectations	16	.08	-.01	-.09	-.16*

\*Significant @ the .05 level (rho > 0)

MOTIVATION INDEX OF STUDENTS IN ADULT PROGRAMS

<u>Motivating Factor</u>	<u>Question Number</u>	<u>Mean</u>	<u>Number of Respondents</u>	<u>Standard Deviation</u>
Learn something new	1	1.49	158	.63
Become a better citizen	2	2.21	157	.97
Do my present job better	3	2.10	156	1.07
Develop a hobby or leisure activity	4	1.77	158	.86
Get along better with my fellow employees	5	2.48	157	.99
Train for a different job	6	2.72	156	1.11
Prepare for a second and/or part-time job	7	3.19	156	.90
Learn to be a better parent	8	2.55	155	1.12
Learn to operate my home more economically	9	2.34	158	1.08
Prepare for future education	10	2.33	157	1.07
Obtain a promotion from my employer	11	2.77	154	1.12
Exposure to new people and activities	12	1.94	158	.86
A change of routine	13	1.87	157	.92
Become a cultured person	14	2.53	157	.98
Better understand myself and other people	15	2.40	156	.95
Increase my yearly income	16	2.40	156	1.17

Scale Value

Rating

- |     |  |
|-----|--|
| (1) | Very important to me when I enrolled       |
| (2) | Important to me when I enrolled            |
| (3) | Unimportant to me when I enrolled          |
| (4) | Not important at all to me when I enrolled |

CORRELATION OF THE MOTIVATION INDEX OF STUDENTS IN  
ADULT PROGRAMS WITH SELECTED DEMOGRAPHIC VARIABLES

(N=158)

<u>Motivating Factor</u>	<u>Question Number</u>	<u>Sex</u>	<u>Marital Status</u>	<u>Ed. Level</u>	<u>One-Way Mileage From Home to Adult Program</u>
Learn something new	1	.18*	.04	.16*	-.02
Become a better citizen	2	.07	-.02	.22*	-.02
Do my present job more efficiently	3	.12	.09	.23*	-.13
Develop a hobby or leisure activity	4	.10	.14	-.34*	.07
Get along better with fellow employees	5	.12	.02	.12	.05
Train for a different job	6	.10	-.10	.34*	-.08
Prepare for a second and/or a part-time job	7	.12	-.08	.11	-.05
Learn to be a better parent	8	.20*	.21*	.10	.09
Learn to operate my home more economically	9	.21*	.23*	.05	.03
Prepare for future education	10	.09	-.11	.36*	-.06
Obtain a promotion from my employer	11	.00	-.07	.18*	-.10
Exposure to new people and activities	12	.17*	-.01	-.01	.05
A change of routine	13	.27*	.08	-.07	.14
Become a more cultured person	14	.09	-.10	-.12	.07
To better understand myself and other people	15	.07	-.04	.07	.09
Increase my yearly income	16	.01	-.06	.21*	-.05

\*Significant @ the .05 level (rho ≠ 0)

## RESULTS OF THE ADULT EDUCATION TEACHER EVALUATIONS

### Demographic Profile:

Virtually all of the respondents were female, part-time instructors. The subjects taught by the respondents covered the entire spectrum of subject matter, however, almost one-half of them were involved in classes in the basic learning and high school skills.

The average teacher had almost four years of adult education experience and slightly more than eight years of total teaching experience. The typical instructor had little formal education above the bachelors degree.

### Adult Program Preferences:

Vocational training, and family health and home management were ranked as most important. The basic learning skills and the basic high school subjects also received high rankings, but many of the respondents were teachers in those areas so the results were probably biased in that direction.

Significant correlations were found between the total number of years of adult education teaching experience and preferences for: (a) psychology and human relations, (b) vocational training, and (c) family health and home management. An inspection of the data indicated that the longer a teacher had taught adult education the lower their preference for the above three types of programs.

A relationship similar to the one in the above paragraph was also discovered between the total number of years of teaching experience and program preferences for (a) vocational training and (b) management and supervisory training.

The total number of years of formal education was found to be associated with a preference for the fine arts. In other words, as the number of years of education increases a preference for the fine arts increases.

#### Teacher Self-Rating Program Evaluations

Due to the rating system used, a score of three or more indicated a favorable response, and one of two or less was unfavorable. A mean score between two and three was neither clearly favorable or unfavorable.

Using these standards only three of the evaluative criteria were clearly rated favorably by the teachers. They were: (a) adequacy of parking spaces (question 13 - Facilities), (b) general housekeeping and maintenance (question 14 - Facilities), and (c) a need for paid preparation time for teachers (question 28 - School reorganization). Teachers rated only one criteria as clearly inadequate; it dealt with the amount of pay received by adult teachers.

None of the average rankings of the five component scores exceeded three. Facilities, curriculum, and non-instructional services received the best ratings.

There were significant correlations between the total number of years of adult education teaching experience and the ratings of these elements: (a) counseling by teachers and counselors, (b) allowing students to work at their own pace, (c) the adequacy of consumable supplies, (d) adequacy of programmed learning aids, (e) supervision of materials and methods by adult supervisors, (f) the amount of teacher feedback on operational matters, and (g) the effectiveness of student evaluations of teachers. With the exception of item (g) above, the relationships between adult teaching experience and teacher ratings was a direct one. This meant

that as the number of years of experience increased, so did the teachers self-evaluation rating of these components. The exact opposite type of relationship was found between experience and the teachers ratings of the effectiveness of student evaluations. In this case, the longer the teacher had taught the lower their ratings of this item.

The total number of years of teaching experience was directly related to the teachers ratings of: (a) counseling by teachers and counselors, (b) allowing students to work at their own pace, and (c) adequacy of vending and smoking facilities for breaks, (d) adequacy of funding for adult programs, (e) adequacy of consumable supplies, and (f) supervision of teaching materials and methods by adult supervisors. The effectiveness of student evaluations of teachers was negatively related to total teaching experience, just as it was to the total number of years of adult teaching.

The number of years of formal education completed by the teacher was correlated with the ratings of these elements: (a) community advisory committee; (b) input into course development; and (c) the adequacy of teachers' salaries. But, in the latter case the relationship was negative, i.e., the more years of education the teacher had completed the less adequate they felt their salary to be.

#### Adult Education Program Priorities.

The responses of the teachers indicated that additional instructional materials and a more appropriate or adequate curricula were their top priorities. Better buildings and equipment was ranked at the bottom of most lists of program priorities.

TEACHER DEMOGRAPHIC VARIABLES

<u>Teaching Status</u>	<u>Percentage</u>
Part-time	98.44%
Full-time	1.56%
	100.00%
	(N = 64)

<u>Sex</u>	<u>Percentage</u>
Female	98.44%
Male	1.56%
	100.00%
	(N = 64)

<u>Subjects Taught</u>	<u>Percentage</u>
The basic learning skills	25.00%
Basic high school subjects (diploma or GED)	23.44%
Basic psychology and human relations	0.00%
Vocational training	20.31%
Recreation and/or leisure time activities	15.63%
Family health and home management	9.38%
The Fine Arts (art, music, drama)	1.56%
General business and/or management training	4.69%
	100.00%
	(N = 64)

<u>Marital Status</u>	<u>Percentage</u>
Married	100.00%
Single	00.00%
	100.00%
	(N = 64)

Average Number of Years of Adult  
Education Teaching Experience

3.65

Number of  
Respondents

63

Standard Deviation

2.86

Average Number of Total Years  
of Teaching Experience

8.41

Number of  
Respondents

64

Standard Deviation

8.31

Average Number of Years of  
Formal Education

16.03

Number of  
Respondents

61

Standard Deviation

1.65

ADULT PROGRAM PREFERENCES

<u>Program Area</u>	<u>Mean</u>	<u>Number of Respondents</u>	<u>Standard Deviation</u>
The basic learning skills	1.48	63	.78
The basic high school subjects	1.46	63	.71
Psychology-human relations	1.89	63	.72
Vocational training	1.41	63	.59
Recreation and leisure time	1.95	63	.75
Family health and home management	1.44	63	.56
The Fine Arts	2.00	62	.77
Management and Supervisory Training	2.00	63	.82

Scale Value

Rating

- |     |                      |
|-----|----------------------|
| (1) | Extremely important  |
| (2) | Important            |
| (3) | Unimportant          |
| (4) | Not important at all |

CORRELATION OF TEACHER PROGRAM PREFERENCES

WITH SELECTED DEMOGRAPHIC VARIABLES

(N=64)

<u>Program Preference</u>	<u>Yrs. Adult Ed. Teaching Experience</u>	<u>Yrs. Total Teaching Experience</u>	<u>Yrs. Formal Education</u>
Basic learning skills	-.02	-.04	.14
Basic high school subjects	-.03	.07	-.05
Psychology-human relations	.26*	.17	-.10
Vocational training	.22*	.29*	.07
Recreation and leisure time activities	.02	.06	-.10
Family health and home management	.24*	.20	.14
Fine Arts	.10	.19	-.27*
Management & supervisory training	.08	.35*	.04

\*Significant @ the .05 level (rho ≠ 0)

NOTE: Program preferences were scored from (1) to (4), with (1) representing a rating of very important.

MEAN PRIMARY COMPONENT SCORES FOR THE TEACHER

SELF-RATING PROGRAM EVALUATION

<u>Evaluation Component</u>	<u>Component Average</u>
Instructional Materials	2.59
Non-instructional services	2.63
Curriculum	2.66
Facilities	2.82
School reorganization	2.59

TEACHER SELF-RATING PROGRAM EVALUATIONS

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
Instructional materials* (Library & reference materials)	1	61	2.69	.89
Instructional materials (Audio-visual equipment)	2	58	2.52	1.01
Instructional materials* (Adequacy of funds)	19	60	2.60	.81
Instructional materials (Adequacy of consumable supplies)	20	62	2.56	.76
Non-instructional services (Counseling by teachers and counselors)	3	59	2.63	.87
Non-instructional services (Administration of personality, aptitude, achievement, and occupational interest tests)	4	60	2.63	1.04
Curriculum (Students learn at their own pace)	5	63	2.84	.81
Curriculum* (Length of adult classes)	6	64	2.58	1.04
Curriculum (Size of adult classes)	7	64	2.94	.83
Curriculum* (Teacher & student input into course development)*	8	58	2.62	.83
Curriculum (Community Advisory Committee input into course development)	9	60	2.72	.80
Curriculum (Input of formal research on community needs into course development)	10	61	2.93	.89

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
Curriculum* (Adequacy of programmed learning aids)	21	62	2.60	.73
Facilities* (Adequacy of vending machines & smoking facilities)	11	64	2.77	.89
Facilities (Adequacy of security for students)	12	62	2.68	.78
Facilities (Adequacy of parking spaces)	13	64	3.1	.80
Facilities* (General housekeeping and maintenance)	14	63	3.03	.84
Facilities (Level of noise in buildings used for adult education)	15	64	2.78	.81
Facilities* (Climate control in buildings used for adult education)	16	64	2.73	.89
Facilities (Space for the preparation of teaching materials)	22	62	2.65	.73
School Reorganization (The effectiveness of student evaluations of teachers)	17	63	2.81	.76
School Reorganization* (Teacher effectiveness)	18	60	2.67	.88
School Reorganization* (Supervision of teaching materials and methods by adult supervisors)	23	59	2.49	.90

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Number of Respondents</u>	<u>Mean</u>	<u>Standard Deviation</u>
School Reorganization (Availability of written policies & procedures)	24	62	2.47	.72
School Reorganization (Need for formal orientation program for new teachers)	25	63	2.84	.90
School Reorganization* (Availability of clerical & duplicating services)	26	61	2.54	.89
School Reorganization* (Adequacy of teacher salaries)	27	62	1.81	.87
School Reorganization. (A need for paid preparation time for teachers)	28	63	3.06	.88
School Reorganization* (Administrators solicit teacher feedback on operational matters)	29	63	2.59	1.09

Scale Value

Rating

- (4) Strongly Agree
- (3) Agree
- (2) Disagree
- (1) Strongly disagree

\*Unfavorable Question

Scale Value

Rating

- (1) Strongly Agree
- (2) Agree
- (3) Disagree
- (4) Strongly disagree

CORRELATION OF TEACHER SELF-RATING PROGRAM EVALUATIONS

WITH SELECTED DEMOGRAPHIC VARIABLES

(N=158)

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Yrs of Adult Teaching Experience</u>	<u>Yrs of Total Teaching Experience</u>	<u>Yrs of Formal Education</u>
Instructional materials* (Library & reference material)	1	-.06	-.04	.01
Instructional materials (Audio-visual equipment)	2	.14	.08	.23
Instructional materials* (Adequacy of funds)	19	.22	.32*	.11
Instructional materials (Adequacy of consumable supplies)	20	.28*	.25*	-.21
Non-instructional services (Counseling by teachers & counselors)	3	.29*	.36*	-.14
Non-instructional services (Administration of personality, aptitude, achievement, and occupational interest tests)	4	-.09	.01	.13
Curriculum (Students learn at own pace)	5	.25*	.39*	-.09
Curriculum* (Length of adult classes)	6	.15	.23	.20
Curriculum (Size of adult classes)	7	-.02	-.07	.16
Curriculum* (Teacher & student input into course development)	8	.01	-.08*	.11
Curriculum (Community Advisory Committee input into course development)	9	.04	.11	.26*

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Yrs of Adult Teaching Experience</u>	<u>Yrs of Total Teaching Experience</u>	<u>Yrs of Formal Education</u>
Curriculum (Input of formal research on community needs into course development)	10	.03	-.06	.23
Curriculum* (Adequacy of programmed learning aids)	21	.25*	.14	-.03
Facilities* (Adequacy of vending machines & smoking facilities)	11	.18	.25*	-.07
Facilities* (Adequacy of security for students & teachers)	12	.05	.19	-.07
Facilities (Adequacy of parking spaces)	13	.11	.18	.22
Facilities* (General housekeeping & maintenance)	14	.02	.12	.08
Facilities (Level of noise in buildings used for adult education)	15	.01	-.03	.16
Facilities* (Climate control in buildings used for adult education)	16	.14	.18	-.08
Facilities (Space for the preparation of teaching materials)	22	.21	.12	.10
School Reorganization (The effectiveness of student evaluations of teachers)	17	-.31*	-.38*	.14

<u>Evaluative Criteria</u>	<u>Question Number</u>	<u>Yrs of Adult Teaching Experience</u>	<u>Yrs of Total Teaching Experience</u>	<u>Yrs of Formal Education</u>
School Reorganization* (Teacher effectiveness)	18	.14	.11	.02
School Reorganization* (Supervision of teaching materials & methods by adult supervisors)	23	.40*	.31*	-.10
School Reorganization (Availability of written policies & procedures)	24	.16	.12	.14
School Reorganization (Need for formal orientation program for new teachers)	25	-.23	-.06	.18
School Reorganization* (Availability of clerical & duplicating services)	26	.19	.17	-.18
School Reorganization* (Adequacy of teacher salaries)	27	.00	-.08	-.29
School Reorganization (A need for paid preparation time for teachers)	28	.05	-.07	-.08
School Reorganization (Administrators solicit teacher feedback on operational matters)	29	.27*	.09	-.02

\*Significant @ the .05 level (rho ≠ 0)

TEACHERS' PERCEPTIONS OF ADULT EDUCATION PROGRAM PRIORITIES

<u>Area Needing Improvement</u>	<u>Number of Respondents</u>	<u>Average Rank</u>	<u>Standard Deviation</u>
Additional Instructional Materials	59	2.56	1.32
Better Buildings and Equipment	60	3.47	1.51
More Appropriate or Adequate Curricula	59	2.76	1.39
Administrative Reorganization	59	2.98	1.49
More Student Services	60	2.98	1.57

RESULTS OF A COMPARISON OF SELECTED DEMOGRAPHIC VARIABLES  
BETWEEN ADULT STUDENTS AND THE GENERAL PUBLIC

Occupation

No significant overall differences were found between the jobs held by the general community respondents and adult students. However, in some occupations the two groups differed considerably. For example, more adult students classified themselves as professionals and service workers. On the other hand, more of the respondents from the general community survey were classified as: (a) managers and self-employed individuals and (b) craftsmen and foremen.

Income

A significant difference was found between the income levels of adult students and those of the general community respondents. Sixty percent of the adult students had family incomes of less than \$15,000 a year, while sixty percent of the general community respondents had family incomes of more than \$15,000.

Education

No significant difference was found between the educational levels of adult students and the respondents to the community survey.

Age

The mean age of the adult students was significantly lower than the average of the general community survey.

A COMPARISON OF THE OCCUPATIONS OF RESPONDENTS IN THE  
GENERAL COMMUNITY SURVEY WITH THOSE OF ADULT STUDENTS

	<u>General Community</u>	<u>Adult Students</u>	<u>Total</u>
Professional	23.29%	30.81%	27.21%
Manager/Self-Employed	10.96%	3.14%	6.89%
Sales Worker	4.79%	3.77%	4.26%
Craftsmen/Foreman	11.64%	5.03%	8.20%
Vehicle Operator/ manufacturing and assembly worker	2.05%	3.14%	2.62%
Service Worker	3.42%	9.43%	6.56%
Laborer	2.05%	2.52%	2.30%
Farmer/Farm Manager	.68%	0.00%	.33%
Housewife	31.51%	33.33%	32.46%
Clerical	2.05%	1.26%	1.64%
Unemployed/Retired	4.79%	3.77%	4.26%
No Answer	<u>2.74%</u>	<u>3.77%</u>	<u>3.28%</u>
Total	100%	100%	100%
	(N=146)	(N=159)	(N=305)

Chi Square = 19.08

d.f. = 11

Not significant @ the .05 level.

A COMPARISON OF THE INCOME LEVELS OF RESPONDENTS IN THE  
GENERAL COMMUNITY SURVEY WITH THOSE OF ADULT STUDENTS

<u>Family Income Level</u>	<u>General Community</u>	<u>Adult Students</u>	<u>Total</u>
Under \$4,000	3.42%	6.29%	4.92%
\$4,000 to \$5,999	.68%	8.80%	4.92%
\$6,000 to \$9,999	14.38%	11.95%	13.11%
\$10,000 to \$14,999	21.23%	28.93%	25.25%
\$15,000 or over	60.27%	40.25%	49.84%
No Answer	<u>0.00%</u>	<u>3.77%</u>	<u>1.97%</u>
Total	100%	100%	100%
	(N=146)	(N=159)	(N=305)

Chi Square = 25.24

d.f. = 5

Significant @ the .05 level

A COMPARISON OF SELECTED DEMOGRAPHIC VARIABLES OF RESPONDENTS  
IN THE GENERAL COMMUNITY SURVEY WITH THOSE OF ADULT STUDENTS

EDUCATION

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	1	.01832563	.01832563	.00254*
Error	296	2135.64610390	7.21502062	
Total	297	2135.66442953		

Student Mean = 13.03

Community Mean = 13.04

\*Not significant @ the .05 level

AGE

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	1	3502.11407215	3502.11407215	24.22110*
Error	297	42943.05649642	144.58941581	
Total	298	46445.17056856		

Student Mean = 33.57

Community Mean = 40.42

\*Significant @ the .05 level

RESULTS OF A COMPARATIVE ANALYSIS OF THE CHANNEL OF  
COMMUNICATION USED TO TRANSMIT KNOWLEDGE OF ADULT EDUCATION

School Catalog

No significant differences were found between the number of individuals learning about adult education from the school catalog in either the general community, employer, or adult student surveys.

Newspaper

Significantly fewer adult students learned about adult education from the newspaper.

Employer

Significantly more respondents from the general community and employer surveys learned about adult education from their employers.

A Friend Told Me

No significant differences were found between the number of individuals learning about adult education from a friend in either the general community, employer, or adult student surveys.

Employment Services

A significantly higher number of respondents learned about adult education from an employment service.

Radio - T.V.

Significantly fewer adult education students learned about the program from radio and television advertising.

A COMPARATIVE ANALYSIS OF THE CHANNELS OF COMMUNICATION  
USED TO TRANSMIT INFORMATION ABOUT ADULT EDUCATION

SCHOOL CATALOGUE

	<u>General Community</u>	<u>Employers</u>	<u>Adult Students</u>	<u>Total</u>
Learned about Adult Education from the school Catalog	32.19%	42.86%	33.96%	34.46%
Was not exposed in this way	<u>67.81%</u>	<u>57.14%</u>	<u>64.04%</u>	<u>65.54%</u>
Total	100%	100%	100%	100%
	(N=146)	(N= 49)	(N=159)	N=354)

Chi Square = 1.879

d.f. = 2

Not significant @ the .05 level

NEWSPAPER

Learned about Adult Education from the news- paper	72.60%	83.67%	47.17%	62.43%
Was not exposed in this way	<u>27.40%</u>	<u>16.33%</u>	<u>52.83%</u>	<u>37.57%</u>
Total	100%	100%	100%	100%
	(N=146)	(N= 49)	(N = 159)	(N=354)

Chi Square = 33.523

d.f. = 2

Significant @ the .05 level

EMPLOYER

	<u>General Community</u>	<u>Employer</u>	<u>Adult Students</u>	<u>Total</u>
Learned about Adult Education from my employer	15.07%	22.45%	4.40%	11.30%
Was not exposed in this way	<u>84.93%</u>	<u>77.55%</u>	<u>95.60%</u>	<u>88.70%</u>
Total	100%	100%	100%	100%
	(N=146)	(N= 49)	(N=159)	(N=354)

Chi Square = 15.693

d.f. = 2

Significant @ the .05 level

A FRIEND TOLD ME

Learned about Adult Education from a friend of mine	30.82%	26.53%	31.45%	30.51%
Was not exposed in this way	<u>69.18%</u>	<u>73.47%</u>	<u>68.55%</u>	<u>69.49%</u>
Total	100%	100%	100%	100%
	(N=146)	(N=49)	(N=159)	(N=354)

Chi Square = .4385

d.f. = 2

Not significant @ the .05 level

EMPLOYMENT SERVICE

	<u>General Community</u>	<u>Employer</u>	<u>Adult Student</u>	<u>Total</u>
Learned about Adult Education from an employ- ment service	1.37%	14.29%	0.00%	2.54%
Was not exposed in this way	<u>98.63%</u>	<u>85.71%</u>	<u>100.00%</u>	<u>97.46%</u>
Total	100%	100%	100%	100%
	(N=146)	(N=49)	(N=159)	(N=354)

Chi Square = 32.23

d.f. = 2

Significant @ the .05 level

RADIO - T.V.

	<u>General Community</u>	<u>Employer</u>	<u>Adult Student</u>	<u>Total</u>
Learned about Adult Education from the radio or T.V.	38.36%	42.86%	5.03%	24.01%
Was not exposed in this way	<u>61.64%</u>	<u>57.14%</u>	<u>94.97%</u>	<u>75.99%</u>
Total	100%	100%	100%	100%
	(N=146)	(N=49)	(N=159)	(N=354)

Chi Square = 57.3958

d.f. = 2

Significant @ the .05 level

## RESULTS OF A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF THE RESPONDENTS FROM THE GENERAL COMMUNITY, EMPLOYER, STUDENT AND TEACHER SURVEYS

### Introduction

One-way analysis of variance was used to test for differences in the mean preference ratings between the four groups.

Significant differences between the groups were found in seven of the eight adult program areas. Only on their ratings of management and supervisory training were the responses of the four groups homogenous. A similar pattern was observed when the mean preference ratings were rank-ordered from most to least favorable. In all cases, except the rating of management and supervisory training, the rank-ordering followed this sequence:

- (a) Highest ranking - teachers
- (b) Second highest ranking - students
- (c) Third highest ranking - general community respondents
- (d) Fourth highest ranking - employers

### Basic Learning Skills

Adult student and teacher ratings of this component were more favorable than those of employers and respondents from the general community.

### Preference for the Basic High School Subjects

Adult student and teacher ratings were significantly higher than those of the employers. In fact, the average employer felt that this type of training was unimportant.

### Preference for Psychology and Human Relations Training

The Teacher's ratings were higher than any other group, but the responses of students and the general community were much closer to the teacher ratings than to the employers.

### Vocational Training

Employers ratings of vocational education were significantly lower than those of any other group, preferences of teachers, students and the general community respondents were higher and more nearly homogenous.

### Recreation and Leisure Time Activities

Employers ratings were far lower than those of teachers, students, and general community respondents. However, the latter three groups had preference ratings that were relatively similar.

### Family Health and Home Management

The employers ratings of this program area were again substantially lower than the ratings of the other three groups.

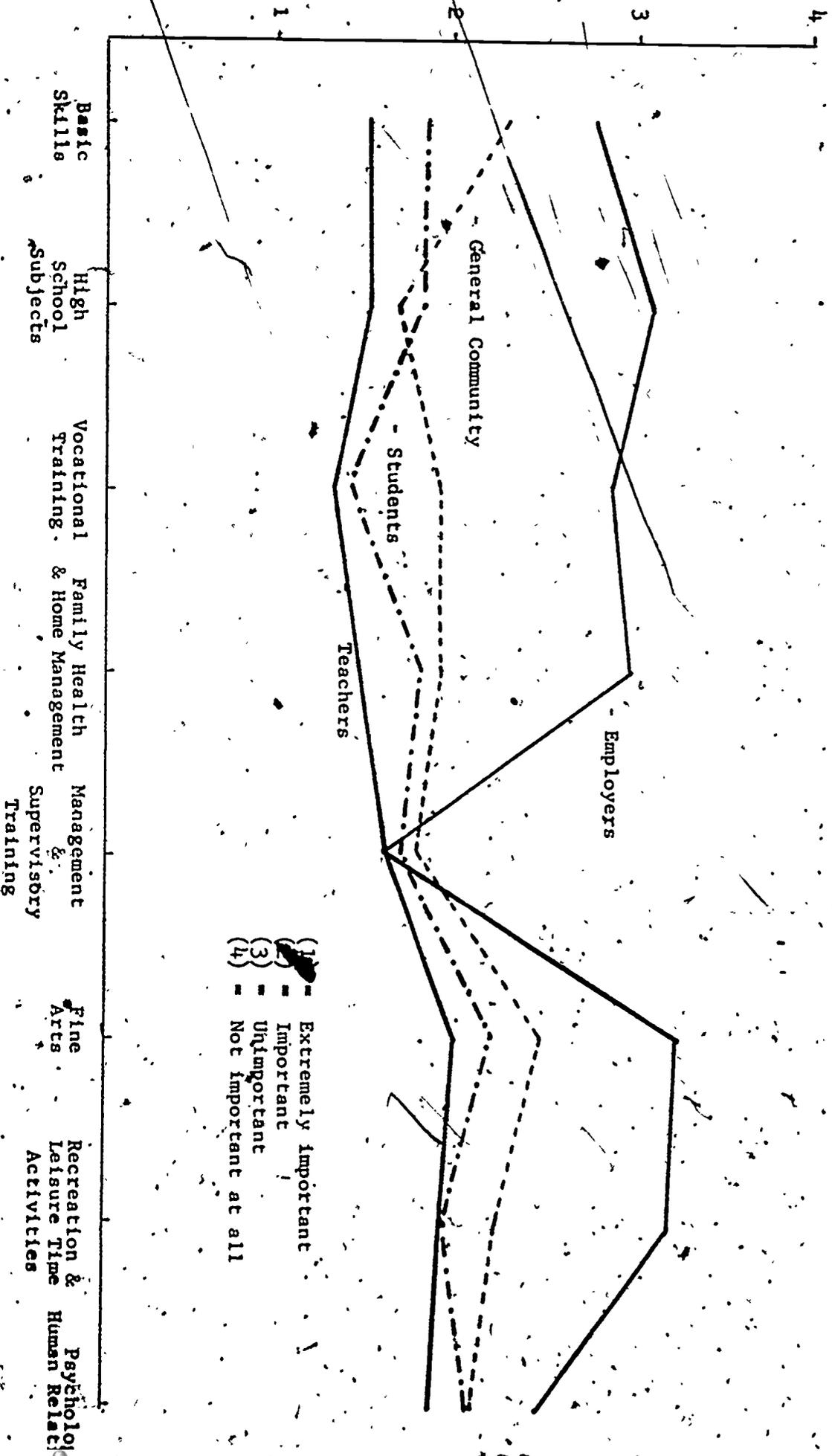
### Fine Arts

The overall ratings of all four groups were lower, but the employers rating was by far the poorest.

### Management and Supervisory Training

This was the only rating of a program area in which the employers mean score could be considered favorable. In fact, the mean scores of employers and teachers were identical and the scores from the other groups were also very similar.

A MEAN SCORE COMPARISON OF THE ADULT EDUCATION PROGRAM  
 PREFERENCES OF THE RESPONDENTS FROM THE GENERAL COMMUNITY, EMPLOYER,  
 STUDENT, AND TEACHER SURVEYS.  
 FIGURE 2



- (1) - Extremely Important
- (2) - Important
- (3) - Unimportant
- (4) - Not Important at all

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for the Basic Learning Skills

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	55.34875505	18.44958502	20.10835*
Error	387	355.07579738	.91750852	
Total	390	410.42455243		
Mean score for General Community Survey			2.29	
Mean score for the Employers Survey			2.83	
Mean score for the Student Survey			1.85	
Mean score for the Teachers Survey			1.48	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for the Basic High School Subjects

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	66.47247181	22.15749060	27.36151*
Error	387	313.39453586	.80980500	
Total	390	379.86700767		
Mean score for General Community Survey			2.06	
Mean score for the Employers Survey			3.03	
Mean score for the Student Survey			1.69	
Mean score for the Teachers Survey			1.47	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF PRESONDENTS

Preference for Psychology and Human Relations Training

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	9.18612989	3.06204330	4.39125*
Error	387	269.85734838	0.69730581	
Total	390	279.04347826		
Mean score for General Community Survey			2.12	
Mean score for the Employers Survey			2.49	
Mean score for the Student Survey			2.06	
Mean score for the Teachers Survey			1.85	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for Vocational Training

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	60.14357369	20.04785790	30.63052*
Error	387	253.29376647	.65450586	
Total	390	313.43734015		
Mean score for General Community Survey			1.87	
Mean score for the Employers Survey			2.86	
Mean score for the Student Survey			1.52	
Mean score for the Teachers Survey			1.42	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for Recreation and Leisure-Time Activities

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	48.72309850	16.24103283	22.5485*
Error	387	278.74493219	.72027114	
Total	390	327.46803069		
Mean score for General Community Survey			2.24	
Mean score for the Employers Survey			3.22	
Mean score for the Student Survey			1.97	
Mean score for the Teachers Survey			1.97	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for Family Health and Home Management

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	56.90184688	18.96728229	30.81481*
Error	387	238.20812754	.61552488	
Total	390	295.10997442		
Mean score for General Community Survey			1.94	
Mean score for the Employers Survey			3.00	
Mean score for the Student Survey			1.79	
Mean score for the Teachers Survey			1.45	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for the Fine Arts

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	43.86407785	14.62135928	21.36711*
Error	387	264.82134414	.68429288	
Total	390	308.68542199		
Mean score for General Community Survey			2.51	
Mean score for the Employers Survey			3.29	
Mean score for the Student Survey			2.22	
Mean score for the Teachers Survey			2.00	

\*Significant @ the .05 level

A COMPARISON OF THE ADULT PROGRAM PREFERENCES OF RESPONDENTS

Preference for Management and Supervisory Training

<u>Source</u>	<u>D F</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F</u>
Regression	3	2.32624736	.77541579	1.07350*
Error	387	279.54076031	.72232755	
Total	390	281.86700767		
Mean score for General Community Survey			2.17	
Mean score for the Employers Survey			1.97	
Mean score for the Student Survey			2.09	
Mean score for the Teachers Survey			1.97	

\*Not significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

ACCOUNTING AND BOOKKEEPING

	General Community	Employer	Adult Student	Total
Interested in	10.27%	26.53%	27.04%	20.05%
Not interested	89.73%	73.47%	72.96%	79.94%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi. Square = 14.84

D.F. = 2

Significant @ the .05 level

TYPING

	General Community	Employer	Adult Student	Total
Interested in	6.85%	16.33%	22.01%	14.97%
Not interested	93.15%	83.67%	77.99%	85.03%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 13.83

D.F. = 2

Significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

COMPUTER PROGRAMMING

	General Community	Employer	Adult Student	Total
Interested in	8.90%	10.20%	23.90%	15.82%
Not interested	91.09%	89.80%	76.10%	84.18%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 14.20

D.F. = 2

Significant @ the .05 level

SHORTHAND

	General Community	Employer	Adult Student	Total
Interested in	4.11%	4.08%	17.61%	10.17%
Not interested	95.89%	95.92%	82.39%	89.83%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 17.49

D.F. = 2

Significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

BUSINESS MACHINES

	General Community	Employer	Adult Student	Total
Interested in	5.48%	10.20%	21.38%	13.28%
Not interested	94.52%	89.80%	78.62%	86.72%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 17.19

D.F. = 2

Significant @ the .05 level

OFFICE PROCEDURE

	General Community	Employer	Adult Student	Total
Interested in	5.48%	30.61%	18.87%	14.97%
Not interested	94.52%	69.39%	81.13%	85.03%
Total	100.00% (N=146)	100.00% (N=49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 21.65

D.F. = 2

Significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

REAL ESTATE

	General Community	Employer	Adult Student	Total
Interested in	6.85%	6.12%	13.21%	9.60%
Not interested	93.15%	93.88%	86.79%	90.40%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square. = 4.34

D.F. = 2

Not significant @ the .05 level

BUSINESS MANAGEMENT

	General Community	Employer	Adult Student	Total
Interested in	10.96%	42.86%	21.38%	20.06%
Not interested	89.04%	57.14%	78.62%	79.94%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 23.60

D.F. =2

Significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

ADVERTISING

	General Community	Employer	Adult Student	Total
Interested in	4.79%	18.37%	9.43%	8.76%
Not interested	95.21%	81.63%	90.57%	91.24%
Total	100.00%	100.00%	100.00%	100.00%

Chi Square = 8.62

D.F. = 2

Significant @ the .05 level

SALESMANSHIP

	General Community	Employer	Adult Student	Total
Interested in	4.79%	32.65%	7.55%	9.89%
Not interested	95.21%	67.35%	92.45%	90.11%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 33.73

D.F. = 2

Significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

BUSINESS RESEARCH

	General Community	Employer	Adult Student	Total
Interested in	4.79%	6.12%	11.94%	8.19%
Not interested	95.21%	93.88%	88.05%	91.81%
Total	100.00% (n=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 5.50

D.F. = 2

Not significant @ the .05 level

HUMAN RELATIONS IN BUSINESS

	General Community	Employer	Adult Student	Total
Interested in	8.90%	28.57%	17.61%	15.54%
Not interested	91.10%	71.43%	82.39%	84.46%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 11.76

D.F. = 2

Significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES.

AUTO BODY REPAIR

	General Community	Employer	Adult Student	Total
Interested	3.42%	0.00%	6.29%	4.24%
Not interested	96.58%	100.00%	93.71%	95.76%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 4.06

D.F. = 2

Not significant @ the .05 level

CARPENTRY

	General Community	Employer	Adult Student	Total
Interested in	6.16%	2.04%	8.81%	6.78%
Not interested	93.84%	97.96%	91.19%	93.22%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 2.86

D.F. = 2

Not significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

ELECTRONICS

	General Community	Employer	Adult Student	Total
Interested in	4.79%	6.12%	6.92%	5.93%
Not interested	95.21%	93.88%	93.08%	94.07%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = .62

D.F. = 2

Not significant @ the .05 level

BRICK LAYING AND CONCRETE FINISHING

	General Community	Employer	Adult Student	Total
Interested in	2.05%	4.08%	5.66%	3.95%
Not interested	97.94%	95.92%	94.34%	96.05%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 2.61

D.F. = 2

Not significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

RESIDENTIAL ELECTRICAL WIRING

	General Community	Employer	Adult Student	Total
Interested in	3.42%	6.12%	6.92%	5.37%
Not interested	96.58%	93.88%	93.08%	94.63%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=157)	100.00% (N=354)

Chi Square = 1.89

D.F. = 2

Not significant @ the .05 level

WELDING

	General Community	Employer	Adult Student	Total
Interested in	2.05%	0.00%	5.66%	3.39%
Not interested	97.95%	100.00%	94.34%	96.61%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 5.02

D.F. = 2

Not significant 2 the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

APPLIANCE REPAIR

	General Community	Employer	Adult Student	Total
Interested in	4.79%	2.04%	9.43%	6.50%
Not interested	95.21%	97.96%	90.57%	93.50%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354) ✓

Chi Square = 4.56

D.F. = 2

Not significant @ the .05 level

HEATING AND AIR CONDITIONING

	General Community	Employer	Adult Student	Total
Interested in	7.53%	4.08%	6.29%	6.50%
Not interested	92.47%	95.92%	93.71%	93.50%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = .74

D.F. = 2

Not significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

FLORISTRY AND NURSERY WORK

	General Community	Employer	Adult Student	Total
Interested in	4.10%	4.08%	17.61%	10.17%
Not interested	95.90%	95.92%	82.39%	89.83%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 17.49

D.F. = 2

Significant @ the .05 level

PLUMBING INSTALLATION AND REPAIR

	General Community	Employer	Adult Student	Total
Interested in	2.05%	4.08%	6.29%	4.24%
Not interested	97.95%	95.92%	93.71%	95.76%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=157)	100.00% (N=354)

Chi Square = 3.37

D.F. = 2

Not significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

MACHINE SHOP

	General Community	Employer	Adult Student	Total
Interested in	2.05%	2.04%	5.03%	3.39%
Not interested	97.95%	97.96%	94.97%	96.61%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 2.87

D.F. = 2

Not significant @ the .05 level

PRACTICAL NURSE

	General Community	Employer	Adult Student	Total
Interested in	6.16%	2.04%	11.32%	7.01%
Not interested	93.84%	97.96%	88.68%	92.09%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 5.47

D.F. = 2

Not significant @ the .05 level

A COMPARISON OF THE RESPONDENT'S VOCATIONAL TRAINING PREFERENCES

MEDICAL SECRETARY

	General Community	Employer	Adult Student	Total
Interested in	3.42%	0.00%	13.84%	7.63%
Not interested	96.58%	100.00%	86.16%	92.37%
Total	100.00%	100.00%	100.00%	100.00%

Chi Square = 16.41

D.F. = 2

Significant @ the .05 level

DENTAL ASSISTANT

	General Community	Employer	Adult Student	Total
Interested in	2.73%	0.00%	10.06%	5.65%
Not interested	97.26%	100.00%	89.94%	94.35%
Total	100.00% (N=146)	100.00% (N= 49)	100.00% (N=159)	100.00% (N=354)

Chi Square = 11.06

D.F. = 2

Significant @ the .05 level

RESULTS OF AN ANALYSIS OF SELECTED DEMOGRAPHICS

AS COMPILED FROM SECONDARY SOURCES OF DATA

(Also see Appendix F)

It was found that the population and work force in Jefferson County was growing at a rate above the national average. Employment had increased the fastest in the non-manufacturing areas of services, wholesale and retail trade, finance, and construction. Substantial employment opportunities were forecast in the following areas:

- (a) Home Economics
- (b) Health occupations
- (c) Marketing and distribution
- (d) Business and office occupations

The non-white population had increased by 23.6% during the 1960-1970 period. Most of this growth was concentrated in the inner city. This increase caused a mass exodus by whites from the cities core to the suburbs. The fastest growing segment of the population was the 16-21 year old age group.

Analysis of census data revealed that areas which were predominately black tended to have lower income and educational levels.

A classification of census tracts (see attached map) into groups based on the median educational and income levels, and the number of black residents resulted in the identification of target groups for basic adult and high school education, as well as for vocational training. Census tracts falling into one of the following groups are key areas for the expansion of adult services.

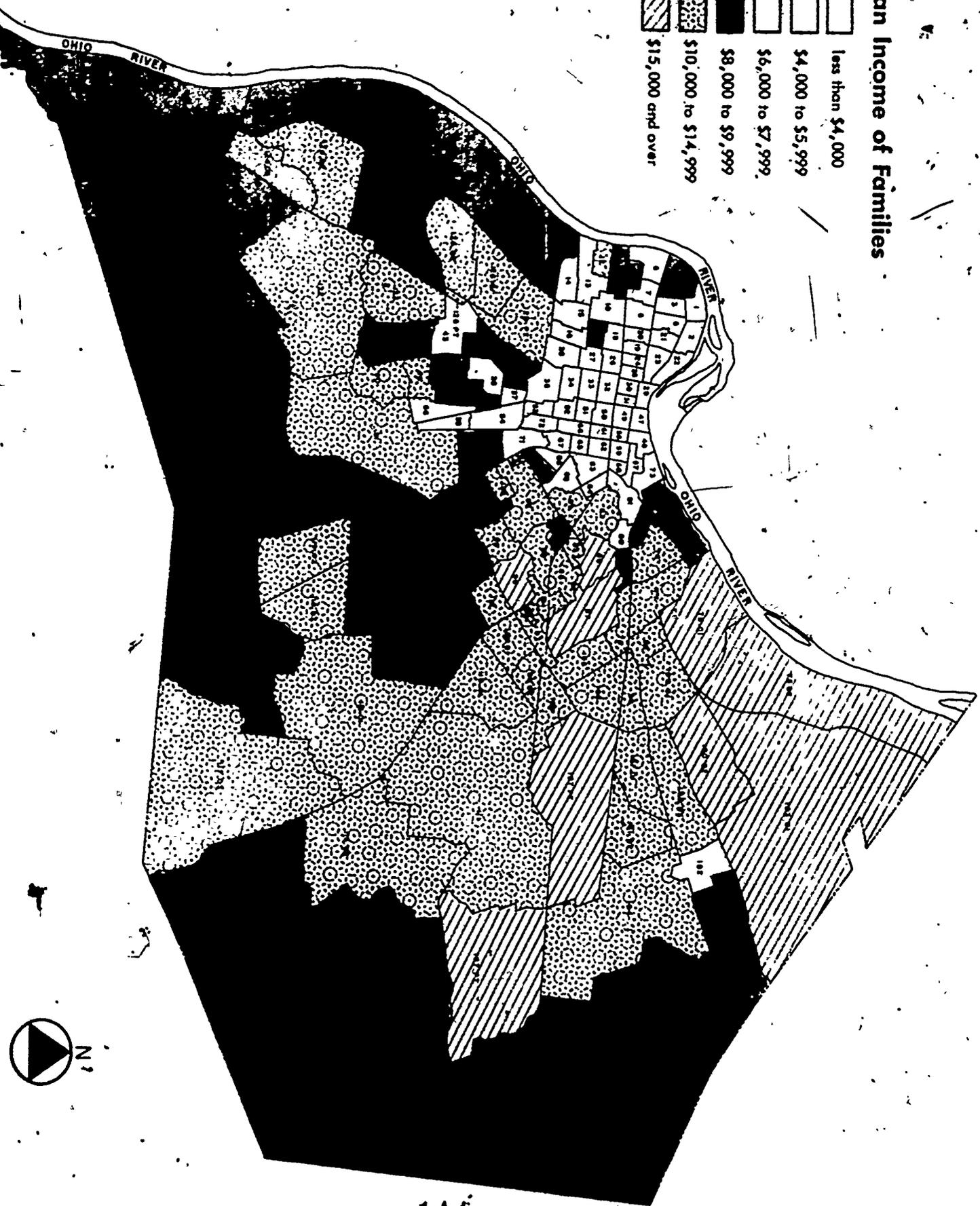
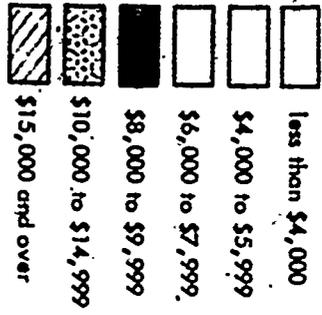
- Group 1:- Eight years of education or less and an income level below that of the black community as a whole  
(Census tracts 29, 57, 58)

Group 3 - Eight years to less than eleven years of education and an income level below that of the black community as a whole (38 tracts - See tables in this section)

Group 5 - Eleven years to less than twelve years of education and an income level below that of the black community as a whole (six tracts, see tables in this section)

Groups 4 and 6 should be considered secondary targets.

# Median Income of Families



144

136

12

Percentage Change in Occupied Housing Units, 1960-1970

Census Tract	Census Tract				1970
	1940-50	1950-60	1960-70	1970	
001	-6.7%	-5.6%	-28.0%	352	
002	+2.6%	-11.8%	-13.5%	911	
003	-36.6%	+9.9%	-22.1%	646	
004	+41.2%	+10.1%	+2.0%	1,658	
005	-2.9%	-5.0%	-10.3%	682	
006	+11.3%	+9.2%	-18.3%	1,089	
007	+12.9%	-1.1%	-14.3%	1,202	
008	+11.3%	-1.9%	-17.7%	763	
009	+29.3%	+0.3%	-4.9%	967	
010	+8.0%	-7.7%	-16.2%	1,454	
011	-31.1%	+1.4%	+8.3%	1,579	
012	+27.3%	+22.2%	+19.2%	833	
013	+38.2%	-4.9%	-44.9%	409	
014	+58.3%	+254.8%	+5.5%	1,448	
015	+39.6%	-10.6%	+18.3%	1,696	
016	+19.9%	-18.7%	+3.0%	1,518	
017	+3.8%	-9.1%	-1.3%	1,093	
018	+5.4%	-13.4%	-10.1%	1,008	
019	+11.7%	-11.0%	-6.6%	979	
020	+16.6%	-12.4%	-11.0%	1,192	
021	+9.0%	-6.7%	-8.9%	1,478	
022	+3.9%	-12.5%	-34.5%	795	
023	+3.9%	-18.5%	-10.2%	1,580	
024	+8.0%	-14.4%	-10.5%	1,068	
025	-5.2%	-5.4%	-43.8%	741	
026	-0.6%	-14.3%	-31.4%	724	
027	+4.8%	-14.9%	-6.6%	1,532	
028	+34.0%	+5.3%	-4.5%	1,054	
029	+30.2%	-23.9%	-78.0%	129	
030	+51.1%	-21.9%	-58.7%	683	
031	+11.9%	-16.3%	-75.3%	170	
032	-8.8%	-33.5%	-28.0%	334	
033	-2.1%	-13.6%	-16.7%	695	
034	+4.4%	-27.7%	-14.7%	500	
035	+4.6%	+25.9%	-9.9%	974	
036	+79.2%	-19.7%	+0.04%	2,480	
037	+18.9%	-7.5%	+0.4%	1,111	
038	+98.2%	-13.8%	+1.1%	1,422	
039	+53.8%	+35.3%	+2.0%	1,866	
040	+34.4%	-6.3%	-2.4%	810	
041	+25.3%	-5.1%	+10.8%	1,346	
042	+236.2%	+3.5%	+1.7%	655	
043		+91.7%	-36.0%	2,829	
044	+75.5%	-3.2%	+19.1%	1,907	
		+62.8%	-31.2%	1,391	
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132					

Source: U. S. Census of Population and Louisville and Jefferson County Planning Commission

EMPLOYMENT OUTLOOK  
by  
MAJOR OCCUPATIONAL CATEGORIES

<u>Occupation DOT Classification</u>	<u>Occupational Needs</u>			<u>% Change 1973-75</u>	<u>% Change 1973-77</u>	<u>% of Total Occ. Needs in 1977</u>
	<u>1973</u>	<u>1975</u>	<u>1977</u>			
Business and Office Occupations	4681	12,823	23,100	273%	493%	
Marketing and Distributive Occupations	2543	7,639	12,753	300%	501%	
Health Occupations	958	2,894	4,833	302%	504%	
Home Economics Occupations	1,137	3,436	5,726	302%	504%	
Technical Occupations	757	1,649	2,565	218%	338%	
Trade and Industrial Occupations	6,715	19,088	31,505	284%	469%	
Total	16,791	40,653	80,482	242%	479%	

Source: Report on Vocational Resources, 1973,

Vocational Resource Committee, Spring 1973.

(See Jim Hawkins, Jefferson Community College, Louisville, Ky.  
for further information)

**A COMPARISON OF INCOME AND EDUCATIONAL LEVELS BY THE NUMBER OF BLACKS RESIDING  
IN EACH CENSUS TRACT**

Educational Level

Number of Black Residents in Census Tract Group	Median for Census tract was less than 8 years		Median for tract was 8 to 10.9 yrs.		Median for tract was 11. to 11.9 yrs.		Median for tract was 12 or more yrs.	
	Less than Median Income	Median Income or More	Less than Median Income	Median Income or More	Less than Median Income	Median Income or More	Less than Median Income	Median Income or More
	1	2	3	4	5	6	7	8
Less than 1,000	100.0%	—	65.0%	82.5%	66.7%	94.4%	—	98.8%
1,000 to 1,999	—	—	12.5%	17.5%	16.7%	—	—	—
2,000 to 2,999	—	—	12.5%	—	—	—	—	1.2%
3,000 or More	—	—	10.0%	10.0%	16.7%	5.5%	—	—
<b>Total</b>	100.0% (N= 3)	0.0% (N=0)	100.0% (N= 40)	100.0% (N=40)	100.0% (N= 6)	100.0% (N=18)	0.0% (N=0)	100.0% (N=80)

ADULT EDUCATION NEEDS BY CENSUS TRACT

Tract Having  
Less than  
1,000 Black Residents      Educational Level      Income Level

Group 1

29	Less than 8 yrs.	Less than the median
57	"	"
58	"	"

Group 2

2	8 to 10.9 yrs.	Less than the median
3	"	"
21	"	"
22	"	"
23	"	"
28	"	"
31	"	"
32	"	"
37	"	"
43	"	"
48	"	"
50	"	"
51	"	"
54	"	"
55	"	"
61	"	"
63	"	"
65	"	"
66	"	"
67	"	"
72	"	"
73	"	"
80	"	"
81	"	"

Group 4

1	"	More than the median
36	"	"
38	"	"
39	"	"
40	"	"
41	"	"
42	"	"
45	"	"

Tract Having  
Less than  
1,000 Black Residents

Educational Level

Income Level

	8 to 10.9 yrs.	More than the median
45	"	"
56	"	"
64	"	"
68	"	"
69	"	"
70	"	"
71	"	"
74	"	"
92	"	"
94	"	"
118	"	"
128	"	"
124.01	"	"
102	"	"
116	"	"
118	"	"
119.01	"	"
126	"	"
127	"	"
128	"	"
129	"	"
118	"	"
124.01	"	"

Group 5

	11.0 to 11.9 yrs.	Less than the median
49	"	"
52	"	"
53	"	"
127	"	"

Group 6

		More than the median
44	"	"
46	"	"
114.01	"	"
124.03	"	"
125	"	"
117.02	"	"
117.03	"	"
119.02	"	"
121.02	"	"
123	"	"
124.03	"	"
125	"	"
126.01	"	"
91	"	"
114.01	"	"
124.01	"	"
124.03	"	"
125	"	"

Tract Having  
 Less than  
 1,000 Black Residents

---

Educational Level

---

Income Level

Group 8

	12 yrs. or more	More than the median
76		
77	"	"
78	"	"
79	"	"
82	"	"
83	"	"
84	"	"
85	"	"
86	"	"
87	"	"
88	"	"
89	"	"
90	"	"
93	"	"
95	"	"
96	"	"
97	"	"
105	"	"
107	"	"
108	"	"
109.01	"	"
109.02	"	"
110	"	"
111	"	"
112	"	"
122	"	"
123	"	"
124.02	"	"
75.01	"	"
75.02	"	"
77	"	"
78	"	"
91	"	"
98	"	"
99	"	"
100.01	"	"
100.02	"	"
100.03	"	"
101.02	"	"
103.01	"	"
101.01	"	"
103.02	"	"
104	"	"
105	"	"
106	"	"
107	"	"
108	"	"
109.01	"	"
110.01	"	"
110.02	"	"



Tract Having  
 Less than  
 1,000 Black Residents

---

Educational Level

---

Income Level

Tract	Educational Level	Income Level
111	12 yrs. or more	More than the median
112	"	"
114.02	"	"
115.01	"	"
115.02	"	"
117.01	"	"
119.03	"	"
122	"	"
124.01	"	"
124.02	"	"
130	"	"
131	"	"
132	"	"
77	"	"
78	"	"
119.01	"	"
110.01	"	"
111	"	"
113	"	"
114	"	"
122	"	"
123	"	"
124.02	"	"



Tracts Having  
Between 1,000 and  
1,999 Black Residents

Educational Level

Income Level

Group 1 & 2

None ----- Less than 8 yrs.

Group 3

25  
30  
33  
35  
60

8 to 10.9 yrs.  
"  
"  
"  
"

Less than  
the median  
"  
"  
"  
"

Group 4

4  
8  
12

"  
"  
"

More than  
the median  
"

Group 5 13

11 to 11.9 yrs.

Less than  
the median

Group 6 - 8

None

\* Tracts Having  
Between 2,000 and  
2,999 Black Residents

Educational Level

Income Level

Group 1 & 2

None ----- Less than 8 yrs.

Group 3

6  
19  
24  
26  
59

8 to 10.9 yrs.  
"  
"  
"  
"

Less than  
the median  
"  
"  
"  
"

Groups 4-7 None

Group 8

12

12 or more yrs.

More than  
the median

Tract Having 3,000 or More Black Residents		Educational Level	Income Level
<u>Group 1 &amp; 2</u>			
None		Less than 8 yrs.	
<u>Group 3</u>			
10		8 to 10.9 yrs.	Less than the median
15		"	"
18		"	"
20		"	"
<u>Group 4</u>			
7		"	More than the median
9		"	"
16		"	"
17		"	"
<u>Group 5</u>			
14		11 to 11.9 yrs.	Less than the median
<u>Group 6</u>	11	"	More than the median
<u>Group 7 - 8</u>			
None		12 yrs. or more	

## RESULTS OF THE EDUCATIONAL CENSUS

A census of local educational institutions revealed that only the Louisville and Jefferson County Adult Programs were delivering training in adult basic and secondary education.

Virtually all institutions offered vocational training in all or some of the following areas (For a detailed breakdown of vocational courses by institution see Report on Vocational Resources: 1973 available from Mr. Jim Hawkins, Jefferson Community College, Louisville, Ky., pp 69-135):

- (a) Agriculture
- (b) Business and Office education
- (c) Marketing and distribution
- (d) Vocational home economics
- (e) Trade and industry
- (f) Medical engineering, or computer, technician

Psychology and human relations training, as well as management and supervisory training were offered as a part of many vocational training courses. Separate programs in management and supervisory training existed at most colleges and universities and a few proprietary schools.

Only the Jefferson County and Louisville systems offered programs in family health and home management for adults.

The continuing education programs of most local colleges and universities offered classes in recreational and leisure time activities; and the fine arts.

\*In conjunction with vocational classes

\*\*Not provided in all classes

**MATRIX ANALYSIS OF THE EDUCATIONAL CENSUS BY PROGRAM AREA**

Institution	Adult Basic Education	Adult High School Classes	Psychology and Human Relations	Vocational Training	Management & Supervisory Training	Family Health and Home Management	Recreation and Leisure Time Activities	The Fine Arts
Jefferson County Schools	X	X	X	X	X	X	X	X
Jefferson Area Vocational Schools	X	X	*	X	**			
Louisville Public Schools	X	X	X	X	X	X	X	X
Proprietary Business & Secretarial Schools			*	X	**			
Proprietary Industrial, Technical, & Trade Schools			*	X	**			
Proprietary Medical & Dental Assistants & Technical Schools			*	X	**			
Colleges & Universities								
o Jefferson Community College			X	X	X			X
o University of Louisville			X	X	X		X	X
o Bellarmine College			X	X	X		X	X
o Indiana University Southeast			X	X	X			X
o Spalding College			X					X

## CHAPTER V: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary

#### Introduction

This research project was conducted during the summer and fall of 1974. Its primary purpose was to develop a comprehensive evaluation model that could be used to revise and improve adult programs. A model containing three primary components was developed. The model contained a contextual (community needs) component, a curriculum development component, and a program evaluation component (see Figure 1).

The model required program evaluation and contextual evaluation data, which were used as inputs into the curriculum development process.

The following types of data were collected:

#### (1) Contextual Evaluation Component

- (a) Demographic data from students, teachers, respondents selected at random from the general community, and employers.
- (b) The awareness levels of citizens concerning adult education.
- (c) The adult program preference ratings for each of the eight areas developed in this study were obtained from the general community respondents, employers, adult education students and teachers.
- (d) The vocational training preferences of adult students, employers, and respondents from the general community.
- (e) Adult education program priorities were collected directly from teachers, and indirectly from secondary data, and the responses to other questions.

#### (2) Program Evaluation Component

- (a) Teacher and student self-ratings of adult programs (this

research was limited by funding constraints to the process elements only).

(b) Student evaluations of their teacher and class.

(c) Data on student motivations for enrolling in adult education programs.

Significance levels for all statistical tests was at alpha = .05. The null hypothesis was used in all significance tests.

### CONTEXTUAL COMPONENT

#### Demographic Data

1. The profile of both the respondents in the general community survey and adult education students indicated that they both were older, better educated, and more affluent than the median levels for the community as a whole (NOTE: adult basic education students were not included in this research).

2. No significant overall differences were found between the occupations held by the community respondents and adult students.

3. Significant differences were found between the income levels of the community respondents and adult students. Sixty percent of the adult students had family incomes of less than \$15,000 a year, while an almost equal percentage of the general community respondents had income in excess of that amount.

4. No significant differences were found between the educational levels of adult students and those of the respondents to the community survey.

5. The mean age of the adult students was significantly lower than the average of the general community survey respondents.

6. The average adult student drove between 4 1/2 and 6 1/2 miles (one-way) to reach the school where their adult class was taught.

7. The typical adult teacher was female, with four years of adult teaching experience, eight years of total teaching experience, about 16 years of formal education, and taught a class in basic adult education or the high school skills.

8. About one-half of the companies participating in the survey were engaged in either retailing or manufacturing.

#### Awareness and Communication of Information About Adult Education

1. Employers and respondents to the general community survey were both highly aware of adult education. More than nine out of ten individuals in each group indicated that they had seen, heard, or read about adult education.

2. Eighty percent of the employers and seventy-two percent of the general community respondents indicated that they obtained information about adult education from the newspaper. On the other hand, only 47% of the adult students reported that they had learned about adult education in this manner.

3. Among the adult students, the respondents from the general community, and employers no significant differences were found between the number of individuals in each of these three groups who got their information about adult programs from:

- (a) the newspaper
- (b) a friend

4. More than 30% of the three groups of respondents mentioned in #3 above obtained information about adult education either from a friend or the school catalog.

5. Significant differences were found between the number of adult students, general community respondents, and employers who obtained information about adult programs from:

158

- (a) the newspaper
- (b) their employer
- (c) radio or television

6. In each of the above cases adult students were found to be less likely to obtain information from these three media.

#### Adult Education Program Preferences

1. The mean preference ratings indicated that the following program areas were important, or very important to all four groups:

- (a) the basic learning skills
- (b) vocational training
- (c) family health and home management
- (d) management and supervisory training
- (e) psychology and human relations training

2. Employers were the only group of respondents who rated a program area unimportant, and they judged both the fine arts and recreation and leisure time activities in this manner.

3. The ratings of students, teachers, and community respondents tended to be favorable and very similar, but the responses of the employers were unfavorable and quite divergent from the other three groups.

4. All four groups participating in this research felt that management and supervisory training was a very important part of adult education.

5. In all cases, except the rating of management and supervisory training, the rank ordering of the mean scores followed this sequence:

- (a) Highest ranking-teachers
- (b) Second highest ranking-students
- (c) Third highest ranking-general community respondents
- (d) Fourth highest ranking-employers.

6. Significant differences between employer, student, teacher and general community program preference ratings were found in seven of the eight program areas. The ratings of management and supervisory training was the only area in which significant differences were not found between the ratings of the four groups.

7. Vocational training was rated as an important part of adult education by students, teachers, and respondents from the general community.

8. The basic learning skills and the high school subjects were rated highly by students, teachers, and the respondents from the general community.

9. A number of significant relationships were discovered which gave insight into the correlation of program preferences with selected demographic variables. These relationships have been stated in the form of behavioral principles, and are listed below:

(a) Educational level:

(1) The higher the educational level of the adult education students, the lower their preference for the basic learning skills and the high school subjects.

(2) The higher the educational level of adult education students, the higher their preferences for:

(a) the fine arts

(b) recreational and leisure time activities

(3) The higher the educational level of the general community respondents, the higher their preference ratings of the fine arts program area.

(b) Marital Status:

(1) The preference ratings of married residents of the community for the basic skill subjects were lower than those of single individuals.

(2) The preference ratings of single residents of the community for the fine arts area were higher than those of married individuals.

(c) Income level:

(1) Among the respondents in the general community survey, the higher their income, the lower their preference ratings for vocational education.

(d) The Number of Years of Adult Education Teaching Experience:

(1) In the following program areas, the longer a teacher had taught adult education, the higher their preferences for:

- (a) Vocational training
- (b) psychology and human relations training.
- (c) family health and home management.

(e) The Total Number of Years of Teaching Experience:

(1) In the following program areas, the longer a teacher had taught, the higher their preferences for:

- (a) vocational education
- (b) management and supervisory training

(f) The Total Number of Years of Formal Education:

(1) The more years of formal education completed by an adult education teacher, the higher their preference for programs dealing with the fine arts.

Vocational Training Preferences

1. A number of significant relationships between the vocational training preferences of respondents from the general community and selected demographic variables were discovered. They are listed below in the form of behavioral principles:

(a) Educational level:

The lower a persons educational level, the more likely they were to prefer training in electronics and practical nursing.

(b) Age:

(1) More younger people preferred training in computer programming.

(2) Older people preferred training in plumbing installation and repair.

(c) Income level:

(1) The higher the respondents income, the more likely it was that they would express a preference for training in:

(a) auto body repair

(b) carpentry

(c) plumbing installation and repair.

2. Analysis of the data revealed a number of significant relationships between the sex of adult students and their program preferences. However, the correlations tended to follow traditional sex role stereotypes (i.e. men expressed preferences for carpentry, and women for typing).

3. An inverse relationship was found between student educational levels and their preferences for training in:

(1) shorthand

(2) Typing

(3) practical nursing

(4) dental assisting.

4. Employers expressed preferences for adult vocational training classes in management and supervision, sales, and accounting.

## Adult Education Program Priorities

1. A rank ordering of the priorities of adult education teachers revealed that a need for additional instructional materials, and a more appropriate or adequate curriculum were their top concerns.

2. Employers indicated a need for more occupational and vocational training. Many of them indicated a critical need for skilled laborers with only a high school diploma, related job training, and little or no practical experience. A strong preference was also expressed for management and supervisory training.

3. An educational census revealed that the Louisville and Jefferson County School Systems were the only institutions in the area providing adult basic and secondary education, and family health and home management services to the community.

4. An analysis of census data (see the Survey of Secondary Data) revealed a number of areas in the county where median income and education levels were far below those found in the rest of the community. The majority of these areas had a larger proportion of black residents. The median income of blacks was more than \$2,000 less than the median for all residents of the county (\$7,611 vs \$9,814). Using an index based on education, income (median income for blacks), and the number of black residents, three primary target populations were identified. They were:

Group 1 - Census tracts with a median level of education of less than eight years and an income level below that of the black community as a whole (Tracts number 29, 57, and 58).

Group 3 - Census tracts with a median level of education between eight and 10.9 years and an income level below that of the black community as a whole (38 tracts).

Group 5- Census tracts with a median educational level between eleven and 11.9 years and an income level below that of the black community as a whole (6 tracts).

5. Census tracts in these categories were considered prime targets for adult basic and high school courses, and vocational training.

6. A survey of secondary data sources revealed that substantial employment opportunities were predicted in the following areas:

- (a) Home economics
- (b) Health occupations
- (c) Marketing and distribution
- (d) Business and office occupations
- (e) Trade and industrial occupations

7. The fastest growing segment of our population was found to be the 16-21 year old age group.

#### Program Evaluation Component

##### Teacher and Student Self-Rating Program Evaluations

1. None of the mean scores for the five major evaluation components (instructional materials, non-instructional services, curriculum, facilities, and school reorganization) reported by teachers and students were high enough to be clearly favorable. A favorable mean score was considered to be three or more, a mean score of less than two was considered unfavorable, and a mean score between two and three was considered acceptable.

2. Students rated only two of the 18 evaluation elements favorably (components are made up of a number of elements). These were elements relating to the availability of student counseling services and the general housekeeping and maintenance school facilities.

3. All of the student ratings were acceptable or better, but the teachers gave unfavorable ratings to their present pay scales and they expressed a strong preference for paid preparation time. All other evaluations by teachers were favorable.

4. The facilities employed for adult education received higher ratings from adult teachers than any of the other four components.

5. A number of significant correlations were discovered between the teacher ratings of their programs and selected demographic variables.

These relationships are listed below in the form of behavioral principles.

(a) The number of years of adult education teaching experience:

(1) The longer a teacher had taught adult education, the higher their ratings of the adequacy of these elements of their programs:

(a) The counseling of students by teachers and counselors

(b) Allowing students to work at their own pace

(c) The amount of consumable supplies available

(d) The availability of programmed learning aids

(e) Supervision of materials and methods by adult supervisors.

(f) Feedback on operation matters by adult supervisors to teachers

(2) The greater the number of years of adult teaching experience, the lower the ratings of the effectiveness of student evaluations in improving adult programs.

(b) The number of years of total teaching experience:

(1) The longer the respondent's total teaching career the higher their ratings of the adequacy of these elements of their programs:

- (a) Counseling of students by teachers and counselors
  - (b) Allowing students to work at their own pace
  - (c) Availability of vending and smoking facilities for breaks
  - (d) The amount of funding for adult programs
  - (e) The amount of consumable supplies
  - (f) Supervision of materials and methods by adult supervisors
- (2) The greater the number of years of total teaching experience, the lower the ratings of the effectiveness of student evaluations in improving adult programs.
- (c) The number of years of formal education:
- (1) The higher the number of years of formal education, the less adequate teachers felt their salaries to be.
  - (2) The higher the number of years of formal education, the higher teacher ratings of the adequacy of these elements of their programs:
    - (a) Teacher input into course development
    - (b) The need for a community advisory council.

#### Student Evaluations of Their Teacher and Class

1. The students, teacher and class ratings were consistently higher than the program evaluation ratings.

2. A number of significant correlations were discovered between the student ratings of their teacher and class, and selected student demographic variables: These relationships are listed below in the form of behavioral principles:

(a) One-way driving mileage:

- (1) As the one-way driving distance increased, the student ratings of teacher effectiveness decreased.
- (2) The longer the one-way driving distance of the student, the higher their ratings of the level of difficulty in the class.
- (3) The longer the one-way driving distance the more likely students were to believe that their class was not what they expected when they enrolled.

(b) Educational Level of the Student:

- (1) The more years of formal education completed by the student prior to enrolling in an adult class, the lower their ratings of teacher effectiveness.
- (2) The higher the educational level of the students, the more likely they were to rate their teachers as confusing and hard to follow.
- (3) The more years of formal education completed by the student, the lower their ratings of their interest levels in the class.

(c) Sex:

- (1) Males were more apt than females to rate their teachers as confusing and hard to follow
- (2) Males were more likely than females to rate their adult class as being too difficult for most of the students.
- (3) Males rated their interest levels in adult classes lower than females.

## Student Motivation Index

1. The following motivating factors received the highest student ratings as elements in their decision to enroll in adult courses.

- (a) Learn something new
- (b) Develop a hobby or leisure time activity
- (c) Exposure to new people and activities
- (d) A change of routine.
- (e) Do my present job better
- (f) Become a better citizen

2. A number of significant correlations were discovered between the students ratings of motivating factors, and selected student demographic variables. These relationships are listed below in the form of behavioral principles:

(a) Sex:

- (1) Female students gave higher ratings to a "desire to learn something new" than did male students.
- (2) Female students placed more emphasis on being "exposed to new people and activities" than males.
- (3) Females, more so than males, rated a desire for "a change in routine" as being an important reason for enrolling in adult education.

(b) Educational level of the students:

- (1) The fewer years of formal education completed by the students, the higher their ratings of "a desire to learn something new" as a factor in their decision to enroll in adult education.

- (2) The higher the educational level of the students, the higher their ratings of the importance of "developing a hobby or leisure time activity" as a factor in their decision to enroll in adult education.
- (3) The lower the level of education, the greater the importance of "learning something from my adult education class that would help me to do my present job better".
- (4) The lower the educational level of the student, the greater the importance of "a desire to be a better citizen" as a reason for enrolling in an adult class.
- (5) The lower the educational level of the student, the greater was the rated importance of "training to help me obtain a different job".

### CONCLUSIONS

#### Demographics

1. The respondents from the general community and adult students were older, better educated and more affluent than the general public.
2. Adult students worked at essentially the same types of jobs, but they were: younger, earned less money, and had about the same amount of education as the respondents from the general community survey.
3. Adult students drove an average of 4-1/2 miles to 6-1/2 miles (one-way) to attend classes.
4. The average adult education teacher did not have a masters degree, but they did have a considerable amount of practical experience.

#### Awareness

1. Both employers and respondents to the general community survey had very high awareness levels. 169

2. The newspaper was found to be the most important method of communication, with employers, the general public, and students.

3. Other media, such as radio and television and word of mouth were also important in facilitating communications about adult education.

#### Adult Education Program Preferences

1. The following program areas were important to all sectors of the community:

- (a) The basic learning skills
- (b) Vocational training
- (c) Family health and home management
- (d) Management and supervisory training
- (e) Psychology and human relations training

2. The fine arts, and recreation and leisure time activities were ranked as important by all of the respondents except the employers.

3. Management and supervisory training were found to be very important to all sectors of the community.

4. The closer people were to adult education the higher their preferences for all of the program areas. For example, the mean rating scores of teachers and students were higher than those of the general public and the employers.

5. The ratings of employers reflected their desires for adult programs that would benefit them directly (i.e., classes in management and supervisory training, and psychology and human relations).

6. Employers did not perceive adult vocational training as an important program area, even though they had listed a shortage of skilled laborers with related job training as one of their most critical employee needs.

7. The number of years of formal education was significantly correlated with the preferences of adult students and the general public for the fine arts. These preferences increased directly with the number of years of education completed by the respondent.

8. Adult students with higher educational levels were more apt to prefer classes in recreational and leisure time activities, and to be indifferent to classes dealing with the basic learning skills.

9. The more affluent members of the community had lower preferences for vocational training than did people with lower incomes.

10. Experienced teachers had higher preferences for vocational training, psychology and human relations training, and family health and home management.

#### Vocational Training Preferences

1. For those respondents from the general community who expressed a preference for vocational training, several important relationships were observed:

- (a) Electronics training and practical nursing was popular with people who had little formal education.
- (b) Computer programming was most popular among the young, and plumbing installation and repair was found to be most popular with older respondents.
- (c) Training in a craft such as carpentry, plumbing, or auto body repair was most popular with people in the higher income levels.

2. The vocational preference ratings revealed no evidence of changes in the occupational role stereotypes of adult students. The correlations between sex and training areas were consistent with current occupational role expectations.

3. Adult students with little formal education had greater preferences for training in shorthand, typing, practical nursing and dental assisting.

4. Employers expressed preferences for adult vocational training of employees in the areas of management and supervisory activities, sales, and accounting.

#### Adult Education Program Priorities

1. Teachers felt that a more appropriate or adequate curriculum was needed.

2. Teachers wanted more instructional materials.

3. Teachers wanted higher salaries and/or paid preparation time.

4. Many adult teachers did not have their masters degree (Mean = 16.03 years of formal education.)

5. Employers indicated a need for skilled laborers who had received their high school diplomas and had some related job training.

6. Employers wanted training for their employees in the areas of management and supervisory activities, psychology and human relations, sales, and accounting.

7. The city and county adult education programs were the only agencies in the community providing adult basic and secondary education, and family health and home management training.

8. Over forty census tracts in Jefferson County were identified as target areas for adult basic and secondary education, and vocational training.

9. Manpower forecasts indicated that substantial occupational opportunities would be available in the areas of:

- (a) Home economics
- (b) Health occupations
- (c) Marketing and distribution

- (d) Business and office occupations
- (e) Trade and industrial occupations

10. The need for adult education services is diverse and four types of potential students were identified:

- (a) The reasonably affluent and well educated person who wants to learn a hobby, or improve his mind through study of one of the fine arts.
- (b) The working, or lower middle class individual who is seeking courses that will help him progress on the job and to become a better person.
- (c) Individuals who see adult courses as a social activity, which allows them to meet new people, to try something a little different, and to merely "get out of the house for awhile". People in this category are more likely to be female than male.
- (d) The educationally and occupationally disadvantaged. People in this group are more likely to be black than white.

#### Teacher and Student Evaluations of their Adult Programs, Teachers, and Classes

1. The evaluations indicated that students and teachers rated their adult programs as adequate. However, none of mean scores for the five evaluation components was high enough to be classified as clearly favorable. The teacher and class evaluations tended to be higher than the program evaluations.

2. The rating system employed in these self-evaluations should be revised. All questions should be stated in either a positive or negative fashion, and scored accordingly.

3. The rating scales using strongly agree, agree, disagree, and strongly disagree should be revised; perhaps to include very good,

adequate, unsatisfactory, and very poor. A very good response would be assigned a scale value of four, adequate a three, and so on.

4. Experienced teachers seem to rate their programs higher than did those who were inexperienced. Teacher ratings were directly related to the number of years of adult teaching experience, and generally speaking the longer the teacher had taught, the higher the ratings of the adequacy of their programs. The exception being the teachers ratings of the effectiveness of student evaluations of teachers in improving adult programs.

5. The more years of formal education completed by the teacher, the less adequate they believed their salaries to be.

6. Adult students who drove long distances were more inclined to be unhappy with their adult teacher and class and rate them poorly, than were those who lived nearer the school.

7. Adult students with a significant amount of prior, formal education were more likely to rate their teacher and class poorly, than were those who had little formal education.

8. Male students tended to rate their teacher and class lower, than did females.

#### Student Motivation Index

1. The most important motivating factors can be grouped into three categories:

(a) Social Motives (new people and activities, a change of routine)  
These motives were most important to females.

(b) Entertainment Motives (develop a hobby or leisure activity)  
These individuals were well-educated.

- (c) Self-Actualization Motives (do my present job better, become a better citizen, learn something new). These individuals tended to have relatively low educational levels.

### Recommendations

1. Expand the operating components of the model to include procedures for cost-benefit and product evaluations.
2. Revise the self-evaluation checklists used in the student and teacher evaluations of adult programs, teachers, and classes. The questions should be stated in a consistently positive fashion, and the ratings modified. The ratings should be very good, adequate, unsatisfactory, and very poor.
3. The efforts extended to develop programs for basic adult and secondary education should be expanded in accordance with the census tracts (Groups 1, 3 and 5) identified in the secondary data search.
4. Teachers pay scales, the idea of paid preparation time, and the instructional materials budget should be reviewed to insure that adult programs continue to attract quality teachers with advanced degrees.
5. The general community was highly aware of adult education, but most indicated that they first learned about it from the newspaper. Many potential adult students do not read newspapers, therefore other media must also be used in conjunction with the newspaper. The power of word of mouth communication should not be underestimated.
6. The eight program areas listed below, were acceptable and recognizable to all of the survey groups. and their use for planning, budgeting, and programming purposes is recommended.

(a) The Basic high school subjects

(b) The Basic learning skills

- (c) Family health and home management
- (d) Recreation and leisure time activities
- (e) Basic psychology and human relations
- (f) The fine arts
- (g) Management and supervisory training

7. The management and supervisory training component of the adult program should be expanded to meet the expressed needs of the community.

8. The adult vocational training programs in the skilled labor classifications should be expanded in accordance with local manpower forecasts (See item 7, Appendix F).

9. The image of adult vocational training needs to be improved in such a way that employers will perceive these programs as a viable source of trained employees.

10. Adult vocational training for the disadvantaged should be expanded.

11. Teachers should be encouraged to participate in the revision of the adult curriculum.

12. Individuals charged with planning for adult education programs should recognize that the eight program areas serve different audiences.

This research suggested these four:

- (a) The reasonably affluent and well educated person who is interested in learning a hobby or studying the fine arts.
- (b) The working or lower middle class person who is seeking courses that will help him be a better citizen, or advance on his job.
- (c) Individuals who see adult courses as a social activity, which allows them to meet new people, to try something different, or to simply "get out of the house".

(d) The truly disadvantaged

13. The relationship between teaching experience and the self-evaluation ratings of teachers should be investigated further. If experienced teachers are biased in their ratings, this would limit the usefulness of this procedure.

14. Students who commute long distances and those with significant amounts of formal education were found to be very demanding of their adult teacher and class. Special efforts should be made to insure that teachers are aware of this phenomena and encouraged to try and make their classes interesting for all of the students.

15. Further research is needed in the area of the motivation of students attending adult classes. This study indicated at least three classes of motives:

- (a) Social motives
- (b) Entertainment motives.
- (c) Self-actualization motives

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APPENDICES

Appendix A

Adult Education Teacher Survey

The information requested on this form is for research purposes only. Tabulation of the information will insure that no person will be identified. Please respond to each item by checking (✓) the appropriate items, or by filling in the proper blanks.

1. Are you a full or part-time adult teacher?

Full time \_\_\_\_\_ Part-time \_\_\_\_\_

2. How many years have you taught adult education (including the 1973/74 school-year)?

\_\_\_\_\_

3a. How many total years of teaching experience will you have at the end of this year?

\_\_\_\_\_

3. How many years of formal education have you completed? (Example. Master's Degree - 17 years)

4. Check (✓) the description(s) listed below that most nearly describe the kind of adult education class(es) that you teach (check all that apply to you).

- a. \_\_\_\_\_ The basic learning skills
- b. \_\_\_\_\_ Basic high school subjects (diploma or GED)
- c. \_\_\_\_\_ Basic psychology and human relations
- d. \_\_\_\_\_ Vocational training

- e. \_\_\_\_\_ Recreation and/or leisure time activities
- f. \_\_\_\_\_ Family health and home management
- g. \_\_\_\_\_ The fine arts (art, music, drama)
- h. \_\_\_\_\_ General business and/or management training

5. Male \_\_\_\_\_ Female \_\_\_\_\_

6. Single \_\_\_\_\_ Married \_\_\_\_\_

### Adult Education Program Priorities

Listed below are five items that are important for improving adult education. Choose the one that you feel is needed the most in the program in which you teach, and mark a (1) beside of it. Choose the next most important and mark a (2) beside of it. Continue until you have ranked the items from (1-5).

- \_\_\_\_\_ Additional instructional materials (library books, films, audio-visual aids, etc.)
- \_\_\_\_\_ Better school buildings or equipment in which to conduct adult classes
- \_\_\_\_\_ More appropriate or adequate curricula (revision of curriculum, new courses, etc.)
- \_\_\_\_\_ Administrative reorganization to improve teacher-administration relations, working conditions, salary, etc.
- \_\_\_\_\_ More student services (personal counseling, health services, vocational counseling, testing, etc.)

### Teacher Self-Rating Program Evaluation

The purpose of this section is to determine your overall attitude towards the adult program in which you teach. Use the scale below to decide how much you agree or disagree with the statement, then circle the correct number for each question.

- 1. Strongly Agree
- 2. Agree
- 3. Disagree
- 4. Strongly Disagree

1. Library and reference materials (books, magazines, etc.) were not available when needed for classroom use  
 1 2 3 4
2. Audio-visual equipment was available, when needed, for classroom use  
 1 2 3 4
3. Teachers, and/or counselors, were available to adult students to give counseling when needed.  
 1 2 3 4
4. Personality, aptitude, achievement and occupational interests tests should be given to adult students when they enroll.  
 1 2 3 4
5. Adult classes are set up so that the students can learn at their own pace.  
 1 2 3 4

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6. Adult classes are not long enough for the teacher to properly cover the material.

1 2 3 4

7. Adult classes are small enough to allow for individualized attention to the learners' needs.

1 2 3 4

8. New adult courses are not developed from suggestions made by students and teachers.

1 2 3 4

9. New adult education courses should be developed at the suggestion of a community advisory committee.

1 2 3 4

10. New adult education courses should be developed as a result of formal research into community needs.

1 2 3 4

11. Buildings used for adult education do not have enough vending machines and/or smoking facilities for students to use during break time.

1 2 3 4

12. School buildings used for adult education do not have enough police protection to insure the safety of teachers and students.

1 2 3 4

13. Buildings used for adult education have enough parking spaces for teachers and students.

1 2 3 4

14. Buildings used for adult education classes are not adequately cleaned and maintained.

1 2 3 4

15. Buildings used for adult education classes are relatively free of outside noises (especially those loud enough to interfere with the learning process).

1 2 3 4

16. Buildings used for adult education are not properly heated/cooled, and this minimizes the student and teacher comfort.

1 2 3 4

17. Student evaluations of teachers are effective in improving the quality of adult programs.

1 2 3 4

18\*. Many adult teachers are not very good at their jobs.

1 2 3 4

---

19. Adequate funds are not available to purchase needed instructional materials.

1 2 3 4

20. Adequate amounts of consumable supplies are available to teachers for use in preparing class materials.

1 2 3 4

21. Adult students do not have enough good programmed learning materials to use in class.

1 2 3 4

22. Facilities used for adult programs have enough room for the preparation of teaching materials, and teacher study.

1 2 3 4

23. Teaching materials and teaching methods are not reviewed often enough by adult supervisors.

1 2 3 4

24. Written policies and procedures are usually available to guide the actions of teachers.

1 2 3 4

25. A formal orientation program is needed for new adult teachers.

1 2 3 4

\* Questions 1-18 were also answered by students

26. Adequate clerical and duplicating services are not available to adult teachers.

1 2 3 4

27. Salary schedules for adult teachers are not high enough to hold good people in the program year after year.

28. Teachers should have paid preparation time.

1 2 3 4

29. Administrators of adult programs do not encourage teacher feedback on operational matters (i.e, textbook adoption, budget, supplies, etc.)

1 2 3 4

P

Adult Education Program Preferences

Here is a list of the kinds of classes that could be taught in an adult education center. Use this scale and circle the number that shows how important you feel each one is to the adults in your community.

1--Extremely Important-A very large number of adults should enroll

2--Important-Many adults should enroll

3--Unimportant-Few adults should enroll

4--Not Important at all-Almost no adults should enroll

a. The basic learning skills (reading, writing, arithmetic)

1 2 3 4

b. The basic high school subjects (classes to obtain a diploma, or to pass a high school equivalency test)

1 2 3 4

c. Psychology - human relations (classes in meeting and dealing with other people and yourself)

1 2 3 4

d. Vocational training (classes to help you get a better job)

1 2 3 4

e. Recreation and leisure time (classes in any of the activities that people could engage in for fun, if they had the proper training--outdoor sports, hobbies, games, etc.)

1 2 3 4

f. Family health and home management (classes to help adults become better homemakers, shoppers, parents, and money managers--for example, cooking, sewing, upholstering, first-aid and personal health)

1 2 3 4

g. The fine arts (classes in art, music, creative writing, etc.)

1 2 3 4

h. Management and supervisory training (classes in accounting, marketing, management, business research)

1 2 3 4

Appendix B

Adult Education Student Survey

The information requested on this form is for research purposes only. I will insure that no person will be identified.

Are you:

1. Male  Female

2. Single  Married

3. What is your present full-time job (please check (✓) the correct block)?

Professional		Service worker	
Manager/Self-employed		Laborer	
Sales worker		Farmer/Farm manager	
Craftsman/Foreman		Housewife	
Vehicle operator/Manufacturing & assembly worker		Unemployed/Retired	

Vocational Preferences

4. Here is a list of job training classes that could help people get a promotion, or a better job. How many do you think would help you? Mark your answers with a check (✓) in the correct column. Do not check an item unless you think you would be willing to pay the fee (\$10-\$20) and complete the class.

Accounting & Bookkeeping		Human Relations in Business	
Computer Programming & Operation		Auto Body Repair	
Shorthand		Carpentry	
Typing		Electronics	
Business Machines		Brick Laying & Concrete Finishing	
Office Procedure		Residential Electrical Wiring	
Real Estate Agent		Welding	
Business Management		Appliance Repair (radio & TV, etc)	
Advertising		Heating & Air Conditioning	

Salesmanship		Floristry & Nursery Work	
Business Research		Plumbing Installation & Repair	
Machine Shop		Dental Assistant	
Practical Nurse		Other (specify)	
Medical Secretary			
None of these, because			

5. How many years of school have you completed? (Example: Person One completed 8th grade, Person Two completed junior year of high school: One 8 Two 11.)

6. How far did you travel to attend your last class (one-way miléage)?

7. What was the name of the adult class you were in last?

8. How did you learn that the adult class you signed up for was being taught? (Check  all that apply)

School catalogue		Friend	
Newspaper		Employment Service	
Employer		Radio, TV	

9. How old are you? \_\_\_\_\_

10. Check () the block that shows how much money your family earned last year. (If you are married include both husband and wife's earnings--if single include only your own income.)

Under 4,000	4,000-5,999	6,000-9,999	10,000-14,999	Over 15,000
-------------	-------------	-------------	---------------	-------------

### Adult Education Program Preferences

11. Here is a list of the kinds of classes that could be taught in an adult education center. Use this scale and circle the number that shows how important you feel each one would be to the adults in your community

- 1--Extremely Important-A very large number of adults should enroll
- 2--Important-Many adults should enroll
- 3--Unimportant-Few adults should enroll
- 4--Not Important at all-Almost no adults should enroll

Example: Classes in the basic learning skills (Person One feels they are important, Person Two feels they are unimportant.)

One
Two  
 1 2 3 4                      1 2 3 4

- a. The basic learning skills (reading, writing, arithmetic)  
1 2 3 4
- b. The basic high school subjects (classes to obtain a diploma, or to pass a high school equivalency test)  
1 2 3 4
- c. Psychology - human relations (classes in meeting and dealing with other people and yourself)  
1 2 3 4
- d. Vocational training (classes to help you get a better job)  
1 2 3 4
- e. Recreation and leisure time (classes in any of the activities that people engage in for fun--outdoor sports, hobbies, games, etc.)  
1 2 3 4
- f. Family health and home management (classes to help adults become better homemakers, shoppers, parents, and money managers--for example, cooking, sewing, upholstering, first aid and personal health)  
1 2 3 4
- g. The fine arts (classes in art, music, creative writing, etc.)  
1 2 3 4

- h. Management and supervisory training (classes in accounting, marketing, management, business research)

1 2 3 4

### Student Self-Rating Program Evaluation

The purpose of this section is to determine your attitude towards the adult program in which you were a student. Use the scale below to decide how much you agree or disagree with each statement, then circle the correct number for that question.

- 1. Strongly Agree
- 2. Agree
- 3. Disagree
- 4. Strongly Disagree

- 1. Library and reference material (books, magazines, etc) were not available when needed for classroom use.

1 2 3 4

- 2. Audio-visual equipment was available, when needed, for classroom use.

1 2 3 4

- 3. Teachers, and/or counselors, were available to adult students to give counseling when needed.

1 2 3 4

- 4. Personality, aptitude, achievement and occupational interests tests should be given to adult students when they enroll.

1 2 3 4

- 5. Adult classes are set up so that the students can learn at their own pace

1 2 3 4

- 6. Adult classes are not long enough for the teacher to properly cover the material.

1 2 3 4

- 7. Adult classes are small enough to allow for individualized attention to the learners' needs.

1 2 3 4

8. New adult courses are not developed from suggestions made by students and teachers.

1 2 3 4

9. New adult education courses should be developed at the suggestion of a community advisory committee.

1 2 3 4

10. New adult education courses should be developed as a result of formal research into community needs.

1 2 3 4

11. Buildings used for adult education do not have enough vending machines and/or smoking facilities for students to use during break time.

1 2 3 4

12. School buildings used for adult education do not have enough police protection to insure the safety of teachers and students.

1 2 3 4

13. Buildings used for adult education have enough parking spaces for teachers and students.

14. Buildings used for adult education classes are not adequately cleaned and maintained.

1 2 3 4

15. Buildings used for adult education classes are relatively free of outside noises (especially those loud enough to interfere with the learning process.)

1 2 3 4

16. Buildings used for adult education are not properly heated/cooled, and this minimizes the student and teacher comfort.

1 2 3 4

17. Student evaluations of teachers are effective in improving the quality of adult programs.

1 2 3 4

18. Many adult teachers are not very good at their jobs.

1 2 3 4

Teacher and Class Evaluation

The purpose of this section is to find out what you think about your last adult education teacher and class. Answer these questions by circling one of the four choices:

1. Strongly Agree with this statement
2. Agree with this statement
3. Disagree with this statement
4. Strongly Disagree with this statement

1. We were not told at the beginning of class what we would study in this course.

1 2 3 4

2. Our teacher did a good job in teaching the subjects we covered.

1 2 3 4

3. Our teacher did not give the students enough chances to take part in classroom discussions.

1 2 3 4

4. Our teacher used many different methods (lectures, films, discussions, etc) to present the material we studied.

1 2 3 4

5. Our teacher was confusing and it was hard to understand what he was talking about.

1 2 3 4

6. Our teacher was neatly and correctly dressed when he/she came to class.

1 2 3 4

7. Our teacher did not have enough knowledge of the subject to present it properly.

1 2 3 4

8. Our teacher was willing to give individual help to students who needed it.

1 2 3 4

9. Our teacher was often late to class.

1 2 3 4

10. Our teacher often kept the class past its scheduled time for dismissal.

1 2 3 4

11. Our class was very interesting.

1 2 3 4

12. Our class was too difficult for most of the students.

1 2 3 4

13. Our class was very informative, and I learned a lot about the subject

1 2 3 4

14. Our class was not well organized.

1 2 3 4

15. Our class was about the right size (not too small, or too large).

1 2 3 4

16. Our class was not what I expected it to be, based on the information I had when I signed up.

1 2 3 4

Motivation Index

Here are some reasons others have given for enrolling in adult classes. Show how important each reason was to you by circling a number from the scale below:

- 1. Very Important to me when I enrolled
- 2. Important to me when I enrolled
- 3. Unimportant to me when I enrolled
- 4. Not Important at all to me when I enrolled

1. I obtain a sense of satisfaction when I learn something new.

1 2 3 4

2. I want to learn things that will help me become a better citizen.

1 2 3 4

3. I want to learn things that will help me do my present job better.  
1 2 3 4
4. I want to learn things that will help me develop a hobby or leisure time activity.  
1 2 3 4
5. I want to learn things that will help me get along better with the people I work with.  
1 2 3 4
6. I want to train myself for a new or different job.  
1 2 3 4
7. I want to prepare for a second (part-time) job.  
1 2 3 4
8. I want to learn things that will help me be a better parent.  
1 2 3 4
9. I want to learn things that will help me save money in the operation of my home.  
1 2 3 4
10. I want to prepare for more education in the future.  
1 2 3 4
11. I want to learn things that will help me earn a promotion on my present job.  
1 2 3 4
12. I like to meet and associate with new people and be involved in new activities.  
1 2 3 4
13. I felt it would be a welcome change from my regular routine.  
1 2 3 4
14. I want to become a cultured person with a better knowledge of art, music, drama, and creative writing.  
1 2 3 4

15. I want to learn things that will help me understand the way I feel about myself and other people.

1 2 3 4

16. I want to learn things that will increase my yearly income.

1 2 3 4

# Jefferson County Board of Education

## ADULT EDUCATION CENTER

411 PRESTON STREET • LOUISVILLE, KENTUCKY 40213  
TELEPHONE 361-1364



RICHARD VANHOUSE  
*Superintendent*

JAMES I. FARMER  
*Associate Superintendent  
of Instruction*

CURTIS W. WHITMAN  
*Director of  
Continuing Education*

June 28, 1974

Dear Adult Education Student:

The University of Kentucky has been asked to do a study of the adult education program in Jefferson County and you were selected to take part in the study. One of the most important parts of this study is to find out what you, the student, think about our program.

The information obtained from you will be used by the project staff to prepare a report, which we believe will aid us in improving our program. I feel this study is of great importance and I strongly urge you to cooperate. The director of the project has indicated that your responses will be held in strict confidence, and the final report will be the only use made of them.

Please help us to improve our program by completing and returning the enclosed questionnaire as soon as possible. To aid you in returning the form to the University, a self addressed postage paid envelope is enclosed. Thank you for your cooperation.

Sincerely,

Curtis W. Whitman  
Director, Continuing Education

CWW:jf

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Appendix C

School Census

The information requested on this form is for research purposes only. Tabulation of the information will insure that no person will be identified. Please respond to each item by circling the appropriate items, or by filling in the proper blanks.

Please indicate whether classes of the type defined below are commonly offered at your school.

1. Classes in the basic learning skills (skills necessary for learning, such as reading, writing, speaking, and arithmetic)

Yes \_\_\_\_\_ No \_\_\_\_\_

1a. If yes, average enrollment \_\_\_\_\_

2. Classes in the basic high school subjects necessary to obtain a diploma, or to pass a high school equivalency test (adult courses such as English, history, mathematics, science, etc.)

Yes \_\_\_\_\_ No \_\_\_\_\_

2a. If yes, average enrollment \_\_\_\_\_

3. Classes in basic psychology and human relations (skills necessary for meeting and dealing with people, including family, friends, and fellow workers)

Yes \_\_\_\_\_ No \_\_\_\_\_

3a. If yes, average enrollment \_\_\_\_\_

4. Classes dealing with recreation and leisure time activities (possible subjects in this area would be: hunting, boating, physical fitness, swimming, all other outdoor and indoor sports, hobbies, crafts, and other activities people could engage in for fun, if they received the proper training)

Yes \_\_\_\_\_ No \_\_\_\_\_

4a. If yes, average enrollment \_\_\_\_\_

5. Classes in family health and home management (classes for adults who are interested in nutrition, first aid, cooking and baking, home health care, sewing, and other subjects that would help adults become better homemakers, shoppers, parents and money managers)

Yes \_\_\_\_\_ No \_\_\_\_\_

5a. If yes, average enrollment \_\_\_\_\_

6. Classes to help us appreciate the fine arts (classes involving subjects such as art, painting, sculpture, music, playing musical instruments, creative writing, drama, etc.)

Yes \_\_\_\_\_ No \_\_\_\_\_

6a. If yes, average enrollment \_\_\_\_\_

7. Classes in management and supervisory training (classes dealing with record-keeping, managing people, marketing, advertising, business research, and basic management)

Yes \_\_\_\_\_ No \_\_\_\_\_

7a. If yes, average enrollment \_\_\_\_\_

8. Please consider carefully the following types of job training, and indicate if they are presently taught at your school on a regular basis, and their average annual enrollment.

Type of Training	Average Annual Enrollment	Increasing or Decreasing Enrollment
Accounting and Bookkeeping		
Computer Programming & Operation		
Shorthand		
Typing		
Business Machines		
Office Procedures		
Real Estate Agent (class to help pass the state realtors examination)		
Business Management		
Advertising		
Salesmanship and Customer Relations		
Business Research		
Human Relations in Business		

Type of Training	Average Annual Enrollment	Increasing or Decreasing Enrollment
Auto Body Repair		
Carpentry		
Electronics		
Brick Laying and Concrete Finishing		
Residential Electrical Wiring		
Welding		
Appliance Repair (including radio & TV)		
Heating & Air Conditioning		
Floristry and Nursery Work		
Machine Shop		
Practical Nurse		
Medical Secretary		
Dental Assistant		
Other, please Specify _____		

9a. Are the above types of classes included in a program leading towards a degree?

Yes \_\_\_\_\_ No \_\_\_\_\_

9b. If yes, what is the title of the degree (please write out):

\_\_\_\_\_

9c. If yes, who is the accrediting agency (please write out):

\_\_\_\_\_

Appendix D

Adult Education General Community Survey

(Adult education classes are any classes offered to people over 16 years of age, who are not full-time students. Exceptions are those classes leading to a degree from a college, junior college, or technical school.)

The information requested on this form is for research purposes only. I will insure that no person will be identified.

Are you:

Married \_\_\_\_\_ Single \_\_\_\_\_

Directions:

If you are married, I would like to have information about both you and your husband or wife. Each of you check (✓) an answer by using the separate spaces provided (H-Husband, W-Wife). If you are single, check ( ) only the column marked single (S).

1. What is your present full-time job? (If married, check two)

	H	W	S		H	W	S
Professional				Service Worker			
Manager/Self-employed				Laborer			
Sales worker				Farmer/Farm manager			
Craftsman/Foreman				Housewife			
Vehicle operator/Manufacturing & Assembly worker				Unemployed/Retired			
				Clerical			

Vocational Preferences

2. Here is a list of job training classes that could help you get a promotion or a better job. If you could pay \$10-\$20 and enroll in one or more of these classes, how many of these do you think would help you get a better job? Mark your answers with a check (✓) in the correct column (H-Husband, W-Wife, S-Single). Do not check more than one unless you think you would pay for, and complete all of them.

	H	W	S		H	W	S
Accounting & Bookkeeping				Real Estate Agent			
Computer Programming & Operation				Business Management			
Shorthand				Advertising			
Typing				Salesmanship			

	H	W	S		H	W	S
Business Machines				Business Research			
Office Procedure				Human Relations in Business			
Auto Body Repair				Floristry & Nursery Work			
Carpentry				Plumbing Installation & Repair			
Brick Laying & Concrete Finishing				Practical Nurse			
Electronics				Machine Shop			
Residential Electrical Wiring				Medical Secretary			
Welding				Dental Assistant			
Appliance Repair			L	Other (specify)			
Heating & Air Conditioning							

None of these, because \_\_\_\_\_

3. How many years of school have you completed? (Example: Husband completed 8th grade, wife completed junior year of high school: Husband 8 Wife 11)

Husband \_\_\_\_\_ Wife \_\_\_\_\_ Single \_\_\_\_\_

4. Have you ever attended an adult education class?

Yes \_\_\_\_\_ No \_\_\_\_\_ Husband \_\_\_\_\_ Wife \_\_\_\_\_ Single \_\_\_\_\_  
 Yes \_\_\_\_\_ No \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_

5. Have you ever read a brochure, seen an ad or heard anyone talk about adult education classes?

Yes \_\_\_\_\_ No \_\_\_\_\_ Husband \_\_\_\_\_ Wife \_\_\_\_\_ Single \_\_\_\_\_  
 Yes \_\_\_\_\_ No \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_

5a. If yes, check (✓) all the blocks that tell where you read, saw, or heard about an adult education class.

	H	W	S		H	W	S
School catalogue				Friend			
Newspaper				Employment Service			
Employer				Radio, TV			

6. How old are you?

Husband \_\_\_\_\_ Wife \_\_\_\_\_ Single \_\_\_\_\_

7. Check (✓) the block that shows how much money your family earned last year. (If you are married include both husband and wife's earnings-- if single include only your own income.)

Under	4,000-	6,000-	10,000-	Over
4,000 _____	5,999 _____	9,999 _____	14,999 _____	15,000 _____

Adult Education Program Preferences

8. Here is a list of the kinds of classes that could be taught in an adult education center. Use this scale and circle the number that shows how important you feel each one would be to the adults in your community.

1--Extremely Important-A very large number of adults would enroll in this type of class

2--Important-Many adults would enroll in this type of class

3--Unimportant-Few adults would enroll in this type of class

4--Not Important at all-Almost no adults would enroll in this type of class

Example: Classes in the basic learning skills (husband feels they are important, wife feels they are unimportant)

Husband	Wife	Single
1 ② 3 4	1 2 ③ 4	1 2 3 4

a. The basic learning skills (reading, writing, arithmetic)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

b. The basic high school subjects (classes to obtain a diploma, or to pass a high school equivalency test)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

c. Psychology - human relations (classes in meeting and dealing with other people and yourself)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

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d. Vocational Training (classes to help you get a better job)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

e. Recreation and leisure time (classes in any of the activities that people could engage in for fun, if they had the proper training--outdoor sports, hobbies, games, etc.)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

f. Family health and home management (classes to help adults become better homemakers, shoppers, parents, and money managers--for example, cooking, sewing, upholstering, first aid and personal health)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

g. The fine arts (classes in art, music, creative writing, etc.)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

h. Management and supervisory training (classes in accounting, marketing, management, business research)

Husband	Wife	Single
1 2 3 4	1 2 3 4	1 2 3 4

9. The city and county school systems would like to have your suggestions for new adult education classes that interest you. List as many as you can in the spaces provided:

Husband: 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Wife: 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Single: 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

UNIVERSITY OF KENTUCKY

LEXINGTON KENTUCKY 40506

COLLEGE OF EDUCATION  
VOCATIONAL EDUCATION

June 17, 1974

Dear Resident:

The University of Kentucky has been asked to do a study of the adult education needs of Jefferson County, and your name was selected as a participant. One important part of this study is to find out what you, the taxpayer, think about adult education. I am talking about all classes taken by adults who are not full-time students, with the exception of classes leading to a degree from a college, junior college, or technical school.

Most adult classes of this type are made available to the community by the city and county school systems. Both the city and county want to improve their programs, and they need your help. By completing and returning this questionnaire you will be helping these officials spend your tax money in ways that reflect what the community wants. It doesn't matter whether you have taken an adult education course or not. What is important is your opinion, and everyone has an opinion.

Please help us improve your adult programs by completing and returning the enclosed questionnaire as soon as possible. For your convenience a self-addressed, postage paid envelope is enclosed to aid you in returning the form. Thank you for your cooperation, and I will look forward to hearing from you.

Yours truly,

*Tom Wilkerson*

Tom Wilkerson  
Project Director

/js

Enclosures

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Appendix E

Adult Education Employer Survey

(Adult education classes are any classes offered to people over 16 years of age, who are not full-time students. Exceptions are those classes leading to a degree from a college, junior college, or technical school.)

Directions:

The information requested on this form is for research purposes only. Tabulation of the information will insure that no person, or organization, will be identified. Please respond to each item by checking (✓) the appropriate items, or by filling in the proper blanks.

1. Have you ever read a brochure, seen an ad, or heard anyone talk about adult education classes? \_\_\_\_\_
- 1a. If yes, check (✓) all the blocks that tell where you read, saw, or heard about an adult education class.

School catalogue		Friend	
Newspaper		Employment Service	
Employer		Radio, TV	

Vocational Preferences

2. Vocational training is an important part of adult education. Listed below are some of the training programs offered in adult centers at a cost of \$10 to \$30. Look at the list and check (✓) in column (1) any of the courses in which your company might wish to have all, or some, of your employees take part--if you would not want them to take part leave column (1) blank. For those items that you check in column (1), write in column (2) the number of employees per year that you would want to enroll.

	1	2		1	2
Accounting & Bookkeeping			Salesmanship		
Computer Programming & Operation			Business Research		
Shorthand			Human Relations in Business		
Typing			Auto Body Repair		
Business Machines			Carpentry		
Office Procedure			Electronics		
Real Estate Agent			Brick Laying & Concrete Finishing		

	1	2		1	2
Business Management			Residential Electrical Wiring		
Advertising			Welding		
Appliance Repair (including radio and TV)			Practical Nurse		
Floristry & Nursery Work			Dental Assistant		
Heating & Air Conditioning			Medical Secretary		
Plumbing Installation & Repair			Other (specify)		
Machine Shop					

None of these, because \_\_\_\_\_

3. What are your three most critical employee needs? By critical, I mean trained employees who possess a skill that is in short supply in your area. This would include white and blue collar jobs for both male and female employees.

a. Type of job: \_\_\_\_\_

(1) Number of Employees needed \_\_\_\_\_

(2) Formal training required (Check (✓) the correct item)

(a) College degree \_\_\_\_\_

(b) Some college \_\_\_\_\_

(c) High school & related job training \_\_\_\_\_

(d) High school (no job training) \_\_\_\_\_

(e) Apprenticeship \_\_\_\_\_

(f) Other vocational training \_\_\_\_\_

(3) Required number of years of related work experience (check (✓) the correct item):

(a) None \_\_\_\_\_

(b) 1 \_\_\_\_\_

(c) 2-3 \_\_\_\_\_

(d) 4-5 \_\_\_\_\_

(e) 6 or more \_\_\_\_\_

b. Type of job: \_\_\_\_\_

(1) Number of employees needed \_\_\_\_\_

(2) Formal training required (Check (✓) the correct item)

(a) College degree \_\_\_\_\_

(b) Some college \_\_\_\_\_

(c) High school & related job training \_\_\_\_\_

(d) High school (no job training) \_\_\_\_\_

(e) Apprenticeship \_\_\_\_\_

(f) Other vocational training \_\_\_\_\_

(3) Required number of years of related work experience (check (✓) the correct item):

- (a) None \_\_\_\_\_
- (b) 1 \_\_\_\_\_
- (c) 2-3 \_\_\_\_\_
- (d) 4-5 \_\_\_\_\_
- (e) 6 or more \_\_\_\_\_

c. Type of job: \_\_\_\_\_

(1) Number of employees needed \_\_\_\_\_

(2) Formal training required (check (✓) the correct item)

- (a) College /degree \_\_\_\_\_
- (b) Some college \_\_\_\_\_
- (c) High school & related job training \_\_\_\_\_
- (d) High school (no job training) \_\_\_\_\_
- (e) Apprenticeship \_\_\_\_\_
- (f) Other vocational training \_\_\_\_\_

(3) Required number of years of related work experience (check (✓) the correct item):

- (a) None \_\_\_\_\_
- (b) 1 \_\_\_\_\_
- (c) 2-3 \_\_\_\_\_
- (d) 4-5 \_\_\_\_\_
- (e) 6 or more \_\_\_\_\_

### Adult Education Program Preferences

4. Here is a list of the kinds of classes that could be taught in an adult education center. As an employer, use this scale and circle the number that shows how important you feel each one would be to the adults in your community in terms of job performance and morale.

1--Extremely Important-A very large number of my employees should take a course of this type

2--Important-Many of my employees should take a course of this type

3--Unimportant-Very few of my employees should take a course of this type

4--Not Important at all-Almost none of my employees should take a course of this type

- a. The basic learning skills (reading, writing, arithmetic) 1 2 3 4
- b. The basic high school subjects (classes to obtain a diploma, or to pass a high school equivalency test) 1 2 3 4
- c. Psychology - human relations (classes in meeting and dealing with other people and yourself) 1 2 3 4
- d. Vocational Training (classes to help you get a better job) 1 2 3 4

- e. Recreation and leisure time (classes in any of the activities that people could engage in for fun, if they had the proper training--outdoor sports, hobbies, games, etc.) 1 2 3 4
  - f. Family health and home management (classes to help adults become better homemakers, shoppers, parents, and money managers--for example, cooking, sewing, upholstering, first aid and personal health) 1 2 3 4
  - g. The fine arts (classes in art, music, creative writing, etc.) 1 2 3 4
  - h. Management and supervisory training (classes in accounting, marketing, management, business research, etc.) 1 2 3 4
5. How many employees (including management personnel) are typically on your payroll?
- \_\_\_\_\_

6. What was the amount of your company's total sales (in dollars) in calendar year 1973?

\_\_\_\_\_

7. Please check (✓) the space that describes the type of business in which your company is engaged.

- |  |   |
|--|---|
| <input type="checkbox"/> a. Manufacturing                            | <input type="checkbox"/> f. Office Businesses and Professions (selling a service rather than a product) |
| <input type="checkbox"/> b. Retail Business                          | <input type="checkbox"/> g. Hotels and Restaurants  |
| <input type="checkbox"/> c. Wholesale Business                       | <input type="checkbox"/> h. Natural Resource Industry (agriculture, mining, timber, water power)        |
| <input type="checkbox"/> d. Warehouse                                | <input type="checkbox"/> i. Transportation and Communication  |
| <input type="checkbox"/> e. Savings and Loan, Banks, Trust Companies | <input type="checkbox"/> j. Federal, State, Local Government  |
|  | <input type="checkbox"/> k. Construction and Building   |

UNIVERSITY OF KENTUCKY

LEXINGTON, KENTUCKY 40506

COLLEGE OF EDUCATION  
VOCATIONAL EDUCATION

June 24, 1974

Dear Sir:

The University of Kentucky has been asked to do a study of the adult education needs of Jefferson County and your company has been selected as a participant. One important part of this study is to find out what the business community thinks about adult education. When I speak of adult education I am talking about all classes taken by adults who are not full-time students, with the exception of classes leading to a degree from a college, junior college, or technical school.

Most adult classes of this type are made available to the community by the city and county school systems. Both the city and county want to improve their programs, and they need your help. By completing and returning this questionnaire you will be helping these officials spend your tax money in ways that reflect what the community wants. It does not matter whether you have taken an adult education course or not. What is important is your opinion as a representative of your company and we hope you will share your views with us.

Please help us improve your adult programs by completing and returning the enclosed questionnaire as soon as possible. For your convenience a self-addressed, postage paid envelop is enclosed to aid you in returning the form. Thank you for your cooperation and I will look forward to hearing from you.

Sincerely,

*Tom Wilkerson*

Tom Wilkerson  
Project Director

FTW/lf

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UNIVERSITY OF KENTUCKY

LEXINGTON, KENTUCKY 40506

COLLEGE OF EDUCATION  
VOCATIONAL EDUCATION

August 12, 1974

Dear Citizen:

Your name was selected at random to participate in a public opinion survey of the adult education needs of Jefferson County. As of this date, only about 10% of the individuals selected have responded.

Please take a few minutes and complete this form. As a citizen your opinions are important to help educators provide the kind of training the community wants and needs for its adults.

In the event the original questionnaire has been misplaced, I am enclosing a second copy. I will eagerly await your reply; however, if you have already returned the form please ignore this request.

Yours truly,

*Tom Wilkerson*

Tom Wilkerson  
Project Director

TW/sm

Enclosure

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APPENDIX F

SECONDARY DATA SURVEY OF THE COMMUNITY

1. What is the total population of the area served by your present adult programs?

723,500 in 1974\*

2. What has been the total percentage change in population during the 1960 to 1970 period?

+13.8%\*

2a. What has been the total percentage change in the non-white population during the 1960 to 1970 period?

+23.3%\*

2b. Why has this change occurred? Net immigration from surrounding rural areas to the central suburbs.

3.\* Present Population characteristics by census tract  
(Source: 1970 Census of Population and Housing, U.S. Dept of Commerce, May, 1972)

Tract No.	Number of Non-White	Md Income	Md Ed Level	Avg No/Household
0001	0012	07883	09.7	3.22
0002	0111	16094	08.7	3.19
0003	0217	07298	09.0	3.25
0004	1495	09537	10.5	3.37
0005	0016	06861	08.7	3.13
0006	2692	06929	09.7	3.20
0007	3093	07773	10.7	3.44
0008	1991	07755	10.8	3.74
0009	3130	08057	10.9	3.22
0010	4554	07085	10.9	3.65
0011	5006	09209	11.7	3.38
0012	2837	10169	12.0	3.44
0013	1301	07468	11.0	4.35
0014	6221	04309	11.0	4.35
0015	5067	07560	09.8	3.45
0016	3096	07899	09.3	3.35
0017	3791	08154	09.7	3.75
0018	3014	05780	09.1	3.34
0019	2596	04269	09.8	2.72
0020	3019	05067	09.4	2.71

\* (Source: 1970 Census of Population and Housing, U.S. Dept. of Commerce, May, 1975)

Tract No.	Number of Non-White	Md Income	Md Ed Level	Avg No/Household
0021	0301	06699	08.6	3.21
0022	0110	05423	08.5	3.38
0023	0645	06039	08.3	3.27
0024	2485	04677	08.7	2.47
0025	1676	03729	08.6	2.35
0026	2028	05968	08.6	3.07
0027	4122	05195	08.9	2.86
0028	0427	07153	08.9	2.72
0029	0153	02750	07.8	2.02
0030	1662	02356	07.3	2.43
0031	0355	03227	08.7	2.16
0032	0714	02783	08.3	2.13
0033	1591	04486	08.2	2.48
0034	0562	05250	08.9	2.91
0035	1775	02790	08.8	3.21
0036	0216	08556	09.4	2.84
0037	0476	06989	08.8	2.68
0038	0000	07935	08.9	2.78
0039	0000	09055	09.8	2.90
0040	0000	08574	09.6	2.78
0041	0004	08274	09.7	3.36
0042	000	08727	10.3	3.07
0043	0176	06760	09.8	2.97
0044	0006	09492	11.5	2.42
0045	0089	09985	10.3	3.10
0046	0000	10487	12.0	2.62
0047	0028	00000	08.4	1.35
0048	0010	03763	08.8	1.74
0049	0295	05833	11.3	1.23
0050	0392	06935	10.4	1.60
0051	0240	06313	10.3	1.85
0052	0048	06055	11.0	1.85
0053	0077	06711	12.2	1.89
0054	0001	06528	12.2	1.89
0055	1344	07008	08.4	2.81
0056	0018	07972	10.1	2.83
0057	0118	05155	07.9	3.01
0058	0035	0000	07.1	2.45
0059	2046	03206	08.6	2.18
0060	1363	04093	08.5	2.87
0061	0290	04757	08.4	2.41
0062	3294	03913	09.0	2.70
0063	0263	07118	08.7	2.93
0064	0009	07679	08.9	2.54
0065	0812	06772	08.9	2.94
0067	0623	06122	08.9	2.87
0068	0155	07911	08.9	2.82

Tract No.	Number of Non-White	Md Income	Md Ed Level	Avg No/Household
0069	0004	07683	09.0	2.79
0070	0004	08853	09.0	2.66
0071	0074	07718	09.5	2.60
0072	0057	07400	10.2	2.70
0073	0003	07403	08.4	3.19
0074	0018	09111	09.8	2.69
0076	0330	10186	12.4	2.45
0077	0030	11558	13.6	2.85
0078	0000	10473	12.4	2.58
0079	0002	08733	12.2	2.49
0080	0095	06359	08.8	2.88
0081	0087	06891	08.7	2.74
0082	0025	10143	12.6	2.01
0083	0002	10646	12.5	2.56
0084	0010	09540	12.1	2.59
0085	0007	12689	12.8	2.34
0086	0004	17705	16.2	2.80
0087	0013	21064	15.2	2.96
0088	0007	13543	12.7	2.46
0089	0049	12270	12.6	2.85
0090	0013	10490	12.1	3.10
0091	0001	10022	11.2	3.10
0092	0000	09000	09.7	3.03
0093	0004	11075	12.1	3.06
0094	0001	08481	10.2	3.01
0095	0000	13380	12.1	3.68
0096	0008	16937	13.0	3.14
0097	0004	11882	12.3	2.94
0105	0000	18912	12.8	3.71
0106	0000	07583	12.3	2.25
0107	0000	13883	12.5	3.69
0108	0001	13128	12.6	3.34
0109.01	0037	11797	12.4	2.98
0109.02	0000	11974	12.5	3.40
0110	0022	13035	12.7	3.66
0111	0000	13886	12.4	2.69
0112	0033	12054	12.8	2.42
0113	0000	0000	09.9	4.24
0114.01	0000	08656	11.4	3.60
0118	0000	09543	10.5	3.74
0122	0000	12007	12.3	3.56
0123	0006	12112	12.1	3.64
0127	0674	07509	11.4	3.49
0128	1018	10463	10.8	3.16
0122	0000	08933	11.4	3.41

Tract No.	Number of Non-White	Md Income	Md Ed Level	Avg No/Household
0124.01	0012	09863	10.6	3.89
0124.02	0006	10308	12.0	3.36
0124.03	0000	10710	11.6	3.59
0125	0022	09645	11.0	3.28
0075.01	0012	32676	15.9	3.18
0075.02	0469	22470	14.2	3.36
0077	0001	5000	15.8	3.23
0078	0000	09911	12.1	2.47
0091	0001	10239	12.1	3.41
0098	0000	11747	12.5	2.84
0099	0000	13933	12.7	2.77
0100.01	0001	14957	13.7	3.35
0100.02	0059	16527	13.5	3.49
0100.03	0059	12140	12.7	3.72
0101.01	0006	10546	12.3	3.49
0101.02	0068	14785	12.9	3.43
0102	0131	07750	08.4	3.75
0103.01	0072	20158	14.5	3.75
0103.02	0594	08340	12.0	3.33
0104	0369	12971	12.6	3.29
0105	0008	13564	12.7	3.03
0106	0010	12828	12.8	2.61
0107	1128	15701	12.9	3.49
0108	0000	12778	12.6	3.41
0109.01	0007	13564	12.6	3.28
0110.01	0082	10713	12.3	3.24
0110.02	0348	09336	12.3	2.97
0111	0927	11683	12.4	3.88
0112	0000	14175	12.3	2.23
0113	5095	09128	12.0	3.90
0114.01	0012	09962	11.2	3.49
0114.02	0082	09706	12.1	3.35
0115.01	0008	12038	12.4	3.82
0115.02	0000	11313	12.3	3.74
0116	0133	09108	10.4	3.50
0117.01	0058	10772	12.1	3.86
0117.02	0028	09715	11.3	3.91
0117.03	0001	10592	11.7	3.83
0118	0015	08352	10.0	3.59
0119.01	0000	08893	9.9	4.04
0119.02	0028	10049	11.2	3.67
0119.03	0009	11370	12.1	3.57
0120.01	0160	09897	10.9	4.12
0120.02	0058	09976	11.9	3.71
0122	0019	12275	12.0	3.45

Tract No.	Number of Non-white	Md Income	Md Ed Level	Avg No/Household
0123	0001	11477	11.8	3.51
0124.01	0001	10658	12.2	3.94
0124.02	0007	10896	12.0	4.05
0124.03	0008	10043	11.1	3.97
0125	0003	09728	11.1	3.07
0126.01	0015	11593	11.5	3.33
0126.02	0001	10180	10.6	3.44
0127	0203	09153	10.1	3.65
0128	0315	10330	10.1	3.13
0129	0001	10324	09.9	2.79
0130	0000	12149	12.7	2.91
0131	0014	14159	12.7	2.84
0132	0000	12094	12.7	2.82
0077	0031	12765	13.9	2.88
0078	0000	10207	12.2	2.53
0091	0002	10143	11.8	3.34
0105	0008	14741	12.8	3.21
0106	0010	12678	12.6	2.59
0107	0028	15115	12.8	3.69
0108	0001	13092	12.6	3.69
0119.01	0044	12026	12.4	3.03
0110.01	0104	12039	12.5	3.47
0111	0027	11757	12.4	3.62
0112	0033	12210	12.7	2.41
0114	5095	09137	12.0	3.90
0114.01	0012	09870	11.2	3.50
0118	0015	09128	10.3	3.69
0123	0007	11850	12.0	3.59
0112	0019	11834	12.1	3.48
0124.01	0013	09969	10.8	3.89
0124.02	0013	10904	12.0	3.98
0124.03	0008	10133	11.2	3.92
0125	0025	09680	11.1	3.20
0127	0877	09032	10.2	3.64
0128	1333	10383	10.3	3.14

4. What is the total size of the communities labor force?

	<u>313,700*</u>
(a) What % unemployed in 1974?	<u>4.4%*</u>
(b) What % male?	<u>61.4%*</u>
(c) What % non-white	<u>35.9%*</u>
(d) What % female?	<u>38.6%*</u>
(e) What % change in the work force?	<u>8.2%*</u>

\* Source: Annual Manpower Planning Report, Louisville SMSA, Ky., Department of Human Resources, January 1975, pp. 15-20.

5. What has been the change in the population composition?

(a) 16-21	<u>+21.7%*</u>
(b) 22-44	<u>+13.9%*</u>
(c) 45 and over	<u>+10.4%*</u>

6. EMPLOYMENT DEVELOPMENTS BY MAJOR INDUSTRIES  
(See attached chart)

Source: Annual Manpower Planning Report, Louisville, SMSA, Ky. Department of Human Resources, January 1975.

\* Source: Annual Manpower Planning Report Louisville, SMSA, Ky. Department of Human Resources, January 1975.

EMPLOYMENT DEVELOPMENTS BY MAJOR INDUSTRY (in thousands) 1/  
 5-County SMSA - Louisville Labor Area 1970-1974

INDUSTRY	1970	1971	1972	1973	1974	% Change	% Change
	Aver. Empl.	1970 to 1974	1973 to 1974				
Total Nonagricultural Employment	335.1	330.5	344.9	362.1	366.7	+ 9.4	+ 1.3
Manufacturing Total	116.2	107.1	109.9	117.6	118.1	+ 1.6	+ .4
Durable Goods Mfg.	70.4	63.7	65.8	72.0	72.5	+ 3.0	+ .7
Lumber & Wood Products	3.8	3.9	4.2	4.4	4.0	+ 5.3	- 9.1
Furniture & Fixtures	2.5	2.6	3.0	3.3	3.0	+ 20.0	- 9.1
Stone, Clay, Glass Products	2.4	2.1	2.2	2.5	2.7	+ 12.5	+ 8.0
Fabricated Metal Products	9.1	8.1	8.9	9.9	10.1	+ 11.0	+ 2.0
Machinery Incl. Electric	28.9	31.0	32.7	34.8	34.8	+ 20.4	.0
Transportation Equipment	7.7	7.2	7.3	8.8	9.4	+ 22.1	.0
Other Durable Goods Mfg.	16.1	8.8	7.4	8.4	8.4	- 47.8	+ 6.8
Nondurable Goods Mfg.	45.9	43.4	44.0	45.6	45.6	- 7	.0
Food & Kindred Prod.	13.2	12.6	12.2	11.9	11.8	- 10.6	.8
Tobacco Manufactures	10.1	9.7	10.5	11.2	11.1	+ 9.9	.9
Apparel & Related	2.2	2.2	2.3	2.4	2.5	+ 13.6	+ 4.2
Printing & Publishing	7.4	6.9	6.9	7.2	6.9	- 6.8	- 4.2
Chemicals & Allied	9.4	8.7	8.7	9.1	9.3	- 1.1	+ 2.2
Other Nondurable Gds. Mfg.	3.5	3.4	3.6	3.8	4.0	+ 14.3	+ 5.3
Nonmanufacturing Total	218.9	223.4	235.0	244.5	248.7	+ 13.6	+ 1.7
Construction	15.9	15.7	18.1	18.7	18.1	+ 13.8	- 3.2
Trans., Comm., Utilities	23.3	23.3	23.9	24.0	23.0	- 1.3	- 4.2
Wholesale & Retail Trade	70.1	71.4	75.0	78.1	79.9	+ 14.0	+ 2.3
Finance, Ins., Real Estate	17.2	17.5	18.2	19.0	19.6	+ 14.0	+ 3.2
Services excl. Domestic	47.7	48.6	52.0	55.5	58.3	+ 22.2	+ 5.0
Government	43.8	45.9	46.9	48.1	48.8	+ 11.4	+ 1.5
Other Nonmanufacturing	.9	.9	1.0	1.1	1.1	+ 22.2	.0

1/ All figures are based on place of work rather than place of residence.

7. EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>Occupational Needs</u>		
	<u>1973</u>	<u>1975</u>	<u>1977</u>
<b>BUSINESS &amp; OFFICE OCCUPATIONS</b>			
Totals	4681	1283	23100
Bookkeeping I & II	256	768	1280
Bookkeeping Mch. Op. I & II	108	324	540
Calc. Mch. Oper. I & II	74	222	370
Typist	400	1200	2000
Clerk, General	1829	5487	9145
Telephone Operator	400	1200	2000
Secretary	500	1500	2500
Stenographer	400	1200	2000
Trans. Mch. Oper.	58	160	261
Programmer, Business	59	161	266
Digital Computer	80	181	285
Key Punch	140	420	700
Manager Trainee	377	1057	1753

Source: Report on Vocational Resources, 1973, Vocational Resource Committee, Spring, 1973, p. 26.

## EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>Occupational Needs</u>		
	<u>1973</u>	<u>1975</u>	<u>1977</u>
<b>MARKETING AND DISTRIBUTIVE OCCUPATIONS</b>			
Totals	2543	7639	12753
Cashier-Checker	279	837	1395
Sales Clerk	900	2700	4500
Salesman Driver	211	633	1055
Cashier II <sub>a</sub>	279	837	1395
Checker Laund.	34	72	109
Purchasing Agent	42	126	210
Claims Exam. II	96	288	480
Shipping/Receiving Clerks	150	490	849
Stock Clerks	552	1656	2760

Source: Report on Vocational Resources, 1973, Vocational Resource  
Committee, Spring, 1973, p.27

EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>Occupational Needs</u>		
	<u>1973</u>	<u>1975</u>	<u>1977</u>
<b>HEALTH OCCUPATIONS</b>			
<b>Totals</b>	958	2894	4833
Dental Asst.	8	22	35
Nurse (R.N.)	221	663	1105
Nurse (L.P.)	200	600	1000
Nurse Aide	240	720	1200
Orderly Med. Ser.	79	151	227
Med. Asst.	40	75	110
Med. Tech.	45	116	183
Mental Health Asst.	41	99	163
Podiatric Asst.	43	145	277
Psychiatric Aide	15	239	431
Med. Records Clerk	26	64	102

Source: Report on Vocational Resources, 1973, Vocational Resource Committee, Spring, 1973, p.28.

EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>Occupational Needs</u>		
	<u>1973</u>	<u>1975</u>	<u>1977</u>
HOME ECONOMICS OCCUPATIONS			
Totals	1137	3436	5726
Housekeeper	23	70	113
Alteration Tailor	60	144	228
Display Artist	19	71	121
Baker Bake Prod.	35	151	264
Cook (Hotel & Rest.)	300	900	1500
Kitchen Helper	300	900	1500
Waiter or Waitress	400	1200	2000

Source: Report on Vocational Resources 1973 Vocational Resource  
Committee Spring 1973. p 29.

EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>Occupational Needs</u>		
	<u>1973</u>	<u>1975</u>	<u>1977</u>
LISTED TECHNICAL OCCUPATIONS			
Totals	757	1649	2565
Cartographic Tech.	13	38	64
Chemical Tech.	41	120	199
Communications Tech.	20	55	90
Electronics Tech.	38	84	135
Engineering Tech.	39	57	76
Library Tech Asst.	11	33	52
Plastic Molding Design	6	21	37
Draftsman Mech.	83	214	350
Const., Cost Est.	20	39	59
Design Tech.	25	39	59
Electronic-Mech. Tech.	98	249	401
Food Quality Tech.	25	44	62
High Energy Forming Tech.	15	31	46
Industrial Eng. Tech.	19	36	54
Metallurgical Tech.	72	127	183
Nondestructive Testing Tech.	24	31	39
Numerical Control Progr.	15	21	31
Wood & Furniture Tech.	14	31	53
Products Development	18	27	37
Laboratory Tester	124	239	355
Estimator	37	111	185

Source: Report on Vocational Resources, 1973, Vocational Resource Committee, Spring, 1973, p. 10.

## EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>Occupational Needs</u>		
	<u>1973</u>	<u>1975</u>	<u>1977</u>
<b>TRADE AND IND. OCCUPATIONS</b>			
Totals	6715	19088	31505
Auto Body	114	335	560
Auto Mechanics	300	900	1500
Diesel Mechanics	35	116	197
Truck Mechanics	136	408	680
Auto Assembler	320	960	1600
Auto Ser. Sta Attendant	300	900	1500
Tractor-Trl. Truck Dr.	180	540	900
Cabinet Making	56	152	246
Carpentry	300	900	1500
Oper. Engineer, Const.	42	126	210
Painter, Const.	141	423	705
Bricklayer, Const.	154	462	770
Lineman, Const. Lt.Ht.Pw.	160	480	800
Cement Mason	125	205	287
Dry Wall Applicator	43	89	134
Roofer	41	86	131
Struct. Steel Worker	80	240	400
Pipefitters or Plumbers	364	943	1523
Electricians	263	744	1239
Office Mch. Repair	14	43	72
Elec. Appl. Service	3	7	13

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EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

Occupational DOT Classification	Occupational Needs		
	1973	1975	1977
<b>TRADE AND IND. OCCUPATIONS</b>			
<b>(Continued)</b>			
Radio, TV Repair	4	15	28
Appliance Repair (Small)	34	96	155
Furn. Ins. Rep. Hot Air	37	96	154
Refrig. Mech.	11	30	52
Air Cond. Mech.	156	444	733
Bindery Worker	63	189	315
Printing Press Oper.	120	360	600
Compositor	29	72	116
Cig. Mak. Mch. Oper.	45	135	225
Mach. Oper. Metal Fabr. I	110	330	550
Machinist	170	510	850
Sewing Mch. Oper.	100	300	500
Tool & Dye Maker	63	189	315
Drier Operator	21	61	106
Fireman Sta. Boiler	32	96	160
Grinder Op. Prod.	29	75	121
Mach. Set-up op.	32	106	180
Molder of Coremaker	78	137	195
Punch Press Op.	31	67	106
Ind. Truck Op.	150	450	750
Truck-Crane Op.	26	75	122
Maint. Man Bldg.	150	450	750
Maint. Man Factory	140	420	700
Maint. Mech II	160	480	800

EMPLOYMENT OUTLOOK BY OCCUPATIONAL CLASSIFICATION

<u>Occupational DOT Classification</u>	<u>1973</u>	<u>1975</u>	<u>1977</u>
<b>TRADE AND IND. OCCUPATIONS</b>			
<b>(Continued)</b>			
Millwright	65	195	325
Mech. Ind. Truck	100	300	500
Carman Loc. Bldg. & Repair	31	93	155
Gen. Office Repr. Tl & Tl	74	127	180
Furn. Ins. Rep. Hot Air	37	96	154
Sheet Metal Worker	206	618	1030
Welder, Arc	194	582	970
Welder, Comb	121	363	606
Metal Finisher	67	175	285
Metal Boring Occ.	24	76	132
Metal Turn. Occ.	18	66	111
Blacksmith Forging	81	194	311
Millman Woodwork	159	345	531
Furniture Finisher	42	116	190
Wood Sawing Opns.	61	146	235
Beautician	78	260	445
Dry Cleaner	52	96	139
Upholstery	5	15	20
Butcher (Meat Packing)	34	102	170
Meat Cutter (Rtl. trade)	99	319	541
Dispatcher	64	141	221
Chem. Operator	46	138	230
Watchmaker	30	92	153
Presser, Mach.	36	118	204
Washer Mach. Lau.	29	73	117

Source: Report on Vocational Resources, 1973, Vocational Resource Committee, Spring, 1973 pp. 31-33.