ANALYTICAL REVIEW OF REMEDIAL EDUCATIONAL PROGRAMS FOR
SOCIALLY AND ECONOMICALLY DISADVANTAGED ADULTS

by

DARRELL VAIL ANDERSON
B.A., University of British Columbia, 1955

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

In the Faculty of Education
(Adult Education)

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
APRIL, 1968
In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my Department or by his representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of  Adult Education

The University of British Columbia
Vancouver 8, Canada

Date  April 16, 1968.
ABSTRACT

The principal concern of this thesis was to examine the role of education in altering the personal and social characteristics of the disadvantaged adult, and to select information of functional value to program design for those educators or agencies contemplating remedial educational programs with disadvantaged adults.

The sources of data for this descriptive study were limited to research reports on special retraining and remedial educational programs for the disadvantaged. Descriptive data on poverty and characteristics of the disadvantaged were also used selectively.

As a group, the disadvantaged have the lowest income, the poorest education, the largest families, the most inadequate housing, the highest incidence of ill health, and the least hope or promise of a better future. In addition to such socio-economic handicaps, the disadvantaged are hampered by certain psychological disabilities including a lack of self-confidence, low self-esteem and a high degree of dependency. Because of a limited perception of the value of education, the disadvantaged display neither the aspiration nor the motivation to achieve educational goals. They are further handicapped by a lack of verbal facility which limits their communication with society.

The research provides a depressing picture of the relationship between the disadvantaged and society. Largely because of discrimination, the poverty sub-culture has been compelled to evolve its own operational way of life. The customary associational contacts of the middle-class
society are not functional to the disadvantaged and they participate instead through casual, close, and often intimate primary group relationships.

Remedial programs are characterized by: programs of lengthy duration with a distinct preference for the classroom method; instructional agents with little or no specialized training for the clientele; use of a limited number of instructional techniques; heavy reliance on instructional devices and materials; extensive use of pre-adult tests for both placement and evaluation; and a preponderant number of descriptive and subjective evaluations.

Because of the scarcity of substantial research, specific details of educational planning for the disadvantaged can not be stated with assurance. The rejection of the institutionalized patterns of education by the disadvantaged is indicative of the need to discover new patterns which will be acceptable to them. The present pattern of remedial educational programs offers little hope of answering the needs of the disadvantaged.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>PURPOSE OF THESIS</td>
<td>3</td>
</tr>
<tr>
<td>SOURCES OF DATA</td>
<td>4</td>
</tr>
<tr>
<td>DEFINITION OF TERMS</td>
<td>4</td>
</tr>
<tr>
<td>PLAN OF THESIS</td>
<td>5</td>
</tr>
<tr>
<td>II. CHARACTERISTICS OF THE DISADVANTAGED</td>
<td>7</td>
</tr>
<tr>
<td>SOCIO-ECONOMIC CHARACTERISTICS</td>
<td>7</td>
</tr>
<tr>
<td>Age and Sex</td>
<td>8</td>
</tr>
<tr>
<td>Education</td>
<td>8</td>
</tr>
<tr>
<td>Income</td>
<td>13</td>
</tr>
<tr>
<td>Employment</td>
<td>15</td>
</tr>
<tr>
<td>Family Size</td>
<td>16</td>
</tr>
<tr>
<td>Marital Status</td>
<td>18</td>
</tr>
<tr>
<td>Health</td>
<td>19</td>
</tr>
<tr>
<td>Residence</td>
<td>20</td>
</tr>
<tr>
<td>SOCIAL-PSYCHOLOGICAL CHARACTERISTICS</td>
<td>24</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>27</td>
</tr>
<tr>
<td>Perception of Need</td>
<td>29</td>
</tr>
<tr>
<td>Motivation</td>
<td>31</td>
</tr>
<tr>
<td>Verbal Facility</td>
<td>33</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>34</td>
</tr>
<tr>
<td>III. SOCIAL INTERACTION</td>
<td>36</td>
</tr>
<tr>
<td>DISCRIMINATION</td>
<td>37</td>
</tr>
<tr>
<td>PRIMARY RELATIONSHIP</td>
<td>42</td>
</tr>
<tr>
<td>PARTICIPATION</td>
<td>43</td>
</tr>
<tr>
<td>COMMUNICATION</td>
<td>48</td>
</tr>
</tbody>
</table>
# Table of Contents

**Chapter**  |  **Page**
--- | ---
SUMMARY  |  51

**IV. REMEDIAL EDUCATIONAL PROGRAMS**  |  52

CLASSIFICATION OF THE PROGRAMS  |  52

- Literacy Education  |  53
- Vocational Education  |  58
- Family and Health  |  59

ANALYSIS OF THE PROGRAMS  |  60

SUMMARY  |  66

**V. IMPLICATIONS FOR PROGRAM DEVELOPMENT**  |  67

BARRIERS  |  67

- Societal Barriers  |  68
- Sub-cultural Barriers  |  69

EDUCATIONAL PLANNING  |  71

- Communication  |  71

CONTENT AREAS  |  73

- Basic Education  |  74
- Vocational Education  |  74
- Family Life Education  |  75
- Homemaker Education  |  76
- Consumer Education  |  76
- Health Education  |  77
- Leisure Education  |  77
- Citizenship Education  |  78

CONTENT SELECTION  |  79

ORGANIZATION AND CONTENT  |  80

SUMMARY  |  83

BIBLIOGRAPHY  |  85

APPENDIX  |  108
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Analysis of Remedial Educational Programs</td>
<td>61</td>
</tr>
<tr>
<td>II</td>
<td>Description of Tests Employed in Remedial Educational Programs</td>
<td>65</td>
</tr>
</tbody>
</table>
## APPENDIX

### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALLEN, D.W.</td>
<td>AN EXPERIMENT IN EDUCATION WITH THE LAUBACH LITERACY COURSE OF STUDY ON FILMS AT THE OHIO STATE REFORMATORY</td>
<td>108-110</td>
</tr>
<tr>
<td>BERTRAND, C.A.</td>
<td>AN EXPERIMENTAL DEVELOPMENT OF PROGRAMMED INSTRUCTIONAL MATERIAL FOR THE VOCATIONAL EDUCATION DEPARTMENT OF THE TEXAS DEPARTMENT OF CORRECTIONS</td>
<td>111-112</td>
</tr>
<tr>
<td>BROOKS, L.B.</td>
<td>RE-EDUCATION OF UNEMPLOYED AND UNSKILLED WORKERS, NORFOLK DIVISION, VIRGINIA STATE COLLEGE, NORFOLK, VIRGINIA</td>
<td>113-116</td>
</tr>
<tr>
<td>BROWN, E.J.</td>
<td>EVALUATION OF A FOODS AND NUTRITION EDUCATIONAL PROGRAM FOR LOW-INCOME FAMILIES IN WILKES-BARRE, PENNSYLVANIA</td>
<td>117-120</td>
</tr>
<tr>
<td>BUNGER, M.</td>
<td>A DESCRIPTIVE STUDY OF OPERATION ALPHABET IN FLORIDA AND AN EVALUATION OF CERTAIN PROCEDURES EMPLOYED</td>
<td>121-126</td>
</tr>
<tr>
<td>CROHN, B.L.</td>
<td>THE DIEBOLD LITERACY PROJECT: PROGRAMMING FOR THE ILLITERATE ADULT</td>
<td>127-129</td>
</tr>
<tr>
<td>DRANE, R.S.</td>
<td>THE EFFECTS OF PARTICIPATION TRAINING ON ADULT LITERACY EDUCATION IN A MENTAL HOSPITAL</td>
<td>130-132</td>
</tr>
<tr>
<td>FEINTUCH, A.</td>
<td>EDUCATIONAL REHABILITATION: AN EVALUATION OF THE ADULT BASIC EDUCATION PROGRAM OF THE STATE OF ILLINOIS</td>
<td>133-135</td>
</tr>
</tbody>
</table>

| FEINTUCH, A.    | A STUDY OF EFFECTIVENESS OF AN INTEGRATED PROGRAM OF VOCATIONAL COUNSELING CASEWORK AND A SHELTERED WORKSHOP IN INCREASING THE EMPLOYABILITY AND MODIFYING ATTITUDES CORRELATING WITH EMPLOYABILITY OF DIFFICULT-TO-PLACE PERSONS | 136-140    |

<p>| FEINTUCH, A.    | HAMILTON DEMONSTRATION PROJECT—LONG-TERM ASSISTANCE FAMILIES | 141-143    |</p>
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>HENNY, R.L.</td>
<td>READING INSTRUCTION BY A PHONIC METHOD FOR FUNCTIONALLY ILLITERATE ADULTS AT THE INDIANA REFORMATORY</td>
<td>144-147</td>
</tr>
<tr>
<td>HOLST, H.</td>
<td>SUMMARY OF THE WKNO-TV LITERACY PROJECT</td>
<td>148-150</td>
</tr>
<tr>
<td>LONG, F.</td>
<td>IMPATIENCE AND THE PRESSURE OF TIME--CLEVELAND'S READING CENTERS PROJECT</td>
<td>151-154</td>
</tr>
<tr>
<td>MCKEE, J. et al.</td>
<td>IMPROVING THE READING LEVEL OF DISADVANTAGED ADULTS -- I</td>
<td>159-161</td>
</tr>
<tr>
<td>MCKEE, J. et al.</td>
<td>IMPROVING THE READING LEVEL OF DISADVANTAGED ADULTS -- II</td>
<td>162-163</td>
</tr>
<tr>
<td>NIEMI, J.</td>
<td>A PROPOSAL IN FUNDAMENTAL LITERACY EDUCATION FOR UNDEREDUCATED ADULTS IN THE OUTLINED AREAS OF ALASKA -- I</td>
<td>166-168</td>
</tr>
<tr>
<td>NIEMI, J.</td>
<td>A PROPOSAL IN FUNDAMENTAL LITERACY EDUCATION FOR UNDEREDUCATED ADULTS IN THE OUTLINED AREAS OF ALASKA -- II</td>
<td>169-177</td>
</tr>
<tr>
<td>PEERSON, N.</td>
<td>AN EXPERIMENT WITH EVALUATION IN THE ERADICATION OF ADULT ILLITERACY BY USE OF TELEVISION INSTRUCTION OVER A STATE EDUCATIONAL TELEVISION NETWORK SUPPLEMENTED BY SUPERVISED GROUP VIEWING AND BY RELATED USE OF PROJECT-SUPPLIED MATERIALS OF INSTRUCTION</td>
<td>172-176</td>
</tr>
<tr>
<td>SCHMIDT, E.</td>
<td>ONE ATTACK ON POVERTY</td>
<td>179</td>
</tr>
<tr>
<td>WHITTEMORE, R.G. &amp; ECHEVERRIA, B.</td>
<td>SELECTION AND EVALUATION OF TRAINEES IN A BASIC EDUCATION EXPERIENCE UNDER THE MANPOWER TRAINING ACT</td>
<td>180-184</td>
</tr>
</tbody>
</table>
Poverty is an ancient social phenomenon which has been of intermittent concern to mankind. At the moment, the social scientists are grappling to define poverty and to identify the causative factors in order to eliminate it as a major social ill. Previously the identification of poverty had been based almost solely on economic measurements but recently there has been an attempt to reconceptualize the phenomenon. There is now a growing awareness that poverty has both socio-economic and social-psychological dimensions. Thus, poverty is both objective and subjective in its manifestations.

The differences identifying the disadvantaged are of such a nature as to suggest that a distinctive poverty sub-culture has developed within the dominant culture of our society. In urban slums the hard core poor have been found to have their own self-contained social system in which they exhibit a fluent use of a particular language style that provides both an identity for members and protection for the group. Moreover, this hard core group differs from other urban slum residents in terms of the perception of time, of self in social space, and of the classification of schemes and causality (69). Such a sub-culture appears to be self-perpetuating as it socializes new members to its ranks.

The continued existence of a poverty sub-culture in the midst of an affluent society results from the interaction of individuals with their
environment in which both contribute to the deprived status of the disadvantaged. The society tolerates conditions conducive to the creation of disadvantaged status and simultaneously rejects those individuals who have fallen victim to such conditions. The victims in turn learn to accommodate themselves to their disadvantaged status and to reject the values of the society which produces their plight. It is this interaction which creates a self-perpetuating situation that must be altered if the problems of poverty are to be resolved. Thus, the environment must be modified on a massive scale so that society itself no longer generates its poor. At the same time, the disadvantaged must change with respect to the characteristics which make them so immediately susceptible to the poverty forming factors in their environment.

The crucial environmental factors which are conducive to the development of a disadvantaged group lie in the nature and structure of the economic system through which the resources of the society are used and distributed. Thus sub-standard housing, inadequate public services and limited employment opportunities contribute to the formation of a poverty group. At the same time, the social characteristics of members of that group determine their reaction and response to such conditions.

The move from private to public charity has signalled the general acceptance of social responsibility for the existence of poverty, but welfare programs neither alter the basic environmental factors nor modify the social characteristics of those who are poor.
An attack upon poverty that seeks to modify the environmental conditions alone is unsuccessful because it does nothing to alter the human characteristics of the poor themselves so that they can assume some responsibility to share in the ultimate eradication of poverty. To change people is more difficult than to change the environment, yet such change is an indispensable prerequisite to the problem. The disadvantaged individuals may be changed through educational programs directed specifically to that end, but this means has not yet received adequate attention from those most concerned with the problem of poverty.

1. PURPOSE OF THE THESIS

The principal concern of this thesis is to examine the role of education in altering the personal and social characteristics of the disadvantaged adult. Research by social scientists suggests that the socially and economically disadvantaged have certain identifiable characteristics which determine, in part, the success of remedial educational programs. Through a review of the literature, this study will select that information which is of functional value as a guide to program design for those educators or agencies contemplating remedial educational programs with disadvantaged populations.
II. SOURCES OF DATA

Because of the recent proliferation of literature concerned with the disadvantaged, this review will be limited mainly to research reports on remedial educational programs for such individuals. These research studies are found in the literature related to rural resettlement programs, agricultural extension activities, programs for low income farmers, remedial activities with migratory workers, community development, urban redevelopment and special retraining and remedial educational programs for the disadvantaged. Descriptive data on poverty and the characteristics of the disadvantaged will also be used selectively.

III. DEFINITION OF TERMS

In analyzing the research on remedial educational programs for adults, it becomes apparent that there is a broad range of terminology used to define poverty and to describe its victims. For the purpose of this analysis, the following definitions are employed:

1. Poverty is a state of need or inadequacy which in fact exists for the individual, or is perceived by him to exist.

2. Disadvantaged is a term applied to those subjects who are members of a poverty sub-culture and are handicapped with respect to the mode of the dominant society.
The existence of a distinct sub-culture accentuates the fact that the existence of cultural differences is not synonymous with cultural deprivation. Hence, the disadvantaged group should not be viewed as "culturally deprived" (18)(165)(239)(267). In effect, then, the comparison of the disadvantaged with the dominant population becomes a cross-cultural comparison through which the differences in culture are more significant and meaningful than differences in individual characteristics.

The definition of disadvantaged used hereinafter is intended to be inclusive of those individuals variously described in the literature as the hard-core poor, the lower socio-economic citizenry, low income people, the culturally deprived, the functionally illiterate, the educationally deficient, the hard-core unemployed and such similar terms.

IV. PLAN OF THE THESIS

This study will first examine the socio-economic and the social-psychological characteristics of the disadvantaged as these have been identified by research. The second step will be to examine the ways in which these identifiable characteristics influence the response of the disadvantaged individuals to their environment and
particularly to educational programs. The selected educational programs designed for disadvantaged adults will then be analyzed to assess their approach to the educational task and to measure their success as reported by research. Finally, the study will analyze the elements which appear to influence education for the disadvantaged adult and provide suggestive clues to the design and conduct of such programs.
CHAPTER II

CHARACTERISTICS OF THE DISADVANTAGED

Disadvantaged status is not the consequence of exclusively economic determinants. Thus, it has been necessary to reconceptualize poverty in terms of objective factors which are almost solely economic and subjective factors which describe the individual's perception of himself as poor. With this two dimensional concept of poverty, it is possible to describe the disadvantaged population in ways which characterize it as different from the population as a whole.

In analyzing the conspicuous and significant differences between the poor and others, the differentiating features are summarized herein-after in terms of common socio-economic characteristics and then in terms of social-psychological characteristics including attitudes, values and similar factors.

I. SOCIO-ECONOMIC CHARACTERISTICS

The disadvantaged adult is differentiated from the general population by certain socio-economic characteristics. The data concerning these characteristics subsume themselves under the following headings: age and sex, education, income, employment, family size, marital status, health and residence.
Age and Sex

Although the very young, the elderly, and the female are over-represented in the poverty group, neither age nor sex are themselves differentiating characteristics apart from their relationship to other factors. Among all the members of a population, there will be age and sex differentials that appear to be accentuated when considering the differences associated with certain descriptive characteristics encountered among the disadvantaged population. In view of this, age and sex will be noted where appropriate in discussing other factors.

Education

Educational level, as measured by years of school completed, is one of the most consistently significant variables in social science. It is significantly related to occupation and income as well as to certain other social and psychological variables which may affect level of living (124)(206)(207)(208)(211)(222)(267). In the disadvantaged population, educational level has been found to be consistently below that of the general population so that the major proportion of the disadvantaged are characterized by educational deficiency (17)(48)(90)(99)(124)(128)(152)(207)(211)(290).

There are, of course, age and sex differences associated with educational level in the general population. Many studies have revealed
that the male is on a lower educational level than the female with the differential as much as one to two years more of schooling for the female (22)(39)(72)(130)(138)(144)(182)(217). This normal differentiation is often accentuated among the disadvantaged.

A study of low-income subjects in rural Canada disclosed that husbands had achieved an average educational level of 6.9 grades, while wives had achieved 7.7 grades. Similarly, among their children, the males who had finished their formal schooling had completed 8.5 years, while the females had attained 9.2 years of schooling (174). It is also reported that males tend to drop out of school earlier than females, but of those who finish high school, more males than females go on to college or university (119)(187)(207).

The educational deficiency becomes conspicuous at the literacy level and in those functions in which literacy is an indispensable tool. There are two levels of literacy that are usually identified. The complete illiterate is one who has had no formal schooling and consequently, is unable to read, write or figure at the level of the first grade (45)(125). The functional illiterate, on the other hand, is one with less than five years of school completed (6)(9)(48)(125). The U.S. Office of Economic Opportunity presently uses the grade eight level as the criterion for functional illiteracy in view of increasing job specialization and expanding technology which require increasing educational qualifications. The normal
prerequisite for vocational training is currently set at the grade ten level (217). Among the disadvantaged, there is a disproportionate number classified as complete or functional illiterates and virtually none who can satisfy the grade eight or ten prerequisite for vocational training. This low level of education is reflected in data on income, unemployment, nutrition, crime and communication.

Low Income

An income level of $3,000 or less is associated with illiteracy (5)(98)(138)(217)(241). In Canada, the average income of a family head reporting either no schooling or one to four years of schooling completed was $3,318 a year compared with an average of $4,985 for all family heads (6). Among Canadian males with only an elementary education, 26 per cent earned less than $2,000 annually, and 46 per cent, less than $3,000. There is a similar situation with respect to low income and inadequate education in the data for women. About two-thirds of all women with only an elementary education, 40 per cent of those with a secondary education, and 20 per cent of those with some university reported earning less than $2,000 annually (138).

Unemployment

Closely associated with illiteracy and income is the matter of unemployment (5)(85)(182)(231)(241)(274). A 1960 Survey in Canada found that about half of the unemployed had not finished primary school and over 90 per cent had not completed high school. Among people who had not
completed primary school, the unemployment rate was six times greater than that among high school graduates (211). The unemployment rate of school dropouts from 14 to 19 years old, is twice the overall Canadian average (225).

Crime

Several recent studies found a relationship between illiteracy and crime in that the educationally disadvantaged are more likely to become incarcerated in a correctional institution than are those with more education (125)(181)(191)(203)(209). A study conducted in the Ohio State Reformatory (9) revealed that 73 out of 142 inmates were unable to register an achievement score equivalent to grade one. The mean educational grade achievement was 1.97, and three-quarters of the inmates achieved a grade of 4.3 or less. In Texas, 55.6 per cent of the prison population would be classified as functional illiterates because of an educational achievement of grade five or less (5).

Nutrition

The relationship between a low level of education and poor nutrition is suggested by a number of studies (41)(102)(208)(217). The evaluation of a foods and nutrition education program for low-income families in Pennsylvania indicated that ninety-one persons (62 per cent) of the 145 subjects had eight years or less of formal schooling and they showed little interest in using the nutritional information
provided. Half of the homemakers who were not even aware of the mailed information and recipe cards had no formal schooling (41).

The lack of nutritional knowledge was demonstrated further by a study of 352 Ontario farm women, whose formal schooling averaged grade ten. Only 161 (46 per cent) knew enough about nutrition to serve one or more correct sources of Vitamin C to their families (102).

A study of welfare recipients in Kentucky, a large number of whom were functionally illiterate, revealed that only three-quarters of the recommended servings of bread and cereals were being eaten, more meat and more meat substitutes than recommended were being used, and only half of the servings recommended by the U.S. Department of Agriculture for milk, fruit and vegetables were in the diet (217).

Homemakers in a Virginia study of food buying revealed that saving money on food was the main interest and concern to those with a low educational level. On the other hand, the better educated attach greater importance to "getting the grade or quality of food for the money spent", "health and nutrition", and "how to tell grade or quality". Similarly, 20 per cent of the homemakers with the lowest level of education compared to 5 per cent of those with one or more years of college expressed "the difficulty of meal preparation". Both education and income were associated with levels of knowledge about grading and quality, but there was little if any consistent relationship between education or income and knowledge of seasonality and price. Consumers needed more information on seasonality as it related to the price and supply of pork, beef and eggs (208).
Income

Amount

The amount of Income is a common measure of disadvantage on the assumption that income basically determines the level of living. In the United States, the Office of Economic Opportunity originally defined poverty in terms of family income which was $3,000 or less. In 1965, the definition was modified to fit the size of the family unit with specified annual incomes by size of family as follows: a one-person family, $1,540; a two-person family, $1,990; a three-person family, $2,400; and a four-person family, $3,130 (217). In Canada rough indices of minimum urban cash requirements have been listed as $1,500 to $1,800 for single persons; $2,000 to $2,500 for two adults; and $2,600 to $3,400 for an urban family of four. Farm families were expected to need cash incomes at 80 per cent of the urban level (138)(204)(211).

In Canada, low incomes were more pronounced for the young and old who are single. Among male wage earners, 77 per cent of the youths under 20 years of age and 35 per cent of males over 65 years of age earn annual incomes of $2,000 or less (211).

In spite of having achieved more formal education than her male counterpart, it is the disadvantaged female in Canada who suffers more in regard to Income distribution. In 1961, over half (53 per cent) of the families with female family heads compared with 21 per cent of families with male heads had incomes of $3,000 or less. Likewise, almost two-fifths (37 per cent) of female family heads compared with 11 per cent of
male heads lived on less than $2,000 annually. In fact, almost one-fifth (19 per cent) of the female family heads had incomes of $1,000 or less (211).

Source of Income

Welfare payments have been identified as an important source of income for the disadvantaged (99)(120)(124)(138)(139)(170)(174)(208)(264)(274). In some areas of the Gaspe, where unemployment and under-employment are chronic, between 90 and 100 per cent of the population is maintained by $100,000,000 distributed annually through public assistance and transfer payments (228). With regard to Indian people, more than one-third (33.5 to 36 per cent) of all Indian households depend upon welfare grants mainly provided by the Indian Affairs Branch. This general rate of financial dependency for Indians was about ten times the national average (230).

It has been suggested further that individual income is no longer a sound measure of an individual's level of living. What matters more is family income (190)(281). Both the upper-lower class and the lower-lower class are compelled frequently to rely upon the work of wives and mothers as an aid to economic survival (144)(251). McBean and Abell (174) found that extremely low income in a rural area of Ontario was significantly related to the family dependence on either one or two of six possible sources of income and ninety-four of the 150 subjects mentioned farming and government payments most frequently as the sources of income.
Access to Capital

Another handicap suffered by the economically disadvantaged individual is related to his inability to obtain credit and to employ it effectively (2)(96)(121)(138)(225)(264). In 1963, the general population in Canada was estimated to have had access to credit averaging $255 per person. The Indian population, on the other hand, was only able to obtain credit to the extent of slightly over $1 per person (230). Furthermore, the cost of credit might be in excess of what a subsistence budget can afford (56).

Employment

The disadvantaged are likely to suffer extended periods of unemployment (98)(133)(170)(201)(241). In Hamilton, Ontario, 160 employable families and 300 so-called unemployable families had been without work for more than a year (120). Likewise, the past employment history of 160 Minneapolis subjects showed that almost half the group (45 percent) had been out of work at least half the time during the past five years (274). A study of 52 "difficult-to-place" persons of a sheltered workshop in Montreal revealed that only two subjects had worked more than one hundred days out of a potential of 260 working days (99).

In general, the disadvantaged worker is employed and working less than he wants to, in part-time or casual employment where productivity and incomes are low. Hence, under-employment becomes a major factor in poverty, especially rural poverty (2)(138)(182). Jenness (138) also
associates under-employment with certain occupations such as fishing, trapping and some of the eastern forestry operations.

Another characteristic associated with the employment history of the disadvantaged is seasonal unemployment. In Canada, seasonal variations in activity account for as much as one-third of the total unemployment; and in many areas, this is a principal cause of poverty (211). Of those with incomes of less than $2,000, over 60 per cent of the male and 35 per cent of the female workers are without work for more than one-quarter of the year. There are limitations to the consideration of such data which concern wage and salary earners mainly, and virtually exclude farmers, fishermen, pensioners, small business owners and the self-employed. A substantial proportion of Canada's poor are found among farmers, fishermen and pensioners (138).

**Family Size**

The disadvantaged frequently have families that are larger than average in size. Data from several studies reveal that extremely low income is related to the bearing and rearing of five or more children (17)(85)(98)(174)(215)(217). Among the Indians and the Metis of Canada it is not uncommon for families to consist of ten or more children with a considerable number of families reporting between 13 and 16 children (232).
As early as 1936, family size was identified as a factor related to poverty (217). Subsequent research has since revealed an inverse relationship between fertility rates and socio-economic status (144). Such a situation is demonstrated in both Quebec and the Atlantic Region which have larger families and a lower level of rural living than the rest of Canada (281).

More recent studies have shown that the relationship between income, education, occupation and residence with fertility rates is much less evident. Such a relationship is still most characteristic of rural migrants to cities, and of the lowest segment of manual labourers (278)(279) (284).

Further, it has been suggested that although the general relationship between social class and fertility is still inverse, within each class the relationship is direct. Hence the better-off manual workers have more children than the poorest. Social mobility is proposed to be the intervening variable between birth rates and social class (278). The findings of Berent (28) strengthen the argument that those who seek upward mobility will tend to curtail family size in order to facilitate the process, while those who are downwardly mobile do so in order to slow the course of their decline.

One Canadian study (211) contends that family size is more closely related to education than to income. Thus families in which the household head has the least education are generally the largest.
Marital Status

It is difficult, if not impossible to use marital status as a distinguishing characteristic to identify the disadvantaged. Jenness (138) found that low incomes in Canada are most pronounced among the young and the old who are single. Among the wage earners and the salaried, the number of married men is almost three times that of single men. Yet there is almost the same number of married men and single, young men who earn $3,000 or less.

On the other hand, data furnished by the U.S. Department of Labour for March, 1962 showed that about 230,000 young men in the 14-19 age group were married. Of this number, about 95 per cent were in the labour force but many proved to have inadequate incomes. Besides, more than 700,000 non-farm families with family heads below the age of 25 had total incomes of less than $3,000 in 1961 (289).

A study of incarcerated subjects enrolled in an occupational, rehabilitation and employment project revealed that 85 per cent were single, and although only 15 per cent of the 289 youths, ranging in age from 17 to 26 years, were or had been married, an additional 16 per cent were fathers out of wedlock (191).

Among the hard core unemployed studied in Detroit, 65 per cent were married. Approximately one in four men and women were single, and more than one in five (22 per cent) of the females were either divorced, separated or widowed (85). In an Illinois study (98) 55.7 per cent of
the subjects were divorced, widowed or separated compared with 23.5
per cent who were married, and 20.7 per cent who were unmarried. This
was in contrast to the findings obtained from a survey of unemployed
persons in the state which showed over 70 per cent married (274).

Health

The socially and economically disadvantaged are characterized
by a high incidence of diseases, higher rates of infant mortality,
lower life expectancy, more chronic illness, more dental defects, and a
greater evidence of generally poor physical and mental health (33)(70)
infant mortality rate varies from 23 to 193 out of 1,000 depending upon
the income of the region of residence (204). Similarly, life expectancy
shows a distinct range. In 1963, the national average was 60.5 years for
men and 64.1 years for women. (204). Among Eskimos and Indians the
figures were considerably lower. The average life expectancy for Eskimos
was about 20 years (204). For Indian males it was 33.1 years, and for
females 34.7 years. If deaths occurring during the first twelve months
of life were excluded however, the average age at death for males rises to
over 46 years and to just under 48 years for females (230).

The disadvantaged are also characterized by lower expenditures
for health services, less use of medical facilities, lower rates of pre­
natal care and lower acceptance of voluntary health insurance, and pre­
paid medical coverage (22)(93)(156)(172)(267). Dental care is also
inadequate and mainly confined to extractions (172)(204)(217).
Practices relating to child care, home sanitation, preventive disease control, and the use of professional sources of information on health practices have little relevance to the household in which the family head is employed as a farm tenant, a share cropper, or farm labourer. In such households, furthermore, the homemakers are likely to have completed less than five years of formal schooling (172).

The excessive health problems of the disadvantaged are attributed to a number of factors including inadequate health care, deficient nutrition, sub-standard housing, and a lack of recreation (98)(190)(215)(230)(231)(252) and there is an inter-relationship of these factors with inadequate incomes and low educational levels (172)(204)(225).

Residence

Isolation

The socially and economically disadvantaged may well prefer to live in an isolated location but such preference entails certain additional handicaps as inhabitants of isolated areas have more limited employment opportunities, lack medical and dental services and show the lowest rates of participation in adult educational activities (138)(140)(172)(213).

Isolation also has its impact on communication. Amongst a group of disadvantaged in Kentucky, four-fifths lived on an unpaved road, four-fifths never received a newspaper, about one-half never watched television and one-third never listened to the radio. These handicaps
of isolation coupled with the low educational level of the parents and their lack of knowledge about the existence of educational facilities contribute to the formation and perpetuation of a distinct sub-culture (217). Hawthorn (124) has indicated that it is the geographical dispersal of Indian communities in Canada which has hindered the development of powerful regional or National organizations.

Location

Although the socially disadvantaged will be found in both urban and rural areas, a larger proportion of Canada's poor are located in the rural setting. Rural areas were reported to have 28.5 per cent of their male residents and 66.8 per cent of the females earning annual incomes of $2,000 or less. This rural-urban difference was even more pronounced in Newfoundland, New Brunswick and Quebec where half of the male wage earners in rural areas earned less than $2,000 (138). Similarly in Kentucky the low income families have been more concentrated in rural areas (217).

Rural areas also tend to have more functional illiterates than urban areas, but recent studies suggest that this situation is changing with particular reference to the older population (266). In Texas, there has been a definite trend toward the urbanization of the educationally deficient. The greatest concentration of illiterates in that state is found in 21 metropolitan areas (5). In Kentucky illiteracy has remained concentrated more among farm residents (217).
Mobility

The disadvantaged in the rural areas are generally an immobile group. In one Nova Scotia area, with a labour force indicating a considerable amount of unemployment and underemployment, as well as substantial numbers reporting a fairly low level of living, the stability of residence was apparent. Some 81 per cent had been born within the project area; 36 per cent had never lived beyond their present community for six months or more; and 54 per cent had lived more than 30 years in their present place of residence (72). Similarly, a study of low income farmers in Missouri revealed that 50 per cent of them were living in the county of their birth and 16 per cent were resident in adjacent counties (164). Such low mobility among the disadvantaged rural population may be a factor in their continuing disadvantaged status as they do not move to areas where employment and opportunities for advancement may be more numerous.

In contrast, the length of residence for the socially disadvantaged in urban areas is frequently very short (47)(85)(98)(221)(263). The 1961 Census indicated that 23.4 per cent of the people in an urban renewal area in Vancouver had lived in their homes for less than one year and 46.8 per cent had been there less than two years. Further, the pupil turnover rate in the local elementary school amounted to approximately half of the school population (263).
Standard of Housing

The quality of the dwelling units available in an area is a specific indicator of socio-economic status. Hence, it might be expected that the disadvantaged will live in areas having a preponderance of old, dilapidated, overcrowded and inadequate houses lacking the ordinary amenities (152)(195)(204)(217)(230)(241)(267). In its description of inadequate housing the U.S. Office of Economic Opportunity also included sound housing without complete plumbing (217).

In Canada there are over 6,000 Indian families who are either sharing accommodation with other family units or living in improvised and inadequate shelters. A survey in 1962 revealed that 60 per cent of the Indian families live in houses of three rooms or less compared to a national average of 11 per cent. Further data showed that only 44 per cent of the Indian homes were provided with electricity, 13 per cent with running water, 9 per cent were serviced with sewers or septic tanks, and 7 per cent equipped with indoor baths. This can be compared to a national average in which 99 per cent of Canadian homes were provided with electricity, 92 per cent had running water and were serviced by sewers or septic tanks, and 84 per cent were equipped with indoor baths (230).

In a Halifax study, of the 134 Negro families interviewed, slightly more than half lived in overcrowded dwellings which were in need of major repair. Only one-seventh of the families had private toilet facilities while more than half the families had neither private nor shared bathroom facilities (241).
The quality or conditions of dwellings alone may be a misleading criterion. It was found that residents of the Prairie Region have fewer amenities than are found in homes in the Atlantic Region even though the prairie dwellers are more affluent. Therefore, housing conditions may reflect certain social-psychological characteristics of a population to some extent. (267).

Both the lower construction rates in depressed areas and the meager per capita investment in housing for the disadvantaged have been noted (230)(267). In 1963, the total per capita investment in housing for the general Canadian population was $90 compared with $21 for Indians (230). No doubt this expenditure has its impact in inadequate housing which in turn contributes to the low standard of health among these disadvantaged people (267).

These socio-economic characteristics indicate some of the differences one might expect to encounter in comparing the disadvantaged with others. Thus, although these characteristics describe the status of the disadvantaged, they neither explain the behavior nor the sub-cultural qualities of the group.

II. SOCIAL-PSYCHOLOGICAL CHARACTERISTICS

The disadvantaged adult is differentiated from the general population by certain socio-economic characteristics as noted previously.
There are even more striking differences observed with respect to certain factors which, for purposes of convenience, are discussed under the general heading of social-psychological characteristics. These items identify certain personality traits common to members of the poverty sub-culture and describe relationships, both among members of that group, and between the sub-culture and the society.

As a general description of the members of the poverty sub-culture, Skene (240) notes the following characteristics identified in research:

1. authoritarian and employ physical rather than verbal dominance;
2. rigidly restrictive where their religious beliefs are prohibitive;
3. more given to intolerance, prejudice, tending more to black and white thinking;
4. more prone to action than reflection; more anti-intellectual;
5. more inclined to physical or concrete thinking and learning than to impersonal, abstract thinking;
6. more given to resign themselves to "fate" and to be pessimistic about a vocational future;
7. more suspicious and hostile toward police and distrustful of governmental authority;
8. less developed in imaginative and logical powers;
9. more reactionary in socio-political areas but more given to economic liberalism;
10. more prone to have a short time perspective, living and working for the present to fulfill immediate needs as their future seems no more secure than the present;
11. more likely to reveal hostility, tension and aggression than those who live well above the subsistence level.
These are supported, in part, by an analysis of adult illiterates made by Derbyshire (84) in which he notes that the personality traits manifested by his population included:

1. Insecurity—displayed by bolsterousness and acting out behavior and an unwillingness to admit error;
2. Physical aggression—recognized lack of status resulting in physical aggression;
3. Reticence—neglected identification of personal needs except in an occasional explosive manner;
4. Lethargy—resigned to current status with lack of motivation for change;
5. Communication—sensitized to non-verbal cues by those in power;
6. Concrete thinking—contented to refer to concrete objects and situations of personal importance instead of abstract thought.

In an attempt to synthesize current knowledge on the motivations, values and attitudes of subsistence farmers, Rogers (226) isolated the ten main elements characteristic of the sub-culture of peasantry. These included: (1) mutual distrust of interpersonal relations; (2) lack of innovativeness; (3) fatalism; (4) low aspirational levels; (5) a lack of deferred gratification; (6) limited time perspective; (7) familism; (8) dependence on government authority; (9) localism; and (10) lack of empathy. It is these functionally interdependent and mutually reinforcing parts which should provide implications for programs of change and research.

These forementioned characteristics represent values which are not conducive to self-help. Small farm operators interviewed in Manitoba were satisfied with their present way of life and many of them
did not see fit to adopt recommended farming practices which could have increased their income (2). A study of urban renewal in Vancouver found that although there were no distinctive elements of social control, there was no indication that the residents desired to change existing conditions. Nor did these residents desire more control and direction by civic authorities (263). Another area development project in the same city reports that it is the narrowed expectation of families who know nothing else which helps to perpetuate the cycle of poverty and social problems (1).

Many of these characteristics have been studied in detail and are presented here for further consideration.

Self Confidence

From their earliest educational experiences of failure in a middle-class oriented school system, the disadvantaged begin to develop a concept of low self-esteem and a lack of self-confidence (20)(44)(59)(78)(88)(100)(128)(135)(139)(154)(224)(234)(254)(291). Contributing to the lowering of self-confidence is the loss of employment and the necessity to accept jobs at a level below that which the person had previously achieved; this produces a feeling of having lost status among former friends and in the eyes of the world (248). Furthermore, when an individual loses a job, at first he keeps hoping for re-employment but when he finally abandons hope, he will frequently restrict his actions
much more than is required. He may not leave his own neighborhood and his thoughts and aspirations will tend to become increasingly narrowed (160).

Closely related to this loss of self-confidence is the development of dependency attitudes (110)(129)(235). The disadvantaged remain largely spectators rather than participants in society. Because a great number of them are dependent on public assistance, their lives tend to become organized and their behavior predictable by the operation of this system (56)(124)(132)(211).

Dependency may also be attributed to the influence of a matriarchal family structure. In certain segments of the lower class where the females are compelled to accept a position of dominance through default of the males, problems of sexual identification as well as those involving passivity and dependency develop in children (144). Trainees in the JOBS Project showed that the father played a reduced role even when present. Only 10 per cent of the male trainees mentioned their father or some other male figure as the person who was most important or influential. Furthermore, 92 per cent admired their mother very much as compared with 14 per cent expressing the same opinion toward their fathers; 51 per cent stated that they resembled their mothers compared with 29 per cent who identified with their fathers (181).

The lack of self-confidence of the disadvantaged may result in their acquiring behavioral patterns which serve to conceal their
personality deficiencies and this may inhibit such individuals from pursuing educational objectives in their adult lives (31)(92)(103)(114)(154)(166)(216). Thus there may be a reluctance to reveal their lack of formal education and they may even attempt to hide their deficiencies from everyone including their immediate family (9)(48)(116)(145).

The disadvantaged also possess certain psychological barriers to learning which are associated with the lack of self-confidence. An Illinois study showed the anxiety experienced by adults before enrollment in an educational program with 22.3 per cent of them believing that they would be too dumb, 29.9 per cent believed they could not really learn, and 30.6 per cent believed they would feel foolish (98). A marked improvement in self-concept was noted among adults enrolled in both basic education and participation training programs (48)(180)(238)(280).

Perception of Need

The disadvantaged generally display a limited perception of the value of education as a means to personal achievement (49)(55)(79)(83)(103)(114)(116)(124)(138)(146)(177)(211)(231)(257)(280). Moreover, the differential perception of the value of education is a function of the respondents' own socio-economic status (21)(58)(207)(225). In answer to a question about how much schooling was necessary for people to get along in the world, 75 per cent of the middle class respondents compared to 40 per cent of lower class respondents considered it was
desirable for a young man to have more than a high school education (65). In a low-income area of Manitoba, seven out of ten of the farmers who wanted their boys to be farmers, thought that eight grades of school or less was all that was necessary for a man to be a successful farmer (2).

In some instances, the disadvantaged think highly of education for their children and other young people (164)(220). Lower socio-economic status adults tend to associate the term "education" with children and cannot accept it as a fitting activity for adults, except possibly for those who are foreign born and going to college. The disadvantaged are more apt to accept educational activities that are concerned with or disguised as employment preparation (83)(98)(133). This suggests that attitudes expressed by the disadvantaged population are more toward the schools than toward education itself (27)(71)(83)(166).

There is support for the proposition that the disadvantaged adult does not view education in terms of self-realization and does not think of learning as an experience which is rewarding in its own right (49). Consequently, they are less inclined to turn to adult education for recreational purposes than for purposes of vocational advancement (140)(183).

Furthermore, when the rewards are inadequate there may be good reason for the disadvantaged to perceive little value in education. This problem arose in Canada when the amount offered as an allowance for
training programs was less than that available through unemployment Insurance (112).

Closely associated with the limited perception of the value of education is the limited aspiration for education shown by the disadvantaged (49)(75)(83)(140)(220)(263). The available data indicates that socio-economic status exerts a significant influence on the nature and level of aspirations (58)(65). A direct positive relation exists between the level of aspiration for education and parental social status (236).

Those aspirations most frequently expressed by the disadvantaged are of an occupational and economic nature (49)(83)(90)(107). In the JOBS Project nine out of ten trainees viewed the project as a means of improving their chances of job success and their main criticism was that the program had failed to fulfill their expectations in this respect. Furthermore, it was found that disadvantaged trainees did not appear to reject American goals, values and aspirations, and although they aspired to middle class values, there was doubt that such norms applied to them (181).

Motivation

Both the limited perception of the value of education and the limited aspiration for education no doubt reduce the motivation of the disadvantaged to learn and to work (48)(129)(291). Indik (133) found that an individual's motivation toward a goal was divided into the following
three parts for analysis: his motive toward it, his expectancy of obtaining it, and its present incentive to him. The individual's motivation to avoid an object was divided into the following categories: his motivation to avoid an object or situation, his expectancy of doing so, and his present incentive value of avoiding it. On the basis of data, he characterized the unemployed as scoring relatively high on the motive to work, but also scoring moderately high on the expectancy to avoid work. On incentive to work, they achieved a moderate score, and they scored moderately low on incentive to avoid work. In contrast, those not in the labour force scored low on motive to work and high on motive to avoid work (133).

Socio-psychological factors are important determinants of unemployed workers' job seeking behavior. Regardless of educational level, workers who held values stressing achievement were more likely to start looking for a job than those who place less importance to such values, and they would use a variety of methods to seek a job. The need to serve certain kinds of unemployed workers was discovered by the Employment Service. Further, the larger the number of services received, the higher the rate of job-finding success achieved, regardless of the age of the worker or his level of skill. The social-psychological characteristics of over one-half of the individuals studied was a combination of low achievement motivation and high job view anxiety (181).
Verbal Facility

The avoidance of wider contacts in the community inhibits communication. The disadvantaged often limit themselves to a distinct style of communication and most under-educated adults prefer to do much of their communication on the non-verbal level because of their limited vocabulary and limited skill in articulation. Thus, their style of learning is not set to respond to oral or written stimuli. Instead, they respond more readily to visual or tactile kinesthetic signals and tend to make judgments more from actions than words (7)(43)(86)(218).

Furthermore, the children of the disadvantaged are handicapped in language development and in ability to converse with adults. Often lower class parents do not talk to their children at meal time, and it is more common for such parents to issue commands rather than to instruct. Hence, the children are ill prepared for entry into a middle class school system which values verbal facility (32)(80)(87)(145)(184)(218)(275)(276).

In a taxonomy of language usage, there are four critical areas which suggest that the social reality of the hard core poor is not only different but also incompatible with that reality underlying standard usage:

a) As for perception of time, the hard core poor seem to perceive time as a series of discrete moments each understood in itself, rather than as a continuum.

b) The perception of self in social space is elucidated by the repeated observation that language distributions typically change in the direction of self-references. This suggests that hard core language users perceive themselves to be placed in the center of their social space.
c) Classification schemes and procedures are identified by the dominance of the descriptive as opposed to analytic abstraction mechanisms. The hard core language users respond to the external, sensed characteristics of objects and individuals rather than to their abstract qualities.

d) As for causality, the dominance of categorical combinations of cause and effect, means and end, the actor and the act, the place and its use all suggest that attention is directed to the unique, rather than the persistent and recurring (69).

The language barrier becomes particularly marked among immigrants. In the Portuguese colony in Toronto, language kept the immigrant women isolated from other women, and those who worked had sought jobs where they did not need to use English (231).

III. SUMMARY

As a group, the disadvantaged have the lowest income, the poorest education, the largest families, the highest incidence of Ill health and the least hope of employment or promise of a better future. In addition to such socio-economic handicaps, the disadvantaged are hampered by certain psychological disabilities. These people are frequently characterized by a lack of self-confidence, low self-esteem and a high degree of dependency. Because of their limited perception of the value of education, the disadvantaged display neither the aspiration nor motivation to achieve educational goals. They are further handicapped by a lack of verbal facility which
limits their communication with society. To a large extent they are outcasts, and they have accepted this status by withdrawing further into their own sub-cultural milieu. As time passes, the relationships between the disadvantaged and others become increasingly tenuous so that there is less and less possibility of communication with them and their opportunity for community involvement is minimal.
CHAPTER III

SOCIAL INTERACTION

The disadvantaged adult responds to his environment in ways that appear to be pre-destined by the socio-economic and social psychological factors described previously. He is assumed to have similar motivations, experiences, and desires irrespective of the unique influences exerted by the sub-culture in which he functions. (192). This sub-culture develops its own values which are usually at variance with those of the total system. Thus, not only is the poverty group rejected by society but it, in turn, also rejects society (37)(95)(128)(135)(139)(188)(268). Furthermore, Schnelderman (233) notes, the principal function of the poverty life style of culture is a purely utilitarian one which enables the group to survive. Hence, each element of this distinctive culture has some relevance for the environment in which these people must live out their lives. Consequently, "the task of the lower-lower class person is to evolve a way of life that will reduce his insecurity and enhance his power in ways that do not depend on achievement in the universalistic sector and on command of a rich and sophisticated variety of perspectives" (66).

The values which characterize the poverty sub-culture relate to the perception of certain basic concepts. The dominant culture appears to prefer mastery over nature; the primary culture is oriented to the future but the sub-culture is oriented to the moment; and finally, the
dominant culture is characterized by striving for a calculated goal. The dominant culture is success oriented, while poor people value the spontaneous activity of "being" rather than "doing" (110)(268).

The perspective of the sub-culture is demonstrated by such groups as the Cree Indians of Quebec who are deeply concerned with present day problems, and unable to perceive the importance of long-range planning associated with effective political, social and economic development. Because of their level of poverty, they must give maximum attention to obtaining a minimum subsistence (60). Thus with perception influenced by immediate need, the disadvantaged view any plan designed for them from the perspective of their own socio-cultural experiences rather than from a larger societal view (56).

In addition, the responses of the disadvantaged will differ from those that might be expected since they have been conditioned by a society that rejects these people. This rejection is manifest in the exercise of discrimination against the disadvantaged and their consequent rejection of the values, structure and opportunities of the larger society.

I. DISCRIMINATION

The personality characteristics of the disadvantaged are accentuated by the response of the society to them. Members of certain racial and ethnic groups are likely to constitute a large proportion of the disadvantaged population (48)(98)(124)(128)(133)(138)(181)(188)(207)
(234)(241)(289) and they are frequently the victims of discrimination which generates in them both a sense of isolation and persecution. It is a situation especially pronounced for racial minorities (56)(63)(124)(129)(137)(141)(286).

The impact of this variable was disclosed to the American Congress through the *1964 Manpower Report of the President* which described the plights of the Negro, the Puerto Rican, the American Indian and other minority groups. In the United States, it was indicated that a much larger proportion of non-white youths were leaving the rural areas. Their lack of training coupled with discrimination resulted in a higher unemployment rate. In 1962, one out of four non-white teenagers in the labor force was unemployed. Moreover, the acquisition of higher educational levels does not assure equal entry into the higher job levels (289). A 1961 survey in the United States showed that only some 20 per cent of the non-white young persons who graduate from high school have white-collar jobs, while more than 50 per cent of white high school graduates have such jobs (289).

The pattern variables of diffuseness-specificity, affectivity-neutrality, universalism-particularism, and achievement summarize the relationship between the minority and the majority groups in our culture (200). According to Byuarm (56) the variable diffuseness-specificity circumscribes freedom of choice and self-development by minority group members. Affective-neutrality compels the Negroes' habitual deference
toward the white, and the coloured minority is permitted only to reflect affective-neutrality feelings in situations which involve the white majority group. The variable universalism-particularism was demonstrated in the response shown to minority members. This variable requires that each group take the others' members into consideration only as a standardized member of the category, and not as unique individuals. By the operation of the fourth pattern variable, achievement-ascription, the minority members are often retrained on the basis of ascription, whereas majority members have the benefit of achievement and are judged on the basis of individual abilities.

In terms of their own self-perception the disadvantaged have no conviction that it is within their power to alter their circumstances. They are sufficiently realistic to recognize that the larger institutions of society hold the keys to power. If the power of the community is committed to holding them down, there is no possibility of their rising from their miserable status through their own efforts (110)(141).

In regard to the Indians, it is felt that the exertion of authority by the Indian Affairs Branch tends to elicit from those people the attitudes of dependency, irresponsibility, apathy, submissiveness, and disguised hostility (124)(129). It is only in less developed communities where the white man's standard of income, consumption and schooling are not too high, that the Indians feel confident of being able to compete on a more equal basis (124).
As a result of discrimination, the status of the disadvantaged is generally low and they become stereotyped as substandard individuals (62)(95)(228). This often develops a negative self-image, and they form a self-concept through which they see themselves as having greater differences from others than actually exist (56)(124)(144)(152)(234)(286). In part, the responsibility for this situation must be borne by middle class adults who have perpetuated a number of myths and held certain reservations about the educability of the disadvantaged (83)(98)(168).

The disadvantaged frequently react to overtures with suspicion and hostility. Their insecurity is often displayed through either physical aggression, lethargy or reticence (154)(216). There is a distrust of the larger world and its institutions because they are strange and unfamiliar (16)(55)(84)(124)(145)(240)(273). Because of this, the disadvantaged are less apt to respond to opportunities for further education or training which is further accentuated when race or minority group factors are added to that of poverty.

The need for increased education for minority ethnic groups was emphasized by Johnie Scott (234). In his description of his own class graduating from Jordan Senior High School in Los Angeles, he described his classmates by their own term "Les Ameliorants" (The Improvers). Of the 550 who had completed the eighth grade, only 97 of the Improvers graduated. Their grade point average was 1.8 (D-minus) and their average reading level was sixth grade.
The plight of minority groups in Canada is similar. It is reported that 95 per cent of the Eskimo population lives in abject poverty with the cash earnings of an average family amounting to less than $500 per year. This meager sum necessitates supplemental assistance through government relief (138). The situation of the Canadian Indian is similar though it is not as serious as that of the Eskimo. Calculations made by the Dominion Bureau of Statistics show the average earnings of Canadian wage and salary earners as a whole was $3,192 for the year prior to June 1, 1961, while the average earnings of Canadian Indians was $1,661, an amount just over half of the average, and certainly far below that required for a minimum standard of living (198). Even if an Indian has acquired the prerequisite education or skill qualifications for employment, he is not free from stereotype discrimination which also extends to the social amenities such as education or libraries, and to provisions for housing (124). Thus, increasing employability through education and training does not automatically result in employment in a society in which ethnic origin is as great a barrier to advancement as inadequate preparation. The disadvantaged condition of some groups such as the Eskimo and the Indian is as much a product of social pressure as of personal ability.
II. PRIMARY RELATIONSHIP

As its response to rejection and discrimination, the poverty sub-culture is particularly inclined to reject the institutional structure of middle-class society as well as its formalized associational contacts. The disadvantaged participate instead through casual, close and often intimate primary group relationships which involve small personal kinship, locality or friendship groups (139)(267). Evidence indicates that the disadvantaged prefer face-to-face contacts and personal communication to impersonal formalistic contacts or abstract communications (40)(48)(75)
(169)(174)(257)(259). Because of this, guidance and counselling can serve a necessary and important function in programs for the disadvantaged (1)
(4)(40)(72)(98)(120)(146)(166)(170)(173)(205), but existing programs and facilities are not adequate. Through such guidance and counselling the disadvantaged can be helped to identify their needs, to recognize what is relevant to them, to know existing opportunities, and to be encouraged to participate in programs that offer a chance of modifying their disadvantaged status (1)(65)(252).

As well as indicating a preference for primary relationships, the disadvantaged place considerable value on kinship ties (41)(60)(96)
(105)(144)(181)(231). In a New Brunswick relocation project, the subjects stated that a major consideration in selecting a farm was proximity to relatives (96). Similarly, low-income families in Pennsylvania disclosed that almost all the people they entertained were either members of their
Immediate family or close relatives. Many of the same homemakers declared that ideas about food or recipes were obtained from a member of their family (41) and relatives have also been named as one of the most effective job-finding sources for semi-skilled workers (181).

Amongst the Cree Indians of Quebec, it is the extended and other kinship ties which present barriers to increased political awareness and action. Under conditions of social and economic stress, these Indians tend to rely on the kinship relations for support, security and assistance (60). In the lower-lower class, these kinship relations are often so close that they frequently conflict with conjugal relations (144). In view of this role of the family in the life of the disadvantaged, there is little chance that they will turn to local community agencies for assistance, thereby creating further barriers between themselves and local resources designed to assist them (42).

III. PARTICIPATION

Existing research shows only a very limited degree of participation in formal associations by the socially and economically disadvantaged (36)(41)(61)(91)(105)(123)(142)(144)(151)(164)(174)(215)(231)(267). This lack of participation is not exclusive with the disadvantaged as:

1. about 25 per cent of the adults do not belong to any formal organization;
2. urban areas have a higher rate of membership;

3. families with higher education, higher income, higher socio-economic status, and better communication facilities have a higher rate of membership;

4. membership rates increase until about age 45 and decrease sharply after age 70;

5. membership rates and leadership in organizations increase with length of residence in the community;

6. church membership is the most predominant type in rural areas (217).

Amongst a group of low-income, rural subjects in Ontario, only 21 of 150 persons were spending any time at meetings or on community activities (174). The disadvantaged may also have affiliations connected with their jobs (36). It has been noted that upper-lower class men tend to be affiliated with labour unions (144).

The church has been identified as an agency with which the disadvantaged are likely to be affiliated, hence their interests and activities are frequently church oriented (36)(41)(49)(56)(140)(143)(205)(215). But church membership alone may bear little relevance for participation. Of 372 families in a blighted section of Metropolitan Indianapolis, 86.8 per cent of the families indicated that they belonged to some church. Nevertheless, only 39.8 per cent maintained regular church attendance, and as few as eight per cent were participants in church clubs or societies (36). It should be noted, however, that a number of the findings which show a high level of church participation relate to Negro subjects, immigrants or specific ethnic groups. Another indication of
participation is the percentage of eligible persons who vote. In the 1964 presidential election, about 45 per cent of all those 18 years of age and over did not vote (217). A similar type of indifference to political participation was evidenced in Canada where the Cree Indians of a community development project showed little interest in the provincial or federal election process (60). Further, it is estimated that the proportion of Indians who vote is only about two-thirds of the general population (124).

The failure of the disadvantaged to participate in community organizations carries over into adult education. Participation in adult education is associated with age, socio-economic status, and participation in voluntary associations (82)(123)(143). Thus participation in educational activities is limited for the disadvantaged (48)(140)(143)(166)(167)(197). A recent and extensive study emphasizes that the factors education, occupation and income each relate individually to rates of educational participation, and all three influence the rate of participation differently. Of these factors, education seems to have the greatest impact on the differences in the rate of participation, which ranges from six per cent among those with only a grade school education to 38 per cent among those who went to college. Substantial differences are also encountered when participation is examined by occupation. Participation among the white collar group is 32 per cent compared to 17 per cent for those in the blue collar category. Amount of income has the effect of substantially
Increasing participation in each occupational category (140). Ten per cent of the semi-skilled workers participated, while unskilled workers had only five per cent. Those with five to eight years of schooling showed six per cent participation while those with less than five years of schooling showed only a two per cent rate (166)(167).

Participation is considered also in relation to Intelligence. In spite of the prevalent belief that the disadvantaged were already functioning at the upper levels of their Intelligence (168) it was found that they had sufficient Intelligence for participation in further education (11)(73)(199)(274)(283).

Farmers at a lower socio-economic level rarely participate directly in programs conducted by the Agricultural Extension Service (75) (271)(272). McBean and Abell surveyed a group of Canadian farmers and out of 95 respondents, only seven were utilizing the services available to them from government (174). In one study conducted in British Columbia, fifty to seventy-five per cent of the farmers had no contact with the District Agriculturist (271). This pattern is consistent in most studies of farmers' use of Information services (17).

Such lack of contact with sources of information is not only characteristic of farmers but extends throughout society. In a study of a Boston slum, parents were shown to take very little interest in school and to be ambivalent about education and teachers. Although they felt that education might lead to better jobs, it also changed their children and gave them strange values. Mothers and fathers were often in
disagreement on this. While the girl who does well in school is encouraged by her mother as well as by her teachers, the boy who is achieving must cope with his fathers' scepticism or opposition. Thus school may become the focal point of sex-role conflict for the boy. Education is something encouraged by mothers, teachers and society, but not by fathers and other men (144).

In Canada since 1961, over a billion dollars has been spent for new vocational training facilities. Yet, with this massive expenditure, there has been dropout rates of 50 per cent and higher, particularly among the unemployed workers, and one sample month in 1965 revealed only one unemployed worker in fifty was enrolled in a training course (204). Thus, the expansion of technical and vocational training since 1961 has had limited impact among the unemployed and only 3.5 per cent of the unemployed were attending training courses in February, 1965 (211).

A significant number of Canadian Indians in the 17 to 21 age group are not taking advantage of educational opportunities. For example, in 1949 there were 13,770 Indians in that age range, and only 58 were enrolled in some form of post-school training. In 1965, the 17 to 21 age group numbered 18,813 persons and of these 1,685 were registered in post-school programs. This low participation of Indian subjects in educational programs is not surprising in view of Byuarm's Illinois study which points out that in a community where there are superordinate-subordinate relations, there is little incentive for the subordinate members to seek formal
schooling (56). The absence of a precedent for participation in community affairs at the level of equality and across racial lines, presents an inhibition to involvement.

Adults of lower educational attainment are much less inclined to use the available cultural and educational resources of the community than the better educated. The home is used more extensively by the economically superior families, while spectator attractions tended to draw the poorer families away from the home (258). The St. Christopher House study in Toronto (231) also noted the inadequate use of community resources by its disadvantaged subjects. This lack of use was attributed to both their limited involvement in social activities, and an unawareness of available community resources. This failure to use available programs and other resources stems from the intellectual isolation of the poor. Because of this, they tend to be ignorant of the resources of society and have little intellectual stimulation. These factors in turn cause a perpetuation of a cycle. The children of the poor are thus ill prepared for adequate participation in the present middle class school systems. These children have often been reared in an environment where there is a fatalistic attitude, little verbal communication, and a lack of belief in long-range success (111).

IV. COMMUNICATION

Wirth (285) states, "If men of diverse experience and interest are to have ideals in common, they must be able to communicate." This

In a manpower retraining study in the United States, it was found that among unemployed and unskilled workers difficulties in communication were among the most important factors causing the disadvantaged to forego retraining. To overcome such difficulty the use of demonstration techniques was recommended (38). Similarly, when language barriers presented themselves in the parent education groups of the St. Christopher House in Toronto, the instruction had to be conducted in pantomime, or through the use of non-verbal demonstrations (231).

In a community where a superordinate-subordinate system of race relations exists, there will probably be no formal channels of communication between the races, and the informal channels will not operate for the exchange of opinion and information on racial issues. Hence, there will be no means to overcome the different perceptions of a community program which in turn will affect its outcome (56).

The Cree Indians of northern Quebec who follow traditional occupations of hunting and trapping are isolated from regular contacts with others during much of the year. This lack of communication does little to stimulate perception of the relevance of government processes to assist in solving local problems (60).

An extensive study in the United States indicated that one adult in three simply did not have any knowledge of educational resources for adults in his community. Persons of low socio-economic status were more
likely than those of either middle or high economic status to say that they did not think any facilities for instruction existed in the communities (140).

In regard to the mass media, a food buying study in Virginia found that there was relatively little difference in educational status between viewers and non-viewers of television informational programs. There was, however, proportionately more of the "users" of information who had completed one or more years of high school. As far as newspapers were concerned, readership was affected by both level of education and income. In an urban sample, two-fifths (41 per cent) of the non-readers of marketing information for consumers had only an elementary education. Likewise, the use of such information was associated with education and income. From the data, it was apparent that marketing information for consumers over radio and TV reached a somewhat larger proportion of those with limited schooling than did the newspapers which seemed most effective in reaching those with higher levels of education (208).

Among farmers, the channels of communication between the poorer farmer and the principal source of information are blocked because of the low rate of contact between them and the District Agriculturist as noted earlier. Mass media provide a principal source of information but this has been found to be inadequate with respect to action that leads to improving conditions (271)(272).
V. SUMMARY

These studies provide a depressing picture of the relationship between the disadvantaged and society. Largely because of discrimination, the poverty sub-culture is compelled to evolve its own operational way of life. The customary associational contacts of middle-class society are not functional to the disadvantaged. They participate instead through casual, close, and often intimate primary group relationships which involve small personal kinship, locality or friendship groups. Programs for change or amelioration appear to be doomed to failure if they adhere to established patterns of contact that are unacceptable to and not used by the group they are designed for.
CHAPTER IV

REMEDIAL EDUCATIONAL PROGRAMS

In spite of the fact that the disadvantaged adults consistently reject institutionalized educational programs, there is an increased emphasis in general education and vocational training for them in North America. At the same time, there has been no corresponding increase in empirical research that is a prerequisite of such programs (75). Curiously, governments are willing to spend vast sums on programs but virtually nothing on research to determine what those programs should be or how they should be organized and conducted. An exhaustive review has revealed only a limited number of reports based on valid research which deal with the education of disadvantaged adults. Those which have been identified are discussed in this chapter.

I. CLASSIFICATION OF THE PROGRAMS

The studies reviewed here have been concerned mainly with an examination of the instructional processes in formal situations, chiefly with respect to literacy and fundamental education. Other studies dealt with vocational training, and family and health education.
Literacy Education

The illiterate adult has a primary need for basic skill development in language, reading and simple arithmetic as a foundation for further vocational or social education. In an attempt to overcome the low self-image of the functionally illiterate, Drane (94) studied whether an adult literacy program using Laubach materials, conducted in a hospital, would be more effective when preceded by a program of participation training. Age, reading level and I.Q., as well as the probability of remaining in the hospital were the criteria used for selecting the patients to participate in the study. The two randomly assigned groups attended a total of 45 hours of instruction. The members of Group T received 18 hours of participation training and 27 hours of literacy instruction while Group L received 45 hours of instruction. The members of both groups were given the Nelson Reading Test Form A as a pre-test. After six weeks, the Nelson Reading Test Form B was administered to both groups and at the end of ten weeks, Form A was used again and Form B was administered again at the end of fourteen weeks. After six weeks, mean improvement of Group L was higher than that in Group T but the difference was not statistically significant. Furthermore, there was no significant difference after ten weeks in the improvement of the mean grade level in both groups. The test for retention that was administered after fourteen weeks showed a greater improvement in Group T. Although the reuse of the test battery limited the reliability of the
later test scores, nevertheless, the study indicates the importance of an informal classroom climate for programs of literacy education.

Henny (125) sought to determine whether individual or group instruction would exert the greater influence on progress in reading performance. He created the Family Phonics System of Instruction in an effort to determine the extent to which functionally illiterate adults can increase their reading performance by using a phonic system. Thirty inmates of the Indiana Reformatory were randomly assigned to a control group which received no instruction using phonics but continued in the elementary school; an experimental Group A which received one-to-one reading instruction by the phonic method, and an experimental Group B which received instruction using the phonic method in a group setting were established. Henny found that there was no statistically significant difference in reading gain between individual and group instruction. After the 20 sessions lasting one hour, the illiterate adult improved his reading ability by as much as 2.5 grade levels with a gain of 1.27 grade levels for the groups which had received phonic instruction. And there was a statistically significant difference in the gain made by these groups over that in the control group.

In research conducted at the Draper Correctional Center, McKee (178) tested an experimental group which received 40 hours of reading instruction along with 160 hours of remedial instruction alone. The mean gains in reading level were 2.39 for the experimental group compared
to .27 for the control group. In total gain, the experimental group achieved a 1.37 mean grade gain compared to 1.05 for the control group. These differences were statistically significant. McKee (178) reported similar achievement in another experimental study in which the experimental group which received 40 hours of reading instruction achieved an over-all grade level increase of 2.5 compared to 1.1 for the control group which did not. Both the McKee studies made use of teaching machines and programmed instruction for the experimental group.

Niemi (196) found a mean increase of one grade level in a group of 70 men in the United States Army who received 240 hours of instruction in an intensive literacy education program conducted in Alaska which verified the utility of such programs in raising the reading, English and computation level of functionally illiterate adults. At the same Alaskan base, approximately the same progress was recorded for twenty-six men who had formerly been Hungarian Freedom Fighters. After receiving 420 hours of intensive literacy instruction, the students in an upper level class achieved a one grade level increase.

The use of the mass media as an adjunct to classroom instruction was studied by television station WKN0-TV (131). In this case, the Laubach materials were used as the basis for the telecasts and the study measured the amount of progress achieved. Through administration of the Metropolitan Achievement Test to a group of 61 students, the following average grade levels were reported: word picture -- 2.6; word recognition --
2.5; word meaning -- 2.7; average reading -- 2.6; numbers -- 3.1; and average achievement -- 2.8 grades.

At Ohio State Reformatory, Allen (9) studied the Laubach literacy films with formal class instruction. During the sixteen weeks of operation, 288 Inmates participated in the program. There was an average educational achievement of 2.1 grades and an average reading achievement increment of 1.7 grades. For the 108 cases who participated in the program for the entire sixteen weeks, the total grade increase was 2.5 and the reading gain was 2.1.

Peerson (202) directed the evaluation of the Florence State College's literacy program which utilized the Laubach Kinescopes developed by WKNO-TV along with volunteer teachers at a viewing center. Classes utilizing direct teaching were organized for those areas with poor television reception. Only 254 out of 608 students who started the program completed it. Both tests developed locally and the Metropolitan Reading Test were used to measure the progress of the TV and regular classes. At the end of the program, the adults showed an average grade level of 2.5. The adults in the formal class surpassed the television group by one-half of a grade level.

Bunger (48) evaluated the effectiveness of the Operation Alphabet program in the State of Florida and found that 132 of the 243 adults were still reading at the first grade level or below at the end of the experiment rather than reaching the anticipated achievement level of third grade.
One explanation of this offered by Bunger was that after the twentieth lesson the majority of the adults stopped watching the program on a regular basis. This study also found that adults who studied in groups made greater progress than did those who studied individually.

Crohn's report (76) of the Diebold Literacy Project described an attempt at individual learning through programmed instruction designed around the learner's spoken vocabulary, using a literate helper. From developmental testing, it was discovered that the disadvantaged did not learn the isolated words used in the specially prepared materials and that there was a need for contextual support material.

The Reading Center Project (169) in Cleveland lacked an objective evaluation; nevertheless, it reported two significant findings. Person-to-person contact between the reading specialist and the illiterate adult is of paramount importance and there must be an instructional agent to direct the learning process.

The Greenleigh study (96) described the adult basic education program of Illinois and pointed out the deficiencies of programs designed to operate largely within the pre-adult school system. It was also found that in spite of provisions for compulsory participation by welfare recipients, attendance was poor (about one-third of the enrolled students attended school during the week sampled), and the drop out rate was considerable.

The use of standardized tests to predict academic achievement was described in two of the basic education programs. In the New Hope
Project (194) adults enrolled in a four-month program were tested with instruments intended for use at the pre-adult level. The study concluded that such tests had severe limitations for use with adults. This conclusion was supported by Whittemore (260) in an eighteen-month study of validity and reliability of standardized tests used with adults in basic education.

Vocational Training

In a study of the effects of counseling and general education on vocational training at the Norfolk Demonstration Research Project (40), a group of 200 adults were divided into the following groups:

1) Intensive general education and technical training with counseling;
2) Technical training and counseling but no general education;
3) Counseling but no general or technical education;
4) Counseling if solicited but no general or technical education.

Groups one and two resulted in a higher proportion of group members employed than groups three and four achieved. Group one had the highest rate of employment, salaries and greater job satisfaction than any of the other groups which indicates the value of general education. Since some of the evaluation procedures used to assess differences among the four groups were subjective rather than objective, the validity of the results of this experiment are subject to question.

A study in Montreal by Feintuch (99) evaluated the effectiveness of an integrated program involving vocational counseling casework and a
sheltered workshop to increase employability and modify attitudes of
52 unemployed adults who were difficult to place. The study found that
the average number of days employed after participation in the workshop
compared with the average employment before, produced a mean increase of
89.25 days per year which was a statistically significant difference.
This indicated the positive value of the workshop in qualifying previously
unemployable adults for increased employment.

Observations on programmed vocational instruction at the Texas
Department of Corrections revealed that the majority of the inmates pre­
ferred programmed learning over conventional instruction (34).

Family and Health

A personal approach to changing behavior through the use of
Intensive counselling was tried in a number of places. In two studies
conducted in Toronto (170) and Hamilton (120) such intensive counselling
by welfare caseworkers resulted in a greater number of welfare recipients
becoming dependent so that more of their cases were closed than occurred
among those who did not receive counselling. In North Carolina, the
counselling provided 223 volunteers in the Family Planning Program over a
two-year period resulted in no pregnancies (232).

In the St. Christopher House study (231), the value of small
group meetings was demonstrated. A group of mothers attended bi-monthly
meetings on nutrition and reported that the greatest value to them was the
opportunity to get together and discuss mutual problems. The contrast was
Illustrated in a study in Pennsylvania (41) which indicated that women with low income and reading deficiencies were not influenced by written materials to adopt new food habits.

II. ANALYSIS OF THE PROGRAMS

An analysis (See Table I on the following page) reveals that fifteen of the twenty-three studies dealt with some aspect of literacy and fundamental education, five studies were concerned with family and health education and the remaining three were related to vocational training programs. These findings indicate the present limited scope of remedial educational programs for the disadvantaged. Moreover, the program areas appear to be those determined exclusively by the superordinate majority in their notion of what is most necessary for upgrading the subordinate sub-culture. In all of the studies, the stated objectives of the programs were those of the sponsoring institution and no reference was made to participant involvement in the determination of needs and the establishment of goals. This is hardly a procedure which will induce voluntary participation of the disadvantaged.

At least one-third of the remedial programs (Table I) were conducted by institutions which could exert a measure of coercion in their operations. Five of the studies were conducted within the setting of state reformatories, two at an army education center, and one within a
## Table I

### ANALYSIS OF REMEDIAL EDUCATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>Program Listed in Appendix</th>
<th>Type of Program</th>
<th>Supporting Institution</th>
<th>Participation</th>
<th>Determination of Goals</th>
<th>Methods</th>
<th>Length of Program</th>
<th>Type of Teacher</th>
<th>Techniques</th>
<th>Devices and Materials</th>
<th>Level of Instruction</th>
<th>Level of Education</th>
<th>No. of Participants</th>
<th>No. of Enrollees</th>
<th>Measured Reading Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Allen</td>
<td>Literacy</td>
<td>State Reformatory</td>
<td>regular</td>
<td>Institutionally Determined</td>
<td>Individual</td>
<td>3 months (6th hrs., approx.)</td>
<td>staff teachers</td>
<td>Review &amp; Practice</td>
<td>Student Workbook</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>100</td>
<td>180</td>
</tr>
<tr>
<td>2. Retnold</td>
<td>Vocational</td>
<td>State Reformatory</td>
<td>regular</td>
<td>Individual Study</td>
<td>Class</td>
<td>12 months</td>
<td>Teaching Machine</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>120</td>
<td>240</td>
<td>1.9 grades</td>
<td></td>
</tr>
<tr>
<td>3. Brooks</td>
<td>Vocational</td>
<td>College (U.S. Gov't)</td>
<td>voluntary</td>
<td>Class</td>
<td>Adult</td>
<td>18 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>200</td>
<td>240</td>
<td>1.8 grades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. William-Bryan Study</td>
<td>Vocational</td>
<td>Family &amp; Civic Health</td>
<td>voluntary</td>
<td>Individuals</td>
<td>Individual Study</td>
<td>6 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>100</td>
<td>320</td>
<td>1.6 grades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Singer</td>
<td>Literacy</td>
<td>State Government</td>
<td>voluntary</td>
<td>Class and Individual Study</td>
<td>Class</td>
<td>6 months (50 hours)</td>
<td>Volunteer teachers</td>
<td>Review &amp; Practice</td>
<td>Student Workbook</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>504</td>
<td>320</td>
</tr>
<tr>
<td>6. Liebhold</td>
<td>Literacy</td>
<td>College</td>
<td>Individual</td>
<td>Individual</td>
<td>Practice</td>
<td>Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Ives</td>
<td>Literacy</td>
<td>State Mental Hospital</td>
<td>voluntary</td>
<td>Class</td>
<td>1.5 mos. (45 hrs.)</td>
<td>Student Workbook</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Institution of Illinois Program</td>
<td>Literacy</td>
<td>State Government</td>
<td>regular</td>
<td>Individual Study</td>
<td>Class</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Pilkington</td>
<td>Vocational</td>
<td>Jewish School Work</td>
<td>voluntary</td>
<td>Individual Study</td>
<td>Class</td>
<td>12 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Hamilton Study</td>
<td>Vocational</td>
<td>Family &amp; Civic Government</td>
<td>voluntary</td>
<td>Individual</td>
<td>Individual Study</td>
<td>6 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Huyck</td>
<td>Literacy</td>
<td>State Reformatory</td>
<td>voluntary</td>
<td>Class and Individual Study</td>
<td>Individual Study</td>
<td>1 mo. (20 hrs.)</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Dale</td>
<td>Literacy</td>
<td>TV Station</td>
<td>voluntary</td>
<td>Class and Individual Study</td>
<td>6 mos. (40 hrs.)</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Long</td>
<td>Literacy</td>
<td>City Library Center</td>
<td>voluntary</td>
<td>Individual Study &amp; Discussion Group</td>
<td>Individual Study &amp; Discussion Group</td>
<td>10 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>20</td>
<td>1.77 grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Long</td>
<td>Literacy</td>
<td>Family &amp; Civic Government</td>
<td>voluntary</td>
<td>Individual Study</td>
<td>Individual Study</td>
<td>6 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. McKeen</td>
<td>Literacy</td>
<td>State Reformatory &amp; U.S. Government</td>
<td>voluntary</td>
<td>Class</td>
<td>1.5 months (40 hrs.)</td>
<td>Reading Machine Programmed instr.</td>
<td>Per-Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>20</td>
<td>2.29 grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. McKeen</td>
<td>Literacy</td>
<td>State Reformatory &amp; U.S. Government</td>
<td>voluntary</td>
<td>Class</td>
<td>2.5 months (40 hrs.)</td>
<td>Reading Machine Programmed instr.</td>
<td>Per-Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>20</td>
<td>2.5 grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. New Hope Project</td>
<td>Literacy</td>
<td>College (U.S. Gov't)</td>
<td>voluntary</td>
<td>Class</td>
<td>4 months</td>
<td>Per-Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>495</td>
<td>171</td>
<td>1 - 2 grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Norm</td>
<td>Literacy</td>
<td>U.S. Armed Forces</td>
<td>volunteer</td>
<td>Class</td>
<td>3 months (24 hours)</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>350</td>
<td>1 - 2 grades</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Noel</td>
<td>Literacy</td>
<td>U.S. Armed Forces</td>
<td>volunteer</td>
<td>Class</td>
<td>6 months (36 hours)</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>350</td>
<td>1 - 2 grades</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Pearson</td>
<td>Literacy</td>
<td>College (U.S. Gov't)</td>
<td>voluntary</td>
<td>Group Meetings</td>
<td>Group Meetings</td>
<td>8 months (38 hours)</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>350</td>
<td>1 - 2 grades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Saint Christopher</td>
<td>Literacy</td>
<td>Family &amp; Civic Health</td>
<td>voluntary</td>
<td>Group Meetings</td>
<td>Group Meetings</td>
<td>11 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Schmidt</td>
<td>Literacy</td>
<td>Family &amp; Civic Health</td>
<td>voluntary</td>
<td>Class</td>
<td>2 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Descriptive</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Wisenes</td>
<td>Literacy</td>
<td>Dept. of Education</td>
<td>voluntary</td>
<td>Class</td>
<td>18 months</td>
<td>Adult</td>
<td>Pre-Adult</td>
<td>Statistical Testing</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 1: Analysis of Remedial Educational Programs*
state mental hospital. Further, a number of the remedial educational programs which were financed by federal or state monies had compulsory provisions in their enlistment of participants. In slightly more than half of the studies, the subjects were enlisted into programs. Such compulsion may, in effect, create negative attitudes towards future educational programs.

The data indicate that the sponsoring institutions showed a distinct preference for organizing the participants in classes (Table I). In at least ten of the studies, the learners were organized in classes while in another five situations, the class was combined with some other method. Although the class method dominates adult public night school programs and university evening extension programs (269), it may not be an acceptable method for the disadvantaged (136). There is some likelihood that they will reject its formalized and-structured nature, or associate it negatively with previous educational experiences.

The remedial programs ranged from 1 to 24 months in length with a median of six month's duration. The total number of hours for each program varied considerably from a minimum of 20 hours to a maximum of 448 hours. Considering their limited time perspective and their proneness to live and work to fulfill immediate needs, the disadvantaged seem unlikely to be committed to programs of lengthy duration. A drop out rate of more than half of the participants is noted in a number of studies. Moreover, an extended length of programming seemed of little benefit in regard to
the Improvement of reading skills. The reading scores ranged from one to 2.6 grades on post-tests and in three of the literacy programs of the shortest duration, the grade achievement in reading was as high or higher than that in the longer programs. Their mean was approximately 2.1 grades compared with 1.9 grades for the several other literacy studies.

The management of the instructional process was frequently in the hands of educational agents who had little or no specialized training for dealing with their disadvantaged clientele. Only three of the programs made specific reference to trained instructors, and in one of these studies the specialized training amounted to no more than five hours instruction for the volunteer teachers (Table I). Reliance on regular staff members, untrained volunteers, and teachers with pre-adult experience seemed to be the common practice. Without some specific training it seems unlikely that instructors will understand the behavioral patterns of the disadvantaged or be able to prescribe any special forms of educational treatment (7)(75)(291).

There was scant reference to the instructional procedures used. These consisted chiefly of review, practice and drill. In only two studies was discussion mentioned as a technique. It would seem then that if attitudes and values of the disadvantaged are to be both understood and modified, the use of this technique must be more fully explored (291). Certainly, group discussion is one of the best techniques for problem-solving which involves both the application of information and the integration of knowledge (269).
A great deal of emphasis in the literacy programs was placed upon the use of Instructional aids (Table I). The Laubach Kinescopes and student work books were used in the three television literacy programs and in one of the reformatory studies. The student work books alone were used by participants in the mental hospital study. Henny (125) also developed a student guide for use in his phonics system of instruction. Other devices and materials used in the remedial educational programs included reading and teaching machines, filmstrip and records, mailed information cards, programmed texts and the USAFI texts.

Most of the Instructional materials used had been developed expressly for adult use (Table I) but such was not the case with the testing devices. These were almost exclusively pre-adult tests which have been developed for and standardized with middle-class children (Table II on the following page). In spite of this fact, such tests were frequently used for both placement and evaluative purposes. There is a critical need to develop adult test Instruments if more effective and purposeful evaluation is to be achieved.

Similarly, there is a need for the more careful evaluation of remedial educational programs for the disadvantaged. In only eight of the twenty-three studies is there any attempt to apply statistical tests to some of the data. Too frequently, the data presented is merely descriptive and the evaluation subjective. Too often, the chief concern is to establish programs and there is no provision made for analytical evaluation which could undoubtedly benefit other program planners.
<table>
<thead>
<tr>
<th>Programs as Listed in Appendix</th>
<th>Tests Used</th>
<th>Date of Test Construction</th>
<th>Basis of Standardization</th>
<th>Type of Test</th>
<th>Appropriate Grade or Age Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Allen</td>
<td>Metropolitan Achievement</td>
<td>1921 - 1964</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 1.5-12</td>
</tr>
<tr>
<td></td>
<td>Stanford Achievement</td>
<td>1923 - 1956</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 1.5-12</td>
</tr>
<tr>
<td>3 Brooks</td>
<td>Army Revised Beta Examination</td>
<td>1931 - 1957</td>
<td>white male prison inmates</td>
<td>Intelligence</td>
<td>Grades 7 - 12 and Ages 10 - 59</td>
</tr>
<tr>
<td></td>
<td>General Aptitude Test Battery</td>
<td>1946 - 1938</td>
<td>adult workers</td>
<td>Aptitude</td>
<td>Ages 10 and over Grades 1 - 10</td>
</tr>
<tr>
<td></td>
<td>Gates Reading Survey</td>
<td>1954 - 1964</td>
<td>school pupils</td>
<td>Reading</td>
<td>Grades 1 - 9</td>
</tr>
<tr>
<td></td>
<td>SRA Arithmetic</td>
<td></td>
<td></td>
<td>Achievement</td>
<td></td>
</tr>
<tr>
<td>3 Burger</td>
<td>Gilmore Oral Reading</td>
<td>1951 - 1952</td>
<td>school pupils</td>
<td>Oral Reading</td>
<td>Grades 1 - 8</td>
</tr>
<tr>
<td>7 Drain</td>
<td>Gray Oral Reading Test</td>
<td>1963</td>
<td>school pupils</td>
<td>Oral Reading</td>
<td>Grades 1 - 10 and adults Grades 3 - 9</td>
</tr>
<tr>
<td></td>
<td>Nelson Reading Test</td>
<td>1963</td>
<td>school pupils</td>
<td>Oral Reading</td>
<td></td>
</tr>
<tr>
<td>8 Illinois</td>
<td>Iowa Every Pupil Reading Test</td>
<td>1940 - 1945</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 3 - 9</td>
</tr>
<tr>
<td>11 Henny</td>
<td>Gates-McKilip Reading Diagnostic Tests</td>
<td>1920 - 1962</td>
<td>school pupils</td>
<td>Reading (oral and written)</td>
<td>Grades 2 - 8</td>
</tr>
<tr>
<td></td>
<td>Gray Standardized Oral Reading Paragraph Test</td>
<td>1915</td>
<td></td>
<td>Oral Reading</td>
<td>Grades 1 - 8</td>
</tr>
<tr>
<td>12 Hoist</td>
<td>Metropolitan Achievement Test</td>
<td>1931 - 1964</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 1.5-12</td>
</tr>
<tr>
<td>16 McKee</td>
<td>Metropolitan Achievement Test</td>
<td>1931 - 1964</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 1.5-12</td>
</tr>
<tr>
<td>17 New Hope Project</td>
<td>California Achievement Test</td>
<td>1934 - 1958</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 1 - 14</td>
</tr>
<tr>
<td></td>
<td>California Test of Mental Maturity</td>
<td>1929 - 1957</td>
<td></td>
<td>Intelligence</td>
<td>Kindergarten to Grade 16 and adults</td>
</tr>
<tr>
<td></td>
<td>Gates Reading Survey</td>
<td>1939 - 1960</td>
<td>school pupils</td>
<td>Reading</td>
<td>Ages 16 and over Grades 7 - 12 and Ages 16 - 59</td>
</tr>
<tr>
<td></td>
<td>General Aptitude Test Battery</td>
<td>1946 - 1958</td>
<td>adult workers</td>
<td>Aptitude</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revised Beta Examination</td>
<td>1931 - 1957</td>
<td>white male prison inmates</td>
<td>Intelligence</td>
<td></td>
</tr>
<tr>
<td>18 Niemi</td>
<td>California Achievement Test</td>
<td>1934 - 1958</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 1 - 14</td>
</tr>
<tr>
<td>19 Niemi</td>
<td>Army General Classification Test</td>
<td>1940 - 1960</td>
<td>adult soldiers</td>
<td>Intelligence</td>
<td>Grades 9 - 16 and adults Grades 1 - 14</td>
</tr>
<tr>
<td></td>
<td>California Achievement Test</td>
<td>1934 - 1958</td>
<td>school pupils</td>
<td>Achievement</td>
<td>Grades 9 - 13</td>
</tr>
<tr>
<td></td>
<td>High School General Education Develop. (Iowa Tests of Educational Development)</td>
<td>1942 - 1963</td>
<td>school pupils</td>
<td>Achievement</td>
<td></td>
</tr>
<tr>
<td>20 Peerson</td>
<td>Metropolitan Reading Test</td>
<td>1932 - 1962</td>
<td>school pupils</td>
<td>Reading</td>
<td>Grades 2 - 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Achievement</td>
<td></td>
</tr>
<tr>
<td>23 Whittomore</td>
<td>California Psychological Inventory</td>
<td>1936 - 1957</td>
<td>high school students</td>
<td>Personality Inventory</td>
<td>Ages 13 and over</td>
</tr>
<tr>
<td></td>
<td>California Test of Mental Maturity (Level 3)</td>
<td>1930 - 1957</td>
<td></td>
<td>Intelligence</td>
<td>Grade 7 - 8</td>
</tr>
<tr>
<td></td>
<td>Differential Aptitude Test (Form L)</td>
<td>1947 - 1958</td>
<td>school pupils</td>
<td>Aptitude</td>
<td>Grades 8 - 12</td>
</tr>
<tr>
<td></td>
<td>Henmon Nelson Test of Mental Ability</td>
<td>1921 - 1958</td>
<td>school pupils</td>
<td>Intelligence</td>
<td>Grades 9 - 12</td>
</tr>
<tr>
<td></td>
<td>Iowa Silent Reading</td>
<td>1927 - 1943</td>
<td>school pupils</td>
<td>Reading</td>
<td>Grades 4 - 13</td>
</tr>
<tr>
<td></td>
<td>Kuder Preference Record--Vocational (Form CH)</td>
<td>1954 - 1960</td>
<td>school pupils</td>
<td>Interest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minnesota Multiphasic Personality Inventory</td>
<td>1942 - 1951</td>
<td></td>
<td>Personality Inventory</td>
<td>Grades 9 - 16 and adults Ages 16 and over</td>
</tr>
<tr>
<td></td>
<td>Otis Quick Scoring Beta Test</td>
<td>1937 - 1954</td>
<td>white male prison inmates</td>
<td>Intelligence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revised Beta Examination</td>
<td>1931 - 1957</td>
<td>school pupils and college students</td>
<td>Achievement</td>
<td></td>
</tr>
</tbody>
</table>

* Source: Mental Measurements Yearbooks.*
III. SUMMARY

The specific program research which has been reviewed was concerned chiefly with matters relating to instruction. Although this is important, the more fundamental problem is that of overcoming resistance to education which is so characteristic of the disadvantaged. The rejection of the institutionalized patterns of education by the disadvantaged as noted previously is indicative of the need to discover new patterns which will be acceptable. None of the research has been concerned with that matter. Secondly, there has been no clear appreciation of precisely which characteristics of the disadvantaged are most amenable to permanent change, and which means will exert the most effective leverage on their total pattern of living. There is still the need to redefine the problems in terms of cultural change if programs are to be directed towards more workable strategies and more viable results (110).

At the best, the studies reviewed here verify the potentialities for further education and training of the disadvantaged and suggest that personalized instruction is most effective. They provide very few clues to the design of the programs and to the selection of content.
CHAPTER V

IMPLICATIONS FOR PROGRAM DEVELOPMENT

As yet, the attempts to ameliorate the situation of the disadvantaged have been noticeably piecemeal and unsuccessful. Welfare programs have shown themselves to be inadequate because they do little more than to maintain existence at a subsistence level and fail to cope with the basic causes of disadvantage. There is some indication, however, that education may offer a solution to the problem. Educational programs can be directed toward altering the situation of the disadvantaged adult; but to do so, a different conception of educational programming must be effected and the barriers which inhibit participation of the disadvantaged must be overcome.

I. BARRIERS

There are certain identifiable barriers which inhibit any programs to alter the situation of the disadvantaged population. These lie both in the larger society and in the disadvantaged sub-culture. Altering one without simultaneously changing the other will not successfully resolve the problem of disadvantage.
Societal Barriers

The disadvantaged constitute a minority group which is subjected to the exercise of prejudice directed toward them by the superordinate group. The prejudice inhibits the participation of the disadvantaged in the on-going organized life of the community. Because of prejudice, they do not have ready access to educational and employment opportunities through which these people might alter their status. Thus, prejudice is a major societal barrier that must be overcome through the education of the larger society in order that it can understand its role in the creation and maintenance of disadvantage (56)(63)(95)(106)(110)(141). Since economic insufficiency is a major factor in producing disadvantaged status (37)(122), it is particularly important that prejudices in employment opportunities be removed through legislation and/or education (56)(106). According to Dellefield (83), the disadvantaged worker can be trained to perform skilled tasks in a short period of time so that the lack of a skill is not a justifiable rationale to obscure the more basic problem of discrimination induced by prejudice.

Of equal importance to the barrier of prejudice are those barriers erected by the educational system itself. Although these barriers are not directed specifically at the disadvantaged as is prejudice, they nevertheless create impediments for these people. The educational barriers stem largely from concepts of education and training held by educators serving the superordinate group in society (75). Moreover, the educational system
has been developed to serve the value system of the middle class. This same middle class educational system has lacked sufficient flexibility to function effectively with the disadvantaged who cannot meet the expectations of a system which is tailored for mass production rather than individual development (128). If such an educational system is to change to meet the needs of the disadvantaged, it will be necessary to introduce innovations in the pattern of organization, the curriculum, and the mode of instruction. Otherwise it may be necessary to provide education and training outside of the established school system.

Sub-cultural Barriers

As victims of a situation in which they recognize themselves to be outnumbered and without power, the disadvantaged have withdrawn from society and established their own sub-cultural system (56)(110). This reinforces the isolation of the disadvantaged and promotes the development of a value system that is at variance with the superordinate values. The resultant alienation and powerlessness of the sub-cultural group promotes listlessness and futility so that the group is characterized by a low level of aspiration and a lack of motivation (48)(49)(83)(177). In their sub-cultural environment, the disadvantaged see no future that differs significantly from the present; consequently, they are interested only in those pragmatic concerns related to survival at the subsistence level (183). The school system is oriented to future success rather than
present survival so that the disadvantaged reject education and remain unaware of educational opportunities and facilities (140)(221).

Furthermore, their past experiences with school have created negative attitudes toward school as an institution and toward education as a means of improving their lot (128)(166).

By withdrawing into their own group and rejecting the institutional structure of society, the disadvantaged become unduly dependent. They rely frequently upon the development of strong kinship ties which in turn inhibit the establishment of relationships with the superordinate group (60) and restrict their understanding of the processes of society so that the disadvantaged cannot profitably use political means to help end their dependency (60)(124)(217). In addition, isolation breeds insecurity, timidity and fear which results in their reluctance to change (31)(56)(85). Although withdrawn, the disadvantaged are not unaware of their status in the larger society and in self-protection they develop a strong pride that makes them ashamed to admit their educational deficiencies (9)(116)(146).

These characteristics of the disadvantaged are real barriers to change but it is possible to alter them. To do so, the disadvantaged must become aware of the value of educational programs, develop a perception of their need for learning (49)(58)(85), and a consciousness of their own educational handicaps and deficiencies (83). These ends cannot be accomplished easily because communication with the disadvantaged is difficult. Written materials in newspapers, magazines, bulletins or written forms
are ineffective in reaching the disadvantaged (41)(143)(208)(254) and even though they listen to radio and watch television they tend to reject such impersonal communication (48)(208)(217). Face-to-face personalized contacts are a more effective way of communicating with the disadvantaged (40)(48)(132).

Successful experience with education is one way to convince the disadvantaged of the personal value of further learning. To provide such successful experiences requires the planning and conduct of educational programs specifically geared to the characteristics and expectations of the disadvantaged.

II. EDUCATIONAL PLANNING

The characteristics of the disadvantaged and their response to situations and conditions as discussed previously provide clues to planning educational and training programs that will meet their needs and be acceptable to them. These clues are discussed below in terms of communication, content, and the organization and conduct of the program.

Communication

Since the disadvantaged sub-culture has its own communication system for identification and protection, the normal channels of communication used among superordinate group members are not suitable for
communicating with the disadvantaged. The high rate of illiteracy and the generally low reading level of the disadvantaged precludes any effective communication through printed materials such as newspapers or bulletins. Radio and television have been found to be somewhat more effective in diffusing information. The disadvantaged are more aware of the information disseminated by these media, but they are rarely, if ever induced to take action as may be suggested by the message. Such failure to take action is attributable partly to the media which is abstract and impersonal and the disadvantaged reject the abstract and symbolic elements of the dominant society. Rejection may also be caused by the kind of action proposed in the message. If it suggests enrolling in night classes, the message is rejected because the disadvantaged reject the institutional structure. Thus, if the message is to be accepted and lead to action it must be concrete, personal and consistent with behavioral patterns of the sub-culture. If these conditions are met, there is no reason to believe that radio and television cannot effectively reach the disadvantaged.

The medium of communication with the greatest possibility of success is personal face-to-face communication either on a one-to-one basis or with small natural groupings (40)(48)(267)(291). As shown earlier, intensive counselling (120)(170)(231) and small group sessions (94)(180)(238)(291) were notably effective in changing behavior. If suitable educational and training programs are established, the disadvantaged can be induced to participate through personal contacts (40)(48)(291).
In a tight homogeneous group such as the poverty sub-culture messages fed into one part of the system through personal contact will spread slowly through the system by word of mouth. This requires a message that is simple and not readily subject to distortion. Small group communication may be faster and certainly less subject to modification but the groups must be natural rather than artificial. In any case, the message will evoke the desired response only if the action specified is itself acceptable and meaningful to the disadvantaged.

The language of the sub-cultural system differs from that of the primary culture. This difference is largely a matter of word meanings; consequently, in order to insure that the desired meaning is conveyed, it is necessary to determine the vocabulary appropriate to the sub-culture. Furthermore, the sub-culture uses non-verbal communication extensively so that this must be understood and used where appropriate. Television may lend itself to non-verbal communication in the form of cartoon presentations. These should be effective in communicating simple but specific messages.

III. CONTENT AREAS

The socio-economic characteristics of the disadvantaged suggest areas of program content in which these people are particularly deficient. It would be a serious mistake, however, to regard any of these program
areas as prescriptive. At the most they should be only suggestive because the disadvantaged themselves must first be involved in developing programs which are relevant to their own needs. Too frequently, the content of the remedial programs has been dictated solely by the institutions of the superordinate majority.

The principal areas which might be explored with the disadvantaged are noted below:

Basic Education

The high proportion of illiterates and functional illiterates among the disadvantaged indicates their need for competence in the basic skills of reading, writing and simple computations since these are prerequisite to most others areas of education. As has been shown, many disadvantaged adults do not possess even the minimum level of education required to qualify them for entry into vocational or job-training programs (211)(217)(231).

Vocational Education

The fact that the disadvantaged adult frequently displays an interest in vocationally oriented goals would designate this area as significant for both rural and urban people. At the present time job positions for the unskilled and semi-skilled workers are proportionately diminishing; there are, though, expanding opportunities in the service
Industries (163)(181). These may provide acceptable alternative sources of employment providing the jobs are not below the level which the worker had previously achieved (83).

With the progression of automation and cybernation, there is the constant confrontation of technological unemployment (253). Since it is now estimated that a worker will have to be retrained three or four times during the course of his working years, the need for vocational and job retraining programs becomes obvious if the individual is to maintain his employability. This is a problem of particular relevance to the young worker with his working life ahead of him (138)(166)(259).

Family Life Education

Since the disadvantaged generally show a marked preference for intimate, primary group relationships, family life education would seem to be an area for consideration and exploration in program development. It is already obvious that poverty is self-perpetuating and may involve generation after generation in its cycle. It is also evident that the disadvantaged families often have as many as five or more children. Such large families in themselves doubtless constitute a considerable if not overwhelming economic burden. Family planning would seem to be one of the areas of imperative need for the disadvantaged (211)(230)(232).

If disadvantaged parents are given help to understand the complexities of family life and the extent of their parental responsibilities, then some benefits will no doubt accrue to the disadvantaged children. Recent
evidence indicates that it is the home setting which is crucial in establishing the child's attitudes towards learning. It is these home-established attitudes which largely affect the subsequent pattern of learning in schools and provide the opportunity for the development of effective communication through contact with an adult level of conversation (32)(100)(144)(184)(218)(239)(240). For these full family responsibilities, both husbands and wives often need extensive parent education programs.

The event of automation may certainly make possible the more equitable sharing of these family responsibilities between husband and wife. As the husband's working time decreases, he should have more time for family and home activities (175).

Homemaker Education

The home also bears the major responsibility for providing for an adequate level of nutrition and maintaining a satisfactory standard of health and child care. To fulfill these responsibilities as well as to perform housekeeping and home management with competence, the disadvantaged women require information and training in homemaking skills (102)(208)(217)(231).

Consumer Education

Since the disadvantaged earn inadequate incomes, there is a pressing need for them to get a maximum return for their consumer dollars.
Suitable educational programs are required to provide the disadvantaged with an understanding of the consumer market, credit operations and the competence to deal with financial matters (2)(75)(138)(208).

Health Education

A study of the characteristics of the disadvantaged members of society reveals a general low level of health and a minimal use of existing agencies and facilities. Although legislative acts may be employed to provide free or low cost services, there still remains the necessity to educate the disadvantaged as to their availability and most effective use. There is also the need to understand the importance of preventive health and dental care and a basic knowledge of nutrition (22)(172)(217)(252).

Leisure Education

With the advance of automation and cybernation, there is much likelihood of a significant increase in the amount of available leisure time, especially for the lower-skilled workers. Coupled with the possibility of the payment of a guaranteed annual income, the two might constitute the ingredients of serious social disorder. The work
Ethnic has been firmly implanted in our society, (99) and there is evidence to indicate that the lower socio-economic groups are the least eager to anticipate the possibility of increased leisure time (258). The role of passive spectators is unlikely to be satisfactory as an outlet for aggressive energies formerly released by work (99). There is also a growing number of aged people in our society who are not involved in work. The challenge is posed for developing recreational programs which will engage the interest, develop the talents, and release the energies of the disadvantaged in a creatively satisfying manner. This area of programming might very well be of greater long range societal significance than that type of vocational training which merely leads to the unsatisfactory solution of dead-end jobs.

Citizenship Education

An obvious characteristic of the disadvantaged is their alienation from participation in the organization life which typifies middle class society. Aside from some involvement in the church and labor unions, the participational rates are minimal. If the disadvantaged are to achieve a fuller measure of the benefits of society, they should be provided with opportunities to realize their potential as vocal and voting citizens. Since there is evidence to indicate that
the disadvantaged are largely relationally oriented in their conceptual style, the actual involvement in community action programs may best serve the purpose of citizenship programs. In these community action programs they should be called upon to think about and take initiative in solving some of their own problems. This would call for citizenship participation in a functional way (56)(106)(110)(124)(188).

IV. CONTENT SELECTION

The consuming preoccupation with survival at the subsistence level by the disadvantaged adult clearly indicates that the content selected in the areas outlined above must be functional and immediately relevant to the problems of the individuals involved. Thus, the educational and training programs conducted for disadvantaged adults must center on their needs rather than content per se. This is a departure from the norm of similar programs conducted for the superordinate group in which the content is dictated by some supposed logic inherent in the content. The disadvantaged require and will accept only that learning which is completely practical and immediately
applicable to their own situation. Learning which is directly related to economic problems is more acceptable than any other (83)(98)(291). Without such relationship of the content to economic goals, there is little chance that the disadvantaged will participate. Among the young particularly, the goals are vocational so that content should be geared to that end (82).

V. ORGANIZATION AND CONDUCT

The disadvantaged adults reject the abstract Impersonal Institutionalized structure of society (267). Consequently, they reject the school as an agency for further learning. In addition, their own prior experiences in the school which were such as to induce them to drop out reinforces their rejection of the school. Any efforts to persuade the disadvantaged adult to "return to school" inevitably meets with failure. In view of this, then, the school is not the locus for initial educational programs for the disadvantaged. After some satisfactory experiences with learning in a more acceptable setting, it may be possible to re-introduce the disadvantaged to the school building or a proper setting for learning.
There are other physical facilities in a community, particularly in the immediate area of the disadvantaged, which are less objectionable than is the school and these should be used for basic education and training programs. Since the church is acceptable, such facilities as church halls and basements would provide a suitable setting. Union halls, community centers and neighborhood houses might also be appropriate. At the moment, school systems are not attuned to the conduct of education outside of the school building because of administrative inexperience and/or indifference to the needs and culture of the disadvantaged. Government regulations governing further education and training also tend to inhibit more functional approaches. Both these factors constitute barriers that interfere with suitable program development.

Furthermore, regulations and administrative practice require larger instructional groups than are suited to the disadvantaged subculture. Such groups are ad hoc structures representative of the characteristics in the larger society which the poverty sub-culture rejects. Smaller natural or autonomous locality groups are better suited to the sub-cultural milieu of the disadvantaged as these permit more personalized communication and inter-personal contacts.
The instructional processes used in ordinary educational situations are appropriate for a mass culture but they are rejected by the poverty sub-culture as too impersonal and formalistic. More emphasis is needed on demonstration, discussion, and similar processes which involve the individual in learning as an active participant rather than as a passive observer. Textbooks and similar instructional materials will need to be constructed out of the experiences shared in the poverty sub-culture so that they are immediately relevant and practical as solutions to familiar problems.

An important prerequisite to the operation of effective remedial educational programs is the selection and training of competent instructors. They should be instructors who have specialized training in adult education. Formal course work in sociology, psychology and anthropology should better enable such instructors to understand disadvantaged people in terms of their culture, their social roles, and their individual behavioral responses (75)(98)(291). Without such background, instructors are hardly in a position to select and use appropriate processes for their special clientele.

Education and training programs designed for the disadvantaged adult must be personal, informal and individual. In short, the mass educational approach must be abandoned in favor of primary group relationships in the learning situation. Whether or not this is possible
to achieve within the existing educational system remains to be explored but the likelihood of success seems dubious.

VI. SUMMARY

Specific details of educational planning to solve the problems inherent in programs designed for the disadvantaged cannot be stated with assurance at present because of the scarcity of substantial research. The generalized implications drawn from existing research as indicated above provide clues to planning which skilled adult educators should be able to translate into functional programs. The present course of educational and training programs offers little hope in answering the needs of the disadvantaged.

Any plan for a remedy for disadvantage must be concerned with cultural change which involves an alteration in the over-all way of life. Piecemeal approaches directed toward the alleviation of individual distress will not solve the problem because they will not alter the basic cultural environment (110). Clearly if the disadvantaged are to be considered within an ecological framework rather than a cause and effect model, there is a need to deal with multiple levels of disadvantage in a coordinate way which requires social institutions unlike any of those we now possess (95).
Thus, it may be more economical in the long run to establish new programs unrelated to present educational institutions than to attempt to reconstruct existing systems.
BIBLIOGRAPHY


4. Abramson, Jane A. A Study of the Effects of Displacement on Farmers Whose Land was Purchased for Two Community Pastures in Saskatchewan. Saskatoon: Center for Community Studies, 1965.


22. Bailey, Wilfred C. *Survey of Families In the Yellow Creek Watershed: Part II. Family Types*. Agricultural Experiment Station, State College, Mississippi, 1962.


42. Brown, James S. *The Family Group in a Kentucky Mountain Farming Community*. Agricultural Experiment Station, University of Kentucky, Lexington, Bulletin 588 (June, 1952).


52. _________________ The Fourth Mental Measurements Yearbook.  

53. _________________ The Third Mental Measurements Yearbook.  

54. _________________ The Nineteen Forty Mental Measurements  

55. Buttz, John R. "The Expressed Aspirations, Problems and Educational  
Interests and Opinions about Learning of a Lower Socio-Economic  
Group in a Small Indiana Town." (Unpublished M.Sc. thesis,  
Indiana University, 1965).

56. Byuarm, S.W. "Community Action: A Case Study In Racial Cleavage."  

57. Caliver, Ambrose. Literacy Education, National Statistics and Other  
Related Data. Circular No. 376, Washington, D.C.: Office of  
Education, 1953.

Press, 1951.

59. Cass, Angelica. Adult Elementary Education. New York: Noble and  
Noble, 1956.

60. Chance, Norman A. Descriptive Statement on the McGill-Cree  

61. Chapin, S.F. "Social Participation and Intelligence." American  
Sociology Review. 4:16 (April, 1939).


63. Clarke, A.C. "A Black Man Talks About Race Prejudice In White Canada."  

64. Clark, S.D. The Employability of the Older Workers. Ottawa:  
Economics and Research Branch, Department of Labour, n.d.

and Participation." Education In Depressed Areas, A.H. Passow  


104. **Focus on New Programs of Continuing Education.** Cincinnati: A Report to the Superintendent and the Board of Education, n.d.

105. Folkman, W.S. *Attitudes and Values In a Rural Development Area: Van Buren County, Arkansas.* Fayetteville Agricultural Experiment Station, University of Arkansas, Bulletin 650 (January, 1962).


163. Lindstrom, David E. Differences In Academic Capability between Rural Youth Planning and not Planning to Go to College. Urbana: University of Illinois, Agricultural Experiment Station, 1964.


172. Lyle, Clay. *The Use of Health Services by Rural People In Four Mississippi Counties*. Agricultural Experiment Station, Mississippi State College (March, 1954).


210. *Presentation of the Canadian Department of Citizenship to the Senate Special Committee on Aging*. Ottawa: Department of Citizenship and Immigration (1964).


240. Skene, Dora L. "The Culturally Deprived" In School and Society: Selected Approaches. Toronto: Research Department, Board of Education of the City of Toronto, (April, 1966.)


261. Training the Hard Core Unemployed--A Demonstration-Research Project


287. Workshop in Adult Basic Education. Columbus: Center for Adult Education, Ohio State University (1967).


APPENDIX

DIGEST OF PROGRAMS
Objectives

The Laubach Literacy Course of the Ohio State Reformatory purposes as its objective to go beyond the mere acquisition of academic and vocational skills to achieve as its ultimate goal, a socialized and integrated human personality. Associated with this goal is the acquisition of an improved status of personal-social relationships in the areas of: (1) Home membership; (2) Health and Physical fitness; (3) Vocational competency; (4) Citizenship Ideals; (5) Recreation and leisure time activities; and (6) Ethical relations.

Administration of Program

The program was organized in 1960 as a pilot program in literacy education by the Ohio State Reformatory. The necessary facilities and student materials were provided by the Institution. The experiment was directed by the Assistant Superintendent of the Reformatory who was assisted in the programming of the project by the Literacy Division of the John C. Campbell Folk School of North Carolina. In addition to the teacher on film, there were classroom teachers to supervise student work done at the reformatory.

The literacy program was designed for the illiterate inmates of the Ohio State Reformatory, and during its 16 weeks of operation, it involved a total participation of 288 inmates.
Format

To initiate the program, four literacy classes with provision for 40 students in each were established. The classes were then assigned a school and work schedule on alternate days.

On a school day, one to two literacy education films were presented during the morning session. In the afternoon, there was review, practice, and drill under the supervision of a classroom teacher. In these sessions the teachers, using the work text books, re-taught, reviewed and reworked the lessons previously presented by the teacher on film. Further, one day each week was allowed for additional drill, review and practice in the consolidation of the learning experiences.

The Laubach Literacy Course of Study was employed. It provided for 98 film lessons taught by an expert literacy teacher. Each of these film lessons which were 30 minutes long, were also supplemented with student work materials and classroom teacher guides.

The educational achievement was evaluated as the program progressed. The following standard achievement scales were administered in the listed order:
1. Stanford Achievement Test, Advanced Battery, Partial, Form J.
2. Metropolitan Achievement Test, Elementary Battery, Form A.
3. Metropolitan Achievement Test, Elementary Battery, Form B.

Evaluation

For the 288 Inmates who participated for varying intervals of time in the educational program, there was an average educational achievement
Increment of 2.1 grades. The 108 cases who participated in the program for the full 16 weeks showed an average education achievement increment of 2.5 grades. As for the average reading grade achievement increment, there was a 2.1 grade level gain for the 108 subjects who participated for 16 weeks, and a 1.7 grade gain for the 288 inmates.
Objective

On the basis of the findings of a prior research project in programmed learning at the Draper Correctional Center of Elmore, Alabama, the objective of this study was to investigate the rehabilitative value of programmed instruction.

Evaluation

The following conclusions and observations were made after two years of study:

1. Most of the prison staff recognized the value of programmed instruction. In addition to their administrative and financial support, they began developing programmed material that was not associated with the research.

2. The majority of inmates who were interested in their education preferred programmed instruction over conventional instruction.

3. The inmate population contained individuals who were capable and willing to write programmed material.

4. Programmed instruction can be effectively used for both supervised classroom study and self-study in a cell.

5. The styles of writing which were developed were suitable for study by the type of inmate that participated in the project.
6. Study of linear programs in a cell was more effective if presentation was by machine rather than by book.

7. Presentations by machine in cells were superior to presentations by machines in classrooms.

8. Presentations by book in a classroom were superior to presentations by book in a cell.

9. The selection of writing style for a program should be based largely on the preference by the writer since no advantage of one over the other was found by this research. If linear style is selected, provision should be made for the writing of responses.
Objective

The major objective of the Demonstration Research Project was to demonstrate and evaluate certain adult education principles of teaching and learning on the recruitment and training of unskilled, unemployed workers. The principles were:

1. The unskilled, unemployed adults can learn a new set of occupational skills in an intensive 12-month program which is designed to take into account the personal attributes in their life situations.

2. Unskilled adults can learn enough skills and internalize values essential for qualifying for certain trades when training in general education (language arts, number skills, occupational information, and human relations) and a guidance supplement are given along with vocational training in the 12-month period.

3. Correlatives of the preceding are:

   a. When the combination of general education, vocational training and guidance is given, there is an improvement in aptitudes and abilities as measured by standardized tests.

   b. Good employment adjustment (as indexed by getting and holding a job after training, etc.) will be a subsequent correlate of successful completion of the General Educational-Vocational Program.
4. That certain standardized tests of aptitudes and intelligence as well as certain inventories of interests have:
   a. predictive value in the selection of trainees who are unskilled, unemployed adults.
   b. utility in the development of the materials and the training program appropriate for this group.

5. That general education supplemented with counselling is an essential correlate of vocational training if adult unskilled workers are to make good adjustments in their new occupations.

**Administration of Program**

The initial proposal for the Demonstration Research Project was designed by an Interdisciplinary group at Virginia State College. Support for this study was provided through two separate grants, one from the United States Office of Education under the Co-operation Research Program and the other from the Office of Manpower, Automation and Training of the Department of Labour.

To evaluate the effectiveness of the techniques and materials used in the project, the staff imposed an experimental design on the retraining and educational activities using statistical and mensurative methods on 200 persons who were divided into the following groups:

Group A -- Main Experimental Group
Group B -- Subsidiary Experimental Group
Group C -- Main Control Group
Group D -- Subsidiary Control Group
Group A received intensive general education and technical training. Group B received technical training but no general education. Group C received neither general nor technical training. Group D received counseling if they solicited it, while individuals in Groups A, B, and C received personal counseling as the need arose. In addition, members of these three groups received group guidance on a systematic basis. Groups C and D were given a small honorarium to assure their continuing contact and co-operation in supplying program records through testing and interviews while members of Groups A and B received a weekly allowance. Each of the two experimental Groups, A and B, were divided into five occupational groups of ten trainees each. The trainees for a given occupation in Group A were matched with trainees in Group B taking the same occupational training and tests of significance that were applied to age, education, and general aptitudes of the two groups indicated no significant differences between the two groups.

**Evaluation**

In evaluating the effects of the general education on post-training performances, the men who completed the combination curriculum (Group A) were identified by the following:

1. They received higher ratings by instructors, higher test scores, higher salaries and higher indications of job satisfaction.

2. Instructors ranked 65 per cent of the "A" group as "most likely to succeed in contrast to 35 per cent in the "B" group.
3. Men in "A" group gained an average of 9.2 points in I.Q. as measured by the Army Revised Beta Intelligence Test; 1.8 years on the Gates Reading Survey; 2.9 percentile ranks on the S.R.A. Test of Arithmetic and 4.9 points on the GATB I.Q. test. Men in the lower half of the group as measured by standardized tests seemed to benefit more from the instruction; Gates Reading score gains, for example, were 2.1 grades for the lower half as compared to 1.8 grades for the total.

4. More men in the "A" group were employed at the time of the interview, 95 to 74 per cent with a higher gross average-weekly salary.

5. Men in Group "A" utilized a larger variety of methods of securing employment and sought higher paying, higher status jobs outside their fields.


In evaluating the results of the training between the experimental and control groups, a higher percentage of the experimental group were employed. They received a higher rate of pay, acquired more promotion, had less job mobility and expressed greater job satisfaction.
Objective

A pilot Food Stamp Program was established in Pennsylvania with the educational objective to increase the knowledge of homemakers in low-income families about nutrition and foods and to provide them sources of information. A series of 12 IBM cards which included information to the participating families about foods and nutrition were the method of teaching. The following were the specific objectives of this program:

1. To determine whether homemakers could recall receiving the cards;
2. To determine whether homemakers read the cards;
3. To ascertain whether homemakers used various foods and recipes mentioned on the cards;
4. To obtain from homemakers their "felt" problems in feeding their families;
5. To ascertain the communication channels homemakers used, their personal characteristics, and the socio-economic status of their families;
6. To determine whether selected personal and social factors were associated with use made of information on the cards.

Administration

Administration of the project was the joint responsibility of the Department of Health and Welfare, the State Government, and the Co-operative
Extension Service, Pennsylvania State University. This project, utilizing the mass media, was conducted between April and September 1964 in the Wilkes-Barre District, Luzerne County. A systematic list sample was used to select a seven per cent sample (161 names). The interviewing of this sample was conducted by 27 staff members of the Pennsylvania State University. During the one day that was set aside for interviews, a total of 145 interviews were conducted.

Evaluation

The interviews reported that 91 per cent of the sample had seen the set of 12 cards. It was believed that this nine per cent of non-cognizant homemakers had actually received the cards. Of the group which acknowledged receipt, certain characteristics were significantly associated with the use of cards. The homemaker was more likely to read the cards if husband and wife were together, if there were more than two in the family, if she was under 60 years of age, if she could read English competently, and if the monthly income was $150 or more. Sixty-nine per cent of the sample indicated that the cards were of help to them. It was acknowledged that change of knowledge would not be adequate to have people adopt new food habits. Programs must also take into account a complex set of attitudes.

Each homemaker was given a quantitative score based on the number of recipes which she had tried from the selected group of seven recipes. A weight of one was given for each recipe so that scores could range from zero to seven. Forty-two per cent of this group had a score of zero, 14
per cent a score of one, 11 per cent had a score of two, 20 per cent a score of three, and 14 per cent a score of more than three. The homemakers were divided into three groupings based on these scores: zero, one to two, and three to seven. A number of characteristics were cross-tabulated with these groupings. The factors associated with the number of recipes tried were: higher monthly income, larger families, and families not on public assistance. The amount of formal schooling of the homemaker and her ability to read English were related positively with the number of recipes that were tried.

A similar rating was established to determine if the homemaker had acquainted herself with various kinds of nutritious and economical foods. The homemakers were divided into three groupings based on a weight of one given for each of the six recommended foods. The scores attained were: zero to two (23 per cent), three to four (44 per cent), five to six (33 per cent). In relating homemakers' characteristics to the number of foods served, it was noted that there was a definite tendency of those homemakers who had ability to read English and had higher family incomes to be using more of the foods. Other characteristics, e.g., formal education, size of family, were not associated with the number of foods used. However, the change in the Food Stamp Program rather than the Penny Planner cards was given as the most logical reason for change in the use of new foods.

The homemakers indicated that they enjoyed cooking; but, only one per cent attended a meeting in the prior year where foods were discussed. Another interesting finding was that the group did their entertaining
primarily among members of their immediate family or with a relative. Although there was a lack of communication with their neighbors, almost all of the group were influenced by radio and TV. In respect to their membership in organizations, 85 per cent belonged to a church. Although 81 per cent did not belong to another organization other than the church, the most likely other organization was the Parent-Teacher Association. The need for more personal approaches to change behavior significantly was a significant finding of this study, although the mass media method had been accepted with a high degree of satisfaction by the Food Stamp Program recipients.
A DESCRIPTIVE STUDY OF OPERATION ALPHABET IN FLORIDA AND AN EVALUATION OF CERTAIN PROCEDURES EMPLOYED

Objectives

In her study of Operation Alphabet in Florida, Bunger stated the main purposes as:

1. To relate the history of this movement in Florida;
2. To describe the Operation Alphabet Campaign; and
3. To evaluate some of the instructional procedures used.

Administration

The Operation Alphabet Series was implemented in February, 1963, as a state-wide literacy campaign. The 98 half-hour telecasts were transmitted by five educational and four commercial stations which served the Florida counties containing 75 per cent of the illiterate or functionally illiterate population in the state. The six major urban areas studied were Miami, Jacksonville, St. Petersburg, Tampa, Orlando and Pensacola.

The state-wide program involved the expenditure of over $50,000 for video tapes alone. In addition, thousands of dollars worth of commercial and educational television time was donated. The Florida Institute for Continuing University Studies contributed financial support and the personnel for teacher-training programs, as well as sponsoring a brochure.
The Florida State Department of Education along with local school officials and community groups also contributed much time and money to the project.

By June, 1963, a survey of all the directors of adult education in Florida indicated that 64 classes had been organized. It was also revealed that 4,247 TV Home Study Guides had been distributed, and it was estimated that some 5,004 illiterates and functional illiterates were participating in the series.

Besides the television teacher, directors of adult education, and volunteer teachers were involved in the operation of the program. The devices and materials employed consisted of the Operation Alphabet or Laubach Kinescopes, and a TV Home Study Guide to be used by the student.

It was reported that 158 said that they could not read at all or had minimum reading skill prior to watching Operation Alphabet. Employers were listed as the most important source by which students learned of the program. Ninety-four students were informed by this source. Forty-one learned of the program from prison officials; 27 from television announcements; 22 from adult education teachers; 18 from schools; and 13 from friends.

Of the 180 students who used the Home-Study Guide, 97 students listed the employer as the most important source for helping to procure the Guides; 40 named the prison; and 25 named the school.

Format

The study was conducted by a researcher obtaining data for a doctoral dissertation. The subject of the investigation was the Operation
Alphabet telecast series in Florida. The investigator set out hour hypotheses and four criterion by which to evaluate the television literacy series.

Subjects from the six major Florida urban areas, as well as participating students at the Raliford and the Lowell Correctional Institutes were selected. In all 243 students, 31 teachers and 10 directors of adult education became subjects of the Investigation.

Three distinct interview schedules were constructed and employed to gather descriptive information and opinions from the participants at each level of Operation Alphabet: the adult students, the volunteer teachers and the directors of Adult Education. The Gilmore Oral Reading Test was selected as the informal reading inventory to determine the reading level of the adult student at the time of the interview.

Evaluation

In evaluating the effectiveness of the Operation Alphabet program, Bunger employed four criteria of judgment. They were: (1) the post-Operational Alphabet literacy level of all the participants interviewed at the end of the study; (2) the changes in enrollment in public school adult literacy and elementary education classes; (3) the percentage of adult illiterates who remained in Operation Alphabet for more than 20 lessons, and the percentage of those who remained after the seventy-fifth lesson; and (4) the statements of opinion and identification of strong and weak points as identified by students, by the volunteer teachers and by the directors of adult education.
Four hypotheses were investigated and reported on. They were:

1. There is no difference in the two groups of Operation Alphabet students (group study and Individual study) with respect to the proportion who scored above and below 3.0 on the criterion test.

2. There is no difference in the two groups of Operation Alphabet students (those who used the Home Study Guide Book and those who did not) with respect to the proportion who scored above and below 3.0 on the criterion test.

3. There is no difference in the two groups of Operation Alphabet students (those who watched regularly and those who watched less than ten times) with respect to the proportion who scored above and below 3.0 on the criterion test.

4. There is no difference between the three counties in the study with respect to the proportion of adults enrolled in adult literacy and elementary education classes at pre- and post-testing times.

The method of statistical analysis for testing the four hypotheses was the application of the chi-square test. For hypotheses 1, 2, and 3 the chi-square test was applied to student scores obtained from the Gilmore Oral Reading Test. The critical value for acceptance of the hypotheses was determined at the .05 level of significance.

As for criterion 1, an examination of the compiled data from the Gilmore Oral Reading Test scores revealed that 154 students (63.3 per cent) scored below 3.0 compared to 89 students who achieved scores of 3.0 or above. Of the 104 subjects who watched the program regularly, 62 scored
below 3.0 on the criterion test while 42 scored above the 3.0 level. Although the Operation Alphabet promotional materials suggested that students who pursued the course should have attained at least the third grade level by the end of the course, the data indicated that the tested population in this study did not reach that goal. In fact, 132 students were still reading at the first grade level or below.

In consideration of criterion 2, the data did not seem to indicate for the counties sampled that Operation Alphabet had affected the enrollments of adult public school literacy and elementary education to any extent.

As for criterion 3, the data indicated that the majority of the student population interviewed for study did not continue to watch the series with any regularity after the twentieth lesson. There were 104 students who stated they had watched the program regularly, compared to 139 who reported that they had watched just a few times or just off and on.

The findings for criterion 4 were revealed in statements of strengths and weaknesses. Students were impressed with the television teacher and his method of presentation and explanation. This criticism dealt primarily with time scheduling and rate of speed lessons were taught, and loss of personal contact.

The teachers felt that the aims and purpose of the program were highly commendable and that the series itself was quite good. Their criticism concerned the fact that time scheduling was not good, lessons progressed too rapidly, volunteer teachers could use more help. They felt that their
work was greatly hampered by general disinterest, apathy, and by the embarrassment of their students.

The directors commended the television broadcast, the teacher and his teaching techniques. They were pleased with the fact that such programs brought all facets of adult education before the public. The directors were critical of the lack of personal communication with the learner. They were disturbed by the failure of the volunteer teachers and the students who failed to follow through with their commitments. They were also critical of the time scheduling of the telecast.

In the testing of the four hypotheses, it was found that the difference stated in hypothesis one was significant at the .05 level or above and, therefore, the hypothesis was rejected. Hence, there was found to be a difference in the two groups of Operation Alphabet students with respect to the proportion of those who scored above and below 3.0 on the criterion test. The students who studied in groups made more progress in reading than those who studied individually.

However, the statistical analysis of hypotheses two, three, and four indicated the differences were not significant at the .05 level, and, therefore, these hypotheses could not be rejected.

The use of the Home-Study Guide did not appear to make any difference in the reading of the Operational Alphabet students. Nor did regularity of watching the telecasts insure success in reading improvement.

It was the researcher's conclusion that although much time, effort and money had been spent in launching the Operational Alphabet campaign, the over-all program was not successful in any of the areas evaluated.
Objectives

The objectives of the Diebold Literacy Project were defined on the basis of the assumption that the illiterate had a level of command of the spoken language. Through the use of a minimum number of words that were in the learner's spoken vocabulary, specially designed written materials were developed for the acquisition and demonstration of reading skills. The specific objectives of the program were:

1. Sight recognition — the development of the ability to read out loud a given number of words in a manner that transmits meaning to other members of one's environment without pictorial or contextual support.

2. Information reception — the identification by the learner of a sound that he makes in the presence of a written word which relates to words that are part of his spoken vocabulary in order to acquire the meaning of the written word as it is used in context.

3. Independent recognition — the use of previously learned information to master unfamiliar material.

Administration of Program

The Diebold Literacy Project was sponsored by Tougaloo College and came under the direction of the Programmed Learning Department of the Diebold Group, Inc., New York. The project concentrated on the development
of materials for the adult illiterate Negroes who resided in the Mississippi Delta region. Staff for the program were recruited from both Mississippi and New York. The program participants were located in the rural area of Northeast Mississippi (Tunica County). Eighty per cent of the population in the county resided in the rural areas and their median annual family income was $992. The median number of school years completed by this group was 4.0.

Due to the cost factor, the use of audio-visual teaching machines was rejected. A programmed book was designed for the project and its use resulted in the program being called the "doubletrack program". To provide auditory stimuli for the learner, the material was designed to utilize a literate helper of the illiterates. It was actually a controlled tutorial program.

The initial course material was designed around the teaching of common nouns which were part of the vocabulary of the participants of the program. Later the material was reorganized to increase the use of context as stimuli support for new words.

Evaluation

Through the first developmental testing, it was discovered that retention as indicated by subsequent lessons was low despite a low error rate. This resulted in further training in visual discrimination. This testing also pointed out the need for an increase in the use of context as stimuli support. The researchers realized the limitations of their
Initial word approach as people talk in meaningful language units. The use of the smallest unit, the isolated word, lacked the contextual and syntactic support of larger language units. This developmental testing has served as a diagnostic purpose by providing data about the skills and abilities of the illiterates that are beyond that obtained from pretesting. Further development of this project should result in additional findings.
Objective

The objective of this program was to determine whether or not adult literacy education would be more effective when preceded by a program of participation training.

Administration

A research project was designed in February 1966, at Central State Hospital, Indianapolis, Indiana for volunteer patients who (1) had been institutionalized for more than one month; (2) had an I.Q. above 70 on a standard scale; (3) had a probability of staying in the hospital for the completion of the study; (4) were above 15 years of age and below 65; (5) had a reading level below the eighth grade (The Gray Oral Paragraph Test was used for this initial selection).

The 30 patients who had qualified were randomly assigned to the two groups of 15. The classes met three days a week for one and one-half hours per day. Each group met for a total of 45 hours. Group T (Training Group) had four weeks of participation training -- 18 hours -- and six weeks of literacy instruction -- 27 hours. Group L (Literacy Group) had ten weeks of literacy instruction only -- 45 hours. Procedures used in the literacy instruction were those designated in Laubach's Streamlined
English. The following procedures were outlined for the collection of data:

1. The Nelson Reading Test (Form A) was given for the pre-test rating during the first sessions for both Group T and Group L.

2. After six weeks of the study, the Nelson Reading Test (Form B) was administered to both groups.

3. At the end of ten weeks, the Nelson Reading Test (Form A) was administered to both groups.

4. Four weeks after the completion of the instruction, the retention period, the Nelson Reading Test (Form B) was administered to each group.

**Evaluation**

Since Groups L and T were not statistically matched, Fisher's "t" test was used to determine the similarity of the pretest scores. Because of the size of the two sample populations, the Sign Test and Median Test were also used.

Three sets of test scores between Group L and Group T were compared statistically to find their differences in this study. The mean scores for Group L and T on the pre-test were compared with the corresponding group mean scores on each of the other three tests consecutively. The tests were administered six weeks, ten weeks, and fourteen weeks after the start of the program.
Statistical Findings

After 6 weeks --

Although mean improvement for group L is higher than mean improvement for group T, the difference was not found to be significant.

After 10 weeks --

When Fisher's "t" test was applied to the data, no significant difference was found between the mean grade level improvement of Groups T and L.

After 14 weeks --

Members of Group T advanced more in grade level than those in Group L. The difference, however, between means was not significant at the .05 level of significance. A continued trend of improvement in favor of Group T is shown as the time between pre-test and post-test increases.

The greatest difference between group means occurred on the retention test after fourteen weeks with Group T showing greater improvement than Group L.
EDUCATIONAL REHABILITATION: AN EVALUATION OF THE ADULT BASIC EDUCATION PROGRAM OF THE STATE OF ILLINOIS

Objective

The purpose of Greenleigh Associates Inc. was to conduct an evaluative study of the adult basic education programs in the State of Illinois.

Administration

The adult basic education program of Illinois was established on July 1963, by the General Assembly of the state. The program was to provide basic adult education, vocational education or both for recipients under the Public Aid Code of Illinois. Its objectives were to enhance the opportunity for self-support and self-care and to minimize or obviate their need for public assistance. An amount of $4,050,000 was provided from Federal and state funds for a biennium period. By January 1965, some 220 programs were in operation and they involved about 10,000 students. Further, it was estimated that somewhere in the neighborhood of 40,000 adults have been enrolled in the program for at least brief periods.

Programs consisting of classes held two evenings a week formed the dominant pattern, although there were several day time programs and evening programs which were offering classes of three and four sessions per week. The programs have provided both basic and vocational education. These have been structured mainly to fit within the curricula and facilities of the elementary school system.
Format

The study was conducted from July to December 1964. Its evaluation was based on depth interviews with a random sample of approximately 900 students who were either in attendance, had completed or had dropped out of an adult basic program. The vast majority of the students were welfare recipients from one of the five selected counties: Cook, Jackson, Saline, St. Clair and Williamson. Similar interviews were conducted with 50 teachers in the program and mall questionnaires were completed by 114 other teachers. In addition, all principals of the school, all county superintendents of public instruction and county heads of public aid were interviewed.

Evaluation

1. The schooling was generally based on a grossly inadequate conception of the problems and the nature of the disadvantaged students.

2. The programs were not intensive enough. There were many cases of adults who had been going to school two evenings a week for long periods of time. It was not realistic to expect much progress or any kind of a total educational experience for illiterates devoting four hours a week to education.

3. The teaching was frequently inadequate. The teachers were almost all recruited from elementary school ranks. Few had any adult education experience and few if any were getting in-service training which related to adult behavior or the learning problems of the disadvantaged.
4. Compelling public aid recipients to attend basic education programs did not create an environment conducive to effective pedagogy. It was recommended that programs be made of such high quality and relevance that enrollment and attendance would be largely voluntary.

5. Attendance was poor and there was a problem of program drop-outs.

6. There was a lack of both adult materials and suitable testing instruments.
Felntuch, Alfred

A STUDY OF EFFECTIVENESS OF AN INTEGRATED PROGRAM OF
VOCATIONAL COUNSELLING CASEWORK AND A SHELTERED WORKSHOP
IN INCREASING THE EMPLOYABILITY AND MODIFYING ATTITUDES
CORRELATING WITH EMPLOYABILITY OF DIFFICULT-TO-PLACE PERSONS

Objectives

The Felntuch study set as its purpose to evaluate the effectiveness
of an integrated program of vocational counselling and placement, casework
and a sheltered workshop in increasing the employability of difficult-to-place persons, who had previously received all the same services except
the sheltered workshop.

Administration

The study was conducted by a researcher obtaining data for a
doctoral dissertation. The setting for the investigation was a sheltered
workshop in Montreal.

The subjects of the study were 52 white adults of the Jewish
faith. They had been unable to find and keep employment in industry for
at least 50 per cent of the time because of advanced age, physical or
emotional disabilities, or some combination of these. For at least six
months prior to enrollment in the study, the subjects had been receiving
casework services and financial assistance from the Jewish Vocational
Service and the Family Welfare Department of the Baron de Hirsch Institute
of Montreal.
The investigation was based on the study of these difficult-to-place clients who had entered the sheltered workshop on or after November 12, 1950 when it was instituted, and had left the workshop on or before February 29, 1952. In each case, the subject's employment history for a period of one year prior to his acceptance into the workshop and for one year after discontinuing work there was studied.

The sheltered workshop in the study limited the kinds of work it would accept to those requiring simple manipulative processes. These were simple tasks such as inserting letters into envelopes, labelling various products with gummed labels, inserting a variety of articles on cards, the setting of rhinestones, and the assembling of electric cords and simple electric switches.

The subjects selected for the workshop had to be able to come to work and return home by themselves. They had to be able to work a full week from 30 to 35 hours. They also had to have full use of their fingers and hands and be able to do sedentary work of a very light and simple nature.

The sheltered workshop, as used in the integrated program, was intended to provide the subjects with the opportunity to try out new experiences in a permissive environment. Further, the shop was to provide the means by which the subjects could be observed as they participated in group experiences and work situations.
Evaluation

The investigation in the study was based on four basic hypotheses:

1. that an integrated program of vocational counseling, placement, casework and sheltered workshop could significantly increase the employability of "difficult-to-place" persons who had previously received the same services without the use of a workshop.

2. that "difficult-to-place" persons possess attitudes toward work and towards self which correlate significantly with their employability.

3. that the integrated program, utilizing a sheltered workshop, could significantly modify these attitudes in a positive direction, and

4. that characteristics and attitudes of the sample could be found which differentiate significantly between those who developed a relatively high degree of employability after the experience of the program, and those who did not.

For statistical analysis of his various data, the researcher applied (1) Wilcoxon's Matched Pairs Signed Ranks Tests (2) Chi-square test of goodness of fit, and (3) Guilford's Coefficients of Correlation and t Ratios.

The number of working days that the 52 subjects of the integrated program of vocational counseling and placement, casework and sheltered workshop increased from an average of 26.76 days during the one-year period prior to the workshop to an average of 116.04 during the one-year period.
following the workshop experience. The mean increase of 89.28 days was statistically significant.

Seven attitudes towards work and towards self were found to correlate significantly with the subjects' employability:

1. Feelings towards work at low, but prevailing wage rates;
2. Feelings towards work of low status or prestige level;
3. Feelings about maintaining good work habits;
4. Feelings about giving an employer a full day's work;
5. Feelings about job hunting;
6. Use of disability as a barrier against finding work; and
7. Confidence in ability to find work and keep employment.

Moreover, there was a substantial relationship found between each of the last five attitudes listed and employability.

The Integrated program succeeded in significantly modifying in a positive direction those attitudes of subjects towards work and towards self which had been found to correlate significantly with their employability.

However, while the majority of the subjects were aided by the Integrated program, 20 (38.5 per cent) were not helped to any extent as far as employability, or stability of employment was concerned. Of the 52 subjects, 11 (21.2 per cent) did not work a single day; 14 (26.9 per cent) worked less than 26 days; and 20 (38.5 per cent) were employed less than 65 days.

The subjects developing a relatively high degree of employment as a result of the Integrated program generally possessed the following
distinguishing characteristics at the time of their entry into the workshop:
1. they were under 55 years of age;
2. they had been in Canada less than ten years;
3. they had one or more dependents;
4. their disabilities handicapped their employability only moderately;
5. they had been employed 20 days or more during the one-year period prior to their workshop experience;
6. they were judged to be able to get along well with people;
7. they had been receiving financial assistance from the community for less than one year;
8. they were considered to be in good mental health, or if there were deviations in mental health, they were moderate.

None of the attitudes of the subjects prior to their entry into the workshop was found to differentiate significantly between those who became highly employable after they left the workshop and those who did not.
HAMILTON DEMONSTRATION PROJECT — LONG TERM ASSISTANCE FAMILIES

Objectives

The Hamilton Demonstration Project was established to provide more concentrated service to a selected group of families that had been recipients of welfare assistance for more than a year. The objectives were to increase the number successfully restored to independence and to improve the health, economic and social circumstances of the families.

Administration

The Hamilton Project was jointly sponsored by the Department of Public Welfare of the Province of Ontario and the City of Hamilton from December 1, 1963, to May 31, 1964. Two welfare workers, one from the City of Hamilton, and the other from the Ontario Welfare Department, were assigned to serve the study group.

The subjects of the study were two random samples of 100 employable and unemployable families taken from the long-term assistance cases identified in a previous survey.

Format

The two random samples of 100 employable and unemployable families were each subdivided into equal groups of 50 to provide for a balanced number of employable and unemployable cases to be placed in the
study and control groups. The 100 cases comprising the study group were then assigned to two welfare workers who had no preparatory training for the project beyond the outline of its aims and the required procedures. The 100 control cases remained scattered throughout the general caseload. The regular welfare workers were not made aware of the significance of the control cases in the study. Their caseloads were unchanged at something over 100 for each welfare worker.

Basic to the techniques was the establishment of a helpful and understanding relationship which the two welfare workers strove to create and maintain with each recipient of the experimental group.

Evaluation

Two main criteria were used to measure changes. These were: whether or not welfare assistance ceased by the end of the project; and whether there was obvious improvement in each case remaining on assistance according to the services given.

Of the 100 cases given special attention, 56 had left the municipal rolls at the end of the six-month period. In the control group, there were 21 cases closed. In the study group 36 heads of families had obtained employment, while only 14 of the 100 control cases had found work.

As for the measurement of improvement in the circumstances of those who remained on assistance, the project workers estimated that 88 per cent of the treated cases had made a noteworthy advance towards better
management of their affairs. This could be said of less than 20 per cent of the control group. Further, of the study group, only 13.5 per cent of those remaining dependent were actually employable, while 32.9 per cent of the control group could be considered such.

The results of the project served to generate enthusiasm for rehabilitation objectives among the welfare staff members. Since the re-employment of recipients accounted for the largest number of case closures in the study group, it was recommended that welfare workers acquire more training in vocational rehabilitation counselling.

In some cases, the welfare workers had made personal visits to employers and had recommended the recipient to them as a prospective employee. Hence, the use and development of medical, psychological, psychiatric and vocational assessments for recipients are of prime importance to the rehabilitation program.

It was also recommended that the present exemption of part-time earnings as incentive and encouragement requires continued experimentation.
OBJECTIVES

In the Henny study, the major purpose was (1) to determine the extent to which functionally illiterate adults can increase their reading performance if given reading instruction using a phonic system; and (2) to determine if there is a significant difference between group instruction and individual instruction as to the progress in reading performance which is made by functionally illiterate adults.

ADMINISTRATION

The study was conducted by a researcher obtaining data for a doctoral dissertation. The setting of the investigation was the Indiana Reformatory. The investigator was assisted in his work by four trained inmate instructors.

All the subjects were reformatory inmates who were either completely illiterate or functionally illiterate as measured by Gray's Standardized Oral Reading Paragraph Test. All the subjects participated voluntarily in the research project. There was no compulsion exercised by the researcher or any prison official for any of the inmates to participate in the study.

FORMAT

The investigator selected 30 subjects matched on characteristics of (1) age; (2) tested reading level; (3) diagnosed major reading
difficulty; (4) Intelligence quotient; (5) educational background; and (6) tested grade level. These subjects were assigned randomly to one of the following groups: (1) control group; (2) experimental group A; and (3) experimental group B. The three groups were scheduled for 20 one-hour sessions over a period of four weeks.

The subjects in the control group received no special phonic instruction during the period of the experiment, but remained as students in the elementary school at the institution. In experimental group A, the subjects received one-to-one reading instruction by the phonic method. The subjects of experimental group B received instruction by the phonic method in a group situation, and met in groups of five students to one teacher.

The Standardized Oral Reading Paragraph Tests provided the reading level for each student in a pre-test and post-test examination. The Gates-McKillop Reading Diagnostic Tests Forms I and II provided for each student an analysis of reading difficulties in pre-test and post-test examination.

The Family Phonics System, created by the researcher especially for use with functionally illiterate students, was used in this study to teach experimental group A and experimental group B.

**Evaluation**

Hypotheses was presented and subjected to the statistical test of the critical t-values. In the study, critical t-values at the five per cent level defined the interval outside of which all t-values could be expected to fall by chance.
1. It was hypothesized that there is no statistically significant
difference in the amount of progress a functionally illiterate adult
will make in his ability to read if he is taught in a group as com­
pared to being individually instructed.

The test of significance of mean gains in reading performance
between the subjects of experimental group A and the subjects of experi­
mental group B did not exceed the critical t-value at the five per cent
level of significance. Thus this null hypothesis was accepted.

2. It was hypothesized that there is no statistically significant differ—
ence in the amount of progress in reading performance that a
functionally illiterate will make if he is taught by a phonic method,
and if he remains in the institution's elementary school where he re­
ceives no special phonic instruction.

The test of significance of mean gains in reading performance
between the subjects of the combined experimental group exceeded the
critical t-value at the five per cent level. Thus this null hypothesis
was rejected.

Further, it was found that the complete illiterate in both
experimental groups progressed more than any other subjects during the
investigation. In experimental group A, the illiterate improved 2.5 grade
levels during the investigation. In experimental group B, he improved 2.1
grade levels. All the subjects who received instruction by the phonic
method showed a gain of 1.27 grade levels.
The study also found that there was no significant difference between the gains in reading performance, when taught to read by the Family Phonics between the oldest and youngest, between those with high I.Q.'s and those with low I.Q.'s and between having the lowest pretesting scores and those having the highest pretest reading scores.
Hoist, Howard

SUMMARY OF THE WKNO-TV LITERACY PROJECT

Objective

The objective of the WKNO-TV Literacy Project, Memphis, Tennessee was to provide illiterates in the area served by this station with an opportunity to learn how to read and write by presentation of the Laubach method on television.

Administration of Program

Because Laubach teaching primers had been used successfully internationally for teaching illiterates, WKNO-TV selected streamlined Reading I as the nucleus for its initial series. First produced in 1956, it consisted of 42 half hour lessons which were telecast on Monday, Wednesday and Friday evenings at 8:00 p.m. In addition to the home viewers, materials were produced by WKNO-TV to assist the students who registered for study at 31 centers throughout the city of Memphis. Supplemental guides were also produced to aid the teacher-assistants at the various centers. A second series entitled Streamlined Reading II was developed by WKNO-TV with the assistance of the students and the teacher-assistants at the centers. This series was first telecast in the form of 96 half hour lessons in 1958-59.
Format

Although home viewers were able to receive the telecasts, the tutorial class method was also used to assist the new reader at the various centers which used Dr. Laubach’s technique for teaching adult illiterates to read and write. Initial emphasis was on the words that were within the learners’ spoken vocabulary. The lessons went from the whole to the part, first teaching the word, and then the sound from which it began. This was followed by lessons on the sounds for vowels and regular ways to spell each sound. The last section of Streamlined Reading I covered the consonants and their sounds.

In Streamlined Reading II, the student’s ability with writing was extended through the presentation of additional material which increased their knowledge of the written word. Content of this series was based on such areas as health, nutrition, personal finance and problems of daily life.

In addition to the telecasts, WKNO-TV’s specially designed workbooks were an important device to guide the student in his learning experience.

Evaluation

The teacher-assistants from the centers provided WKNO-TV with feedback on the telecasts. As a result, several changes were made on
Individual telecasts with additional time being allowed for review and writing. The producers felt that the effectiveness of the Laubach system was not lost through adaptation to television. However, they indicated that more time was needed for review in the case of the English illiterate as opposed to non-English speaking illiterates. In May, 1959, an attempt was made to acquire additional evaluation data by the administration of the Metropolitan Achievement Test to a group of 61 Streamlined Reading I students with the following results:

<table>
<thead>
<tr>
<th></th>
<th>Word Picture</th>
<th>Word Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.6</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Word Meaning</th>
<th>Average Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.7</td>
<td>2.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average Grade Level</th>
<th>Numbers</th>
<th>Average Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.1</td>
<td>2.8</td>
</tr>
</tbody>
</table>
Long, Fern

IMPATIENCE AND THE PRESSURE OF TIME — CLEVELAND'S READING CENTERS PROJECT

Objectives

1. to provide library services for the "limited adult reader" or the functionally illiterate adult; and
2. to develop further the basic reading skill which such readers have already acquired.

Administration

The Limited Adult Reader Service was established by the City of Cleveland in 1965, after it was awarded a Library Services and Construction Act grant from the Ohio State Library to carry on the experimental project.

The LSCA grant made possible the establishment of three Reading Centers for limited adult readers in the Cleveland area. The responsibility for the Centers was allocated to the Adult Education Department of the Cleveland library.

Funds also enabled the Department to:

1. purchase large quantities of books at an easy-reading level as well as other useful materials. These included films, filmstrips and records.
2. add equipment which was needed to use these media.
3. employ staff for all three Centers.
One of the staff additions was a reading specialist. Other necessary appointments included staff field workers who were to seek out the limited adult readers. Extra clerical workers were needed in the library to process books and materials and make them available as quickly as possible. There was also a need to add a technical aide to help the regular projectionist with extra film showings, tapings and caring for equipment.

The clientele to be served were the functional illiterates. These the study defined as one who reads at a fifth grade level. The report referred to these subjects as the limited adult readers. The Centers were located in the Main Library, in the Carnegie West Branch, and the Quincy East Side Branch. Each of the areas revealed a high proportion of functional illiterates. They comprised 35 per cent of the population in the west area; and 34 per cent in the east area.

Format

One of the first assignments of new staff field workers was to seek out the limited readers and to communicate the intentions of the program. They visited agencies, churches and homes.

Secondly, the reading specialist was assigned to work mainly with individuals on a one-to-one basis.

Thirdly, the staff worked with groups. Reading aloud, discussion based on simple reading, on film strips and on films were the activities
conducted. There was also a systematic program of visits to all three Centers by the 2,000 people enrolled in these basic education classes.

A fourth phase of the activities was to instill more vitality into the previous service of lending books to adult classes.

Another important aspect of the program was the fact that the activities have been conducted within areas of the existing library buildings, rather than in new or special rented quarters. The purpose was to lead the "limited adult reader" as directly as possible into the library environment.

As far as the use of materials, it was not limited to books alone. Films, filmstrips, slides, records and view-masters were all considered legitimate means of bridging the gap of communication between the culturally disadvantaged and the culturally privileged.

The program itself was publicized by the following means: the use of TV and radio spot announcements; brief notes enclosed with 17,000 relief cheques; visits by field workers; announcements to basic education classes and the distribution of 22,000 door-to-door flyers.

**Evaluation**

After ten months of operation, the following views have been expressed concerning the program:

First, the effort which is exerted is often out of proportion to the results obtained. Secondly, there is an ebb and flux situation in the participation. There is often enough motivation for a start, but not enough
for continuation. Thirdly, it was found necessary that library staff must assume a teaching role to accomplish its work, rather than merely relying upon the development of an existing skill, as was purposed at the beginning.

Circulation wise, the results are notable. In the division which lends classroom sets for adult students, circulation has almost tripled. Also a good number of the "limited adult readers" have taken out library cards, and many have gone from the Reading Centers into classes.

As far as the work of the reading specialist with individuals, there seems to be strong evidence that the person-to-person approach has proved itself.
LONG-TERM ASSISTANCE FAMILIES -- A DEMONSTRATION PROJECT

Objective

The Toronto Demonstration Project stated the two objectives of the program as (1) to measure the effectiveness of intensive and concentrated service by the regular staff of a welfare department in promoting the self-reliance of recipients to the point where financial independence is attained; (2) to make observations about services that would be required for the economic, health and social rehabilitation of these families.

Administration

The study of Long-Term Assistance families was constituted as a joint project by the Ontario Department of Public Welfare and the City of Toronto. The study and demonstration was conducted during the six-month period from July 1962 to January 1963. Two welfare workers, one from the city of Toronto and the other from the Ontario Department of Welfare were assigned to the study cases.
The subjects of the study were 200 long-term assistance families chosen from the Welfare Assistance rolls of Toronto.

Format

These 200 families were divided evenly into a control group and a study group with similar significant characteristics. Then the 100 study group cases were assigned on an equal basis of 50 each to the two welfare workers.

Because the frequency and quality of the home visits was considered essential, the caseloads were reduced to a point where the welfare visitor could spend as much time as necessary with any family. The concentration of home visits was considered essential in furthering the rehabilitation objective.

In addition, the setting of limited goals for recipients was considered of primary importance. The welfare workers were firm, direct and prescriptive in their expectations of the recipients.

Evaluation

There is evidence of the effectiveness of the more intensive counselling services. The results were accomplished by assigning small
caseloads to staff members. It was found that 42 per cent left the municipal rolls compared with 23 per cent of the control group. Moreover, of the 42 successful cases in the study, 26 left the rolls within the first four months of operation. Such would seem to indicate the effectiveness of concentrated services in getting people off assistance at an earlier date.

Another positive result was that among the 58 study cases remaining on the welfare rolls, there was a noticeable upgrading in economic, health and family circumstances for 54 of the subjects and only four showed no favorable response. The judgment of improvement was based on observation of objective behavior and physical circumstances. In the control group cases, there were 13 cases still receiving assistance who showed improvement; however, 64 cases displayed no noticeable improvement.

The difference in objective family characteristics (e.g., employability, number of parents in the home and number of children) between long-term and short-term assistance families was found to be negligible. The reason for prolonged dependency was therefore related to health conditions in some cases, but frequently to general subjective inadequacies.
It was found that people withdrew from public assistance under frequent visiting. The subjects also displayed a surprising resourcefulness and self-reliance when confronted by necessity. To some of the welfare recipients who had let themselves adopt a rather passive acceptance of their life structure, the direct and firm approach of the welfare visitor provided structure and motivation for action.
McKee, John M. et al.

**IMPROVING THE READING LEVEL OF DISADVANTAGED ADULTS**

**Objectives**

The purpose of the study was to determine the effectiveness of a reading program on over-all grade-level gains and individual subtest gains of young adult students in a Vocational Experimental and Demonstration Project.

**Administration**

The Vocational E and D Project was conducted by the Draper Correctional Center at Elmore, Alabama.

All the subjects were inmate students enrolled in the six-month training courses of the Vocational E & D Project. They were students who each had achieved a total score of 8.5 grades or below on the Metropolitan Achievement Test.

**Format**

Two treatment groups which had been organized as classes were selected for the study. The variables had been previously administered without benefit of a predetermined design. In short, the experimental design was imposed on the existing data.

Group A was comprised of 26 subjects in the fourth training class of the E & D Project. These subjects received 40 hours (4 hours a week for
10 weeks) of training in a reading program using materials and a Perceptoscope from Perceptual Development Laboratories of St. Louis, Missouri. The subjects also received an average of 160 hours of remedial instruction using programmed instructional materials.

Group B comprised of 33 subjects in the second training class of the E & D Project. These subjects had no special instruction in reading. However, they received an average of 160 hours of remedial instruction using programmed instructional materials.

Each subject was given the Metropolitan Achievement Test both at the beginning and the end of the six-month training course. The treatment variables were administered between the dates of the pre-testing and post-testing.

**Evaluation**

Comparisons were made between the grade gains of the two groups. The areas included in the Metropolitan Achievement Test included Total Score, Reading, Word Knowledge, Spelling, Language, Arithmetic Computation and Arithmetic Reasoning.

The interpretation of group differences was done by inspection or by use of the student's t-test.

Group A made significantly greater gains than Group B in total average, reading and language.
The average gain made in reading by Group A was approximately nine times greater than the gains made by Group B. The mean grade gains on the reading subtest of the Metropolitan Achievement Test showed a 2.39 improvement by Group A compared with a .27 gain by Group B. This was considered significant by inspection beyond the .01 level.

The language gains were also found to differ significantly with Group A showing the greater increase. The language sub-test of the Metropolitan Achievement Test showed a mean grade gain of 1.27 for Group A compared with the .27 gain for Group B. This was considered significant by inspection beyond the .01 level.

For the total grade, Group A achieved a 1.37 mean grade gain compared with 1.05 for Group B. With $t = 1.797$, this difference was interpreted as significant beyond the .05 level.
McKee, John M. et al.

IMPROVING THE READING LEVEL OF DISADVANTAGED ADULTS

Objectives

The objective of this experimental program was to determine the effectiveness of a reading improvement program designed with the Perceptoscope* in overcoming the low motivation of Inmates towards academic pursuits.

Administration

In order to accomplish the objective of the academic and vocational programs, the staff of Draper Correctional Center experimented with various reading programs to overcome the problems in the training of students with low reading levels.

All inmate applicants for vocational training who score below the 7th grade reading level on the Metropolitan Achievement Test were enrolled in the phonics or immediate reading improvement program.

In order to determine the reading rate, reading comprehension, vocabulary and story comprehension of the students, the Perceptual Development Laboratories (PDL) Diagnostic Test was administered.

The students of the Reading Improvement Program were retested at mid-course and again at the conclusion of the program. A different form

* A multi-function machine which is manufactured by Perceptual Development Laboratories (PDL) of St. Louis, Missouri.
of the Metropolitan Achievement Test was used upon completion of the reading program to determine what effect the participation in the reading classes may have had on sub-test areas other than reading. The students who did not participate in the Reading Improvement Program and had only remedial training served as control groups.

Evaluation

After 40 hours of Instruction in the Intermediate PDL Reading Program using the Perceptoscope, subjects in the first experiment achieved an over-all average increase in grade level of 2.5 compared with 1.1 grade levels for the non-participants. In reading levels, the average increase was 2.5 grades for the program participants, while non-participants who used only programmed instruction in their training, registered only a .7 grade gain in reading. The greatest grade gain in reading level among all the subjects who participated in the reading program was from 4.9 to 9.7 or an increase of 4.8 grade levels.
Objectives

The New Hope Project Initiated by Modesto Junior College listed the following objectives for the adult basic education aspect of their manpower training programs:

1. to assist the undereducated and unemployed adult to qualify for vocational training through a program of basic education;
2. to assist the undereducated and unemployed adult to develop those capabilities which would enable him to secure employment at an entry level occupation;
3. to assist the trainee to develop those competencies which would enable him to maintain continued employment.

Administration

Through the Adult Division, Modesto Junior College, the New Hope Project was established. As of 1966, the project received 1006 different referrals to the various educational programs from the Department of Employment. Approximately 400 of these individuals received training in basic education. These students remained in the pre-vocational phase of the program for an average of four months. Experience indicated that methods and techniques had to be modified when working with undereducated adults to cope with the following: absence from classroom, serious personal problems, isolation and non-identity with surrounding community.
Evaluation

In the New Hope Project, it was discovered that the California Achievement Test and the General Aptitude Test Battery had severe limitations as indicators of academic progress. The tests are highly dependent upon background and verbal skills. They cover different material from what is covered in the classroom. The norms of the California Achievement Test were based on a population considerably younger than persons in the Modesto Program. Specific findings of this project were:

1. Adults with less than four years of schooling could be expected to advance one school year in four months.

2. Adults with four to nine years of schooling could be expected to advance between two and three years in four months.

3. In mathematics, the adult will generally advance between two to three years in four months regardless of his prior schooling.

4. Intelligence, perceptual, verbal and manual aptitudes will increase after training in basic education.

5. Students can be effectively placed into the program by grade level through use of a graded word list.

6. Individuals with a reading level below sixth grade should be given tests such as Gates Reading Survey, California Achievement Test elementary level, mathematics test, and the revised BETA.

7. Adults at or above sixth grade reading should be administered tests such as California Achievement Test—junior high level—and California Test of Mental Maturity, short form.
Objective

The objective of the English Fluency Training was to provide basic English classes to military personnel who were unable to speak or understand the English language.

Administration

Army regulations specify that unit commanders may request the Army Education Center to conduct courses in basic English fluency if a large number of personnel in their units are unable to speak or understand the English language.

Since the authorization for the program was outlined in Army regulations, regular command funds were available for the hiring of instructors from the local community to teach the program at the Education Center from 8 a.m. until 4 p.m. (Monday to Friday).

Prior to 1958, courses in English fluency had been requested at the various Army posts in Alaska for Puerto Ricans and German nationalists. In the fall of 1958, the Fort Richardson Army Education Center received a request to establish an English fluency class for 26 Hungarian Freedom Fighters who had been assigned to the post. These men who entered the Army under the Lodge Act, received no prior English language training.
Their inability to speak and understand English was affecting their performance as soldiers.

Format

Since initial testing was impossible, the group of 26 Hungarians were arbitrarily divided into two equal classes on the basis of the formal schooling completed in their native Hungary. After six weeks of extensive work in phonics and reading, the two classes were administered the California Achievement II for placement into two homogeneous classes.

The instructors had the dual problem of teaching the Hungarians a new language and of broadening their limited basic knowledge in mathematics, science and geography. The lower level class continued to work extensively with phonics, basic reading and third and fourth grade level English and spelling. The advanced class covered, in addition to advanced reading, junior high courses in geography and history.

Evaluation

An individual subjective evaluation was completed by the instructors on each man. Since the course disclosed a low level of literacy in their native language, the content of the course was expanded to cover basic knowledge. A second version of the California Achievement Test II was also administered at the completion of the additional six weeks of study and the results were compared to the initial test scores.
The upper level class obtained the following results:

<table>
<thead>
<tr>
<th></th>
<th>Reading</th>
<th>Arithmetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Increase in Grade Level</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Language</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>

The lower level class obtained the following results:

<table>
<thead>
<tr>
<th></th>
<th>Reading</th>
<th>Arithmetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Increase in Grade Level</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>1.1</td>
<td></td>
</tr>
</tbody>
</table>
Objectives

The objectives of the On-Duty Refresher Course, Fort Richardson, Alaska, were established to provide military personnel who had less than an eighth grade education level or low aptitude scores with an opportunity to overcome these deficiencies. The objectives of the course were to provide the participants with basic skills and knowledge which would enable the person to acquire the following:

1. an eighth grade certificate by passing standardized examinations developed by United States Armed Forces Institute in the areas of English, arithmetic, science, geography and history.
2. an opportunity to apply for a retest of the Army Classification Battery based on successful completion of the eighth grade level.
3. a chance for the graduates to complete the High School General Education Development Test through enrichment material covered in the classes to meet individual needs.
4. a possible civilian high school certificate or diploma on the basis of the individual's HSGED scores and course completion.

Administration

Although Army regulation made provisions for off-duty classes, the United States Army, Alaska (USARAL) published a command circular
that authorized the establishment of an On-Duty Refresher Course. The personnel at the Education Center had the responsibility for locating deficient personnel, counselling, pre-testing and establishing the quotas for individual military units.

As a regular USARAL supported program, the cost of the Program was included in the Education Center's budget. Regular appropriated funds were included to hire teaching staff from the local community to instruct at the education center, and to develop supplementary materials to enrich the two levels of instruction.

Format

On the basis of their California Achievement 11 Pre-Test scores, the soldiers who were sent to the program, were organized into homogeneous groupings. The On-Duty Refresher Course was divided into two levels. Students who scored below the sixth grade level on the pre-test were placed in a lower level class. Students who scored above sixth grade on the pre-test or who had successfully completed the lower level of study were placed in the upper level. The lower level classes covered fourth, fifth and sixth grade reading, English and mathematics plus courses in history, geography and science.

During the class instruction which was conducted in the morning (8 a.m.-12 a.m.) there was a combination of techniques used by the instructors to meet individual needs. In the afternoon a study hall
was conducted in each class with the top ranking men in charge. The students received a total of 240 hours of classroom instruction. United States Armed Forces Institute texts were used as materials.

**Format**

Test results for a group of 70 students who completed the lower level of study between June 1957 and December 1957 indicated an average increase of one grade level in reading, English and performance computations during the six weeks of study. Only six of the 70 students (8.5 per cent) failed to meet the required sixth grade standing which entitled them to return for the upper level of study.

During the same period, 218 students completed the upper level of study. Of this group, 142 (66 per cent) successfully passed all five USAFI end-of-course examinations and received an eighth grade certificate.

Although large percentages of the group completed a re-test of the Army Classification Battery and took the High School General Education Development test, a mass rotation of personnel prevented the acquisition of this data.
Objective

The purpose of the project was to evaluate the effectiveness of the combined telecasts, presentations designed with an adaptation of the Laubach method of teaching reading and writing and group instruction with illiterate adults in an 11-county area in close proximity to Florence State College, Florence, Alabama.

Administration

In June 1960, Florence State College officially established the literacy project with the appointment of a director and a staff of six area supervisors. Financial support for this research was acquired through a grant from the U.S. Department of Health, Education and Welfare, Office of Education.

The first three weeks of the project were spent in formulating the plan on how to organize a community in regard to the location of students, to methods of acquiring staff and facilities and to establish a plan for evaluation. The area supervisors had the responsibility of working with local committees to organize the program with regard to publicity, identification and enrollment of students, recruitment and training of
volunteer teachers, location of teaching centers and the acquisition of finances where necessary.

The initial lesson was telecast on a Wednesday evening from 8:30-9:00. Afterwards a regular schedule was established on Monday, Wednesday and Friday evenings. To assist the students at the centers in interpreting the lessons and to provide them additional help in reading, writing and ear training, volunteer teachers were recruited. The volunteer teachers were given five hours of specialized instruction by the area supervisor. In addition to the volunteer teachers, sociology and education students from a college or university assisted in some areas in enrolling students and administering tests. The administration duties of the center became an assumed responsibility of the volunteer teachers. A variety of facilities were used in the program, e.g., school buildings, churches, recreation centers, homes. Television sets were lent or given to the centers by individuals or groups.

The participants in the program came from an area where 105,310 people were functionally illiterate and 19,430 had no prior schooling. Of the 608 students who were enrolled in the program, 53 per cent learned about the program through personal invitations from employers, members of their family, friends or committee members designated to interview students. The remaining 47 per cent learned about the program through radio (15 per cent), newspapers (13 per cent), church announcements (11 per cent), TV (5 per cent); and PTA, unemployment office and rehabilitation centers (7 per cent). The typical student was in his forties with two or three
years of prior formal schooling. An additional 57 students who were not included in the sample purchased materials and received instruction from volunteer teachers. No attempt was made to take into account the home-viewers who were not officially in the program.

Format

The students viewed the televised lessons as a group at the centers which were staffed by volunteer teachers who acted as resource persons. Small classes with direct instruction were established for late enrollees to the program and in areas in which the transmission signal was weak.

The content of the televised lesson was based on the kinescopes that were procured from WKNO-TV in Memphis, Tennessee. This agency had adapted the Laubach material to TV and had developed two student workbooks with the material related to the kinescope. To supplement the program, the area supervisors developed materials, exercises and assisted in the development of a weekly newspaper.

Evaluation

Of the 608 students who started the program, only 254 completed the work. To evaluate the program, five reading tests were given during the course of the year. Four initial informal tests were constructed for the project while the fifth was the Primary 11 level of the Metropolitan Reading Test.
As some standard of comparison, the informal tests were given to groups of children in grades two, three and in some cases four in certain Alabama schools. For the Metropolitan Test, the published national norms were used for the comparison. In the locally developed Initial test, neither the TV viewers nor the individuals in the regular class did as well as children in the early months of the second grade. On tests two and three, the two adult groups did about as well as children in the second grade at a corresponding time of the year. In the fourth test, the adults appeared to move ahead of the second grade students, but did not do as well as third graders.

In the Metropolitan Reading Test, the results indicated that the adults in the two programs were performing at the level characteristic of children halfway through the second grade. Of the three scores—one for knowledge, one for word discrimination, and one for reading of connected prose, the notable difference between the two adult groups was the score on connected reading. The adults in the formally taught class surpassed the television group by one-half a grade, which suggests that television teaching is a less effective procedure in developing skills of connected reading. In relating prior education to the results on the Metropolitan Test, individuals who had reported no prior ability at the beginning were performing at a level comparable to a recently promoted first grader while those with four or more years of schooling demonstrated a reading ability equivalent to the average child in the second grade.
Although the literacy program had handwriting as one of its objectives, calculation was difficult because of the lack of appropriate scales and instruments. Through subjective evaluation of the comparative public school students and a comparison with published handwriting scales, it was reported that the handwriting performance of the adults was related to years of early schooling and to their reported ability to read. For the average adult in the two groups, writing ability was represented at a level equal to a mid-term second grade student.
OBJECTIVES

The objective of this program was to determine the value of using the group method in training mothers of "multi-problem" families to improve the quality of family nutrition.

ADMINISTRATION

In September 1962, Ryerson School which is in the St. Christopher House neighborhood, was selected for the newly inaugurated Board of Education School Lunch Project. The economic status of the families necessitated a subsidization which would enable selected children to participate in the program. Upon the receipt of a service club grant, a group of 13 children were selected which represented 11 families. The mothers agreed to attend a bi-monthly nutrition meeting which was held at St. Christopher House. At these meetings, the lunch room money was distributed. Four additional mothers joined the group, although their children were not being subsidized for school lunches.

A representative advisory committee of agencies and public departments which were concerned with the study met on three occasions to discuss and evaluate the project.
Format

The group meetings were established on a bi-monthly basis during the period between July 1962 and June 1963. A variety of techniques and numerous teaching devices were used in the group meetings. Although the outline of the meetings was prepared in advance, changes were made as needs appeared or upon requests from the group. Time was also allowed for individual counselling after the meetings and the families were visited frequently by the Family Life Worker.

Evaluation

The amazing fact that the overburdened mothers did participate was initially attributed to the subsidies; however, the group indicated that the continuation of the subsidy was not necessary for their participation in the second year. The mothers indicated that the meetings had practical value to them. In addition, the members shared information and similar problems with one another and it also brought them into an informal contact with two professional workers, a nutritionist and a social worker, who were interested in their problems. These group leaders were able to detect actual application of what had been learned through discussions, home visits and reactions from children. The general observations and comments of the children's teachers indicated an over-all beneficial effect of the program on the child's health and indirectly on the quality of their work in school.
Objective

In November, 1960, a pilot project was started for welfare recipients in Mecklenberg County. The objective of this project was to determine the success of family planning programs on the voluntary and successful use of the "pill" by welfare recipients.

Evaluation

After two years, it was reported that there were no pregnancies among the 223 women volunteers who had been previously accustomed to frequent pregnancies. In an evaluation of the financial costs of the program, it was learned that the program cost the public less than one-twenty-fifth as much as it would cost the public to support unwanted children.
Objective

The objective of this project was to develop further knowledge about applicants for MDT programs who could not benefit from MDT training programs without instruction in basic education.

The project had the following additional objectives:
1. Determine the best testing devices that can be used to discover various areas of homogeneity in trainees enrolled in MDTA classes involving basic education.
2. Discover the most effective way of measuring the reading and computation levels of such trainees.
3. Analyze the common personality dynamics of such training.
4. Compile a standardized system of testing the adult education trainees that would enable the teachers and counsellors to understand these groups better and to achieve more effective teaching.

Administration

A review of prior studies on tests by the Nevada State Department of Education disclosed a number of deficiencies. Some of these findings were:
1. the general method of selecting tests was to choose them by tradition;
2. there was no adequate data on the validity of available standardized tests for adults;
3. there were estimates on the amount of time and money that were required to operate a testing program;
4. the personality dynamics of the students were not shown in tests of questionable validity; and
5. the grouping was haphazard when the institutional staff was not sure of the tests used.

As a result, the Nevada State Department of Education contacted two consultants from the University of Nevada, Dr. Whittemore and Mr. Echeverria to design the study.

Classes from both Las Vegas and Reno were used in this study. The participants in the two Las Vegas groups were primarily Negro and female. Only five out of 87 trainees were Caucasian and only two were male. The three Reno groups were more heterogeneous. Of the 39 trainees, the groups had four Negroes and nine men. The Las Vegas sample's educational level ranged from 5-12 years which resulted in a median claimed educational level of 10 years. Their "G" score of the General Aptitude Test Battery (GATB), which was used as an indication of intelligence, ranged from 41 to 112 with a mean "G" score of 88.8. The Reno trainees had a median claimed educational level of 10.2 years on the basis of a range of education from 4 to 13 years. Their "G" score ranged from 73-148 with a mean "G" score of 101. One of the Reno classes was incorporated into the study as a contrast group. Their I.Q. scores and
educational level are significantly different from the other groups.

During the 18 months, the following instruments were administered to the five different groups in their regular class time:

**Intelligence:**
- Hemmon-Nelson Test of Mental Ability, Grades 9-12, Form A
- California Short Form Test of Mental Maturity, Level 3, Grades 7-8, 1963
- Otis Quick Scoring Mental Ability — Beta Test
- Revised Beta Examination

**Achievement:**
- Sequential Test of Educational Progress, Level 3, Grades 7-8-9-

**Aptitude:**
- Differential Aptitude Test, Form L, Grade 9

**Interest:**
- Kuder Preference Record — Vocational Form CH

**Personality:**
- Minnesota Multiphasic Personality Inventory,
- California Psychological Inventory

**Reading:**
- Iowa Silent Reading Test

**Evaluation**

The Las Vegas test administration had been under the direction of MDT counsellors who also reported the test data. The Reno classes did not have a counsellor which resulted in sketchy information on the pre-test and post-test data.

During the early part of the study, many subjective evaluations of certain instruments were made. The administration of the Hemmon-Nelson Test did not confirm the previous information about average grade completion of 9.9. There also was no significant difference between pre- and post-test treatment mean scores, and as a result this instrument was dropped
from further use in these classes. The sequential test of Educational Progress did not appear feasible due to the following:
1. the administrative costs for a widespread testing program;
2. the time for administration (280 minutes) seemed too long for this type of program;
3. there was no statistically significant difference in pre- and post-test scores.

There was an actual decrease in the mathematical mean scores after 16 months in class. This Instrument was dropped from further use. The MMPI was used as an attempt to eliminate students with disabling psychological problems. The resulting profiles (both pre- and post-treatment) were identified as normal profiles. The researchers were aware that individual trainees might manifest serious personality disturbances but the absence of any gross pattern precluded continuing with the MMPI.

Correlations at .01 significance were made on the following variables:

GATB "G" score with Otis IQ score. Otis IQ score with DAT sentences.
DAT V score with DAT sentences. CPI Well-being score with CPI Self-Control.
CPI Well-being score with CPI Achievement-through-conformance.
CPI Well-being score with CPI Intellectual-efficiency.
CPI Achievement-through-conformance with Intellectual-efficiency.
Iowa Composite with Revised Beta IQ score. Iowa Word-meaning with Revised Beta IQ score.
Certain significant changes did take place as a result of the learning experience offered through the basic education program. Although the DAT Mean V scores had revealed an approximate 9th grade norm, the tremendous increase in numerical ability by both Reno and Las Vegas classes indicated by the DAT N scores still left individuals below the 8th grade level of competency. The mean IQ of the California Test of Mental Maturity was around 80 IQ in both pre- and post-treatment. The researchers cautioned interpretation of mental retardation without consideration of cultural background. The CPI indicated an over-all improvement in self-concept and well-being (the latter particularly significant). There also was a favorable trend in improvement in responsibility and psychological mindedness.