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ABSTRACT

Adults from Kings County, Prince Edward Island, participated in a Basic Training for Skill Development Program, designed to improve their reading and computational skills. Test scores, obtained before and after instruction, were analyzed to evaluate the effect of the program on skill levels. Results showed that group gains in terms of grade level were relatively small, considering the duration of the program. Suggestions are made on the direction planning should take if the program is to be effective. (Author)

# ADULT BASIC EDUCATION AS A PROGRAM FOR SOCIAL CHANGE

by
Peter C. McGonnell

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## PREFACE

For several years the Prince Edward Island Department of Education under the sponsorship of the Canada Department of Manpower and Immigration has been conducting a series of adult basic education programs known as Basic Training for Skill Development (BTSD).

It is essential to the development of new programs that an assessment be made of existing programs so that the needed changes can be indicated.

In 1968-69, Prince Edward Island NewStart Inc. made arrangements with the Vocational and Continuing Education Branch of the Prince Edward Island Department of Education and with the Department of Manpower and Immigration to administer intelligence and achievement tests to trainees in the BTSD programs in Kings County. The results of this testing and some of its implications are reported in this paper.

Subsequent to this testing, the Corporation has developed an Adult Basic Education component for its Comprehensive Manpower Development System, which admits the disadvantaged adult at any achievement level from illiteracy to high school equivalency.

Further studies in adult basic education by the Corporation will be reported in subsequent publications.

Austin L. Bowman
Executive Director

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## ABSTRACT

Adults from Kings County, Prince Edward Island, participated in a Basic Training for Skill Development program, designed to improve their reading and computational skills. Test scores, obtained before and after instruction, were analyzed to evaluate the effect of the program on skill levels. Results showed that group gains in terms of grade level were relatively small, considering the duration of the program. Suggestions are made on the direction planning should take if the program is to be effective.

# INTRODUCTION

As the war on poverty continues, there is an increased emphasis being placed on remedial education and vocational training for the disadvantaged. The United States Manpower Development Training Act (MDTA), and the Canadian Adult Occupational Training Act (OTA) have been legislative expressions of this concern. The OTA legislation appears to have a considerable impact in the Atlantic Region, where the rate of unemployment and underemployment is consistently higher than most other parts of Canada, and the average level of education in the labour force lower than the average for Canada (Economic Council of Canada, 1968).

In Canada, in 1961, more than two-thirds of all low income families had family heads with less than secondary education (Economic Council of Canada, 1968). Besides various other socio-economic variables, a low educational level has been found to be significantly related to unemployability and low income (Podaluk, 1965; Porter, 1965). Although a number of other methods are used by government to alter the status of the disadvantaged, upgrading their educational level has received considerable emphasis over the past few years. The undereducated have a need for skill development in reading, language and arithmetic as a prerequisite for further vocational training. With this realization, present manpower policy gives high priority to educational upgrading as a means of opening the gateway to skilled occupations for the disadvantaged.

Governments in the United States and Canada have spent vast sums of money on upgrading and retraining programs, but unfortunately, very little on research. For example, the Canadian Department of Manpower and Immigration in its

1968-69 annual report (1970) lists the expenditures for occupational training of adults at $ 189,965,776. Although research grants totaling $ 469,341. were administered through the department, no reports are available to date on the effectiveness of the B.T.S.D. program, in terms of its immediate objective, that of improving the reading and computational skills of the trainees, and long range objective, that of successful job placement.

There is an appalling lack of properly designed research on past and current Adult Basic Education programs in Canada. Consequently, one must rely largely on the research literature of the United States. Although studies indicate that adults can be upgraded successfully (Ball, 1967; DePierro & Pryor, 1968; Mollenkopf, 1969), there are many problems to be overcome before effective programs can be undertaken in the field of adult education (Lanning & Manny, 1966). The need to develop more meaningful curricula and to train educators for these adult-oriented programs are two of the major problems.

It is the purpose of this report to evaluate the effect of the Basic Training for Skill Development (BTSD) program on the average grade level of a sample of the trainees in four communities, Montague, Morell, St. Peters and Souris of Kings County, Prince Edward Island.

## METHOD

### SUBJECT

A total of 101 males, ranging in age from 17 to 60 years, were initially enrolled in the program. Of these, 16 missed either the initial or final testing. Forty-five males, with a mean and median age of 30.2 and 26.0 years respectively and a mean of seven years of formal schooling, were in the Grade 8 and below group (M-1). Forty males with a mean and median age of 28.4 and 25.5 years respectively and with a mean of eight years of formal schooling were in the Grade 9 and 10 group (M-2).

Of the 29 females, ranging in age from 17 to 50 years, four did not take either the initial or final testing. Eleven females with a mean and median age of 35.4 and 42.0 years respectively and with a mean of seven years of formal schooling were in the Grade 8 and below group (F-1). Fourteen females, with a mean and median age of 27.3 and 29.5 years respectively and with a mean of nine years of formal schooling, were in the Grade 9 and 10 group (F-2).

### PROCEDURE

Instruction was given in communication and computational skills and science for 25 hours each week, over a five-month period. Instructional processes consisted mainly of traditional classroom lectures. Review, practice and drill were the chief procedures followed. There was no use made of auto-instructional equipment and materials. In each of the four communities there were two classes. Depending on the educational background of the individual student, he was

placed in the class consistent with his or her educational experience. With classes in each of four communities in Kings County, Prince Edward Island, the results could have been evaluated by community, instructor (class), grade level and sex. Future studies should investigate the first two variables, but it was decided in this study to remain with a grade and sex breakdown. It was assumed that a division by the two grade levels would result in homogenous groups from which one could draw more meaningful conclusions. It was also decided that a comparison between the sexes might offer useful information on the similarities and differences in IQ and achievement results between males and females in the program. Since some persons were not available for the complete testing period, the number varied for each subtest and IQ results for each of the four groups.

## INSTRUMENTATION

Parallel forms of the Otis Quick-Scoring Mental Ability Test (Otis, 1954) and the Stanford Achievement Test, Intermediate 11 Battery (Kelly, Madden, Gardner & Rudman, 1964) were administered prior to and following completion of the BTSD program to provide information on the changes in skill levels as a result of the instruction.

## RESULTS

The M-1 and M-2 groups increased their mean IQ scores 4.4 (TABLE 1) and 4.8 points (TABLE 2) respectively ($P<0.01$). The F-1 (TABLE 3) group with a mean gain of 1.8 points did not significantly improve their intelligence score between pre and post testing, whereas the F-2 group (TABLE 4) had a mean gain of 5.5 IQ points ($P<0.05$). Of the four groups, F-1 had the lowest pre and post IQ scores. Since the IQ test is verbal in content, it must be assumed that the increase in IQ score is attributable to an increase in reading with comprehension capability rather than an increase in intelligence. The increased test-taking ability should not be discounted.

On the Stanford Achievement Test each of the four groups increased their grade level significantly on most of the subtests. At the same time, it must be pointed out that the mean grade level change was relatively small. There were 28 combinations (4 groups x 7 subtests) that offered the opportunity for grade level changes. In only one instance did the mean grade level change two or more grades (Arithmetic Concepts of F-2 group). Eight of the 28 had a mean grade level change of more than one but less than two grade levels. Twelve of the 28 combinations had a mean grade change of more than 0.5 but less than 1.0. The remaining seven, had a mean grade change of less than 0.5.

TABLE 1

IQ and Achievement Test Results for Grade 8 and below Males

The M-1 Group

| Variable | N | Mean | Range | SD | SEm |
|---|---|---|---|---|---|
| Pre Word Meaning | 45 | 6.6 | 3.8 - 9.5 | 1.46 | .22 |
| Post Word Meaning | 45 | 7.8 | 3.9 - 11.5 | 1.95 | .29 |
| Change Word Meaning | | 1.2** | -1.9 - 4.2 | | |
| Pre Paragraph M. | 45 | [illegible] 9 | 3.0 - 9.2 | 1.43 | .22 |
| Post Paragraph M. | 45 | 6 [illegible] | 2.0 - 10.9 | 1.79 | .27 |
| Change Paragraph M. | | 0.4 | -3.6 - -3.8 | | |
| Pre Spelling | 45 | 6.3 | 3.4 - 11.0 | 2.10 | .32 |
| Post Spelling | 45 | 7.0 | 3.6 - 11.5 | 2.04 | .31 |
| Change Spelling | | 0.7** | -1.7 - 3.0 | | |
| Pre Language | 44 | 4.7 | 2.5 - 7.2 | 1.05 | .16 |
| Post Language | 44 | 5.6 | 2.4 - 7.9 | 1.24 | .19 |
| Change Language | | 0.9** | -.6 - 3.4 | | |
| Pre A. Computation | 43 | 6.6 | 3.7 - 11.2 | 1.76 | .27 |
| Post A. Computation | 43 | 8.5 | 4.4 - 12.6 | 2.14 | .33 |
| Change A. Computation | | 1.9** | -3.9 - 7.2 | | |
| Pre A. Concepts | 42 | 6.0 | 3.6 - 8.0 | 1.14 | .18 |
| Post A. Concepts | 42 | 7.8 | 4.6 - 11.8 | 1.73 | .27 |
| Change A. Concepts | | 1.8** | -1.7 - 4.2 | | |
| Pre A. Applications | 41 | 7.8 | 4.2 - 12.2 | 2.00 | .32 |
| Post A. Applications | 41 | 8.5 | 4.9 - 12.2 | 2.06 | .33 |
| Change A. Applications | | 0.7** | -2.3 - 3.3 | | |
| OTIS | | | | | |
| Pre | 44 | 82.0 | 60 - 104 | 7.16 | 1.09 |
| Post | 44 | 86.4 | 60 - 108 | 7.93 | 1.21 |
| Change | | 4.4** | -6 - 12 | | |

* $P < 0.05$
** $P < 0.01$

TABLE 2

IQ and Achievement Test Results for Grade 9 and 10 Males

The M-2 Group

| Variable | N | Mean | Range | SD | SEm |
|---|---|---|---|---|---|
| Pre Word Meaning | 40 | 8.1 | 3.9 - 11.8 | 1.86 | .30 |
| Post Word Meaning | 40 | 8.8 | 4.4 - 12.1 | 1.78 | .29 |
| Change Word Meaning | | 0.7** | -1.2 - 2.2 | | |
| Pre Paragraph M. | 40 | 7.6 | 3.9 - 11.8 | 1.87 | .30 |
| Post Paragraph M. | 40 | 7.9 | 4.4 - 12.1 | 2.26 | .36 |
| Change Paragraph M. | | 0.3 | -2.8 - 3.6 | | |
| Pre Spelling | 40 | 8.5 | 5.1 - 12.9 | 2.32 | .37 |
| Post Spelling | 40 | 9.2 | 4.8 - 12.9 | 2.39 | .38 |
| Change Spelling | | 0.7** | -1.1 - 4.1 | | |
| Pre Language | 39 | 6.9 | 4.1 - 11.7 | 2.33 | .38 |
| Post Language | 39 | 7.5 | 4.3 - 11.5 | 2.12 | .34 |
| Change Language | | 0.5** | -1.7 - 2.2 | | |
| Pre A. Computation | 38 | 8.9 | 5.4 - 12.9 | 2.22 | .36 |
| Post A. Computation | 38 | 10.9 | 7.1 - 12.9 | 1.85 | .30 |
| Change A. Computation | | 2.0** | -.5 - 5.8 | | |
| Pre A. Concepts | 39 | 8.6 | 5.4 - 12.9 | 2.06 | .33 |
| Post A. Concepts | 39 | 9.8 | 6.5 - 12.9 | 1.86 | .30 |
| Change A. Concepts | | 1.2** | -1.1 - 5.0 | | |
| Pre A. Applications | 38 | 10.1 | 6.5 - 12.9 | 2.07 | .34 |
| Post A. Applications | 38 | 10.4 | 6.8 - 12.9 | 1.87 | .31 |
| Change A. Applications | | 0.3 | -3.1 - 5.4 | | |
| OTIS | | | | | |
| Pre | 38 | 90.9 | 72 - 111 | 10.41 | 1.71 |
| Post | 38 | 95.7 | 77 - 115 | 11.27 | 1.85 |
| Change | | 4.8* | -6 - 16 | | |

* P < 0.05
** P < 0.01

TABLE 3

IQ and Achievement Test Results for Grade 8 & below Females

The F-1 Group

| Variable | N | Mean | Range | SD | SEm |
|---|---|---|---|---|---|
| Pre Word Meaning | 10 | 5.3 | 3.8 - 7.8 | 1.5 | .50 |
| Post Word Meaning | 10 | 6.5 | 4.1 - 8.8 | 1.8 | .60 |
| Change Word Meaning | | 1.2* | .3 - 3.7 | | |
| Pre Paragraph M. | 10 | 4.8 | .2 - 6.1 | 1.5 | .50 |
| Post Paragraph M. | 10 | 5.5 | 3.9 - 6.9 | 1.3 | .43 |
| Change Paragraph M. | | 0.7* | -.4 - 2.6 | | |
| Pre Spelling | 10 | 5.5 | 2.0 - 8.0 | 1.8 | .60 |
| Post Spelling | 10 | 6.2 | 3.6 - 2.7 | 2.1 | .70 |
| Change Spelling | | 0.7 | -1.2 - 2.1 | | |
| Pre Language | 11 | 4.1 | 2.6 - 7.1 | 1.41 | .45 |
| Post Language | 11 | 4.4 | 2.5 - 6.4 | 1.8 | .57 |
| Change Language | | 0.3 | -.3 - 1.6 | | |
| Pre A. Computation | 11 | 5.5 | 4.1 - 8.2 | 1.2 | .38 |
| Post A. Computation | 11 | 7.4 | 3.6 - 10.0 | 1.8 | .57 |
| Change A. Computation | | 1.9** | -.5 - 3.1 | | |
| Pre A. Concepts | 10 | 5.1 | 4.0 - 7.0 | 1.1 | .36 |
| Post A. Concepts | 10 | 5.9 | 4.3 - 8.0 | 1.3 | .43 |
| Change A. Concepts | | 0.8** | -.1 - 1.7 | | |
| Pre A. Applications | 11 | 5.9 | 3.6 - 6.8 | 1.1 | .35 |
| Post A. Applications | 11 | 6.3 | 3.8 - 8.6 | 1.4 | .44 |
| Change A. Applications | | 0.4 | .2 - 1.0 | | |
| OTIS | | | | | |
| Pre | 11 | 76.7 | 68 - 84 | 6.04 | 1.91 |
| Post | 11 | 78.5 | 70 - 84 | 7.02 | 2.22 |
| Change | | 1.8 | -4 - 10 | | |

* $P < 0.05$
** $P < 0.01$

TABLE 4

IQ and Achievement Test Results for Grades 9 and 10 Females

The F-2 Group

| Variable | N | Mean | Range | SD | SEm |
|---|---|---|---|---|---|
| Pre Word Meaning | 14 | 8.3 | 5.9 - 10.5 | 1.4 | .39 |
| Post Word Meaning | 14 | 9.4 | 7.3 - 11.5 | 1.4 | .39 |
| Change Word Meaning | | 1.1** | -1.0 - 2.2 | | |
| Pre Paragraph M. | 14 | 8.0 | 5.9 - 10.0 | 1.32 | .37 |
| Post Paragraph M. | 14 | 8.6 | 6.7 - 12.6 | 1.66 | .46 |
| Change Paragraph M. | | .6 | -1.6 - 3.4 | | |
| Pre Spelling | 14 | 11.1 | 9.2 - 12.9 | 1.17 | .32 |
| Post Spelling | 14 | 11.4 | 8.5 - 12.9 | 1.26 | .35 |
| Change Spelling | | 0.3 | -.7 - 1.4 | | |
| Pre Language | 14 | 7.8 | 5.5 - 11.4 | 1.6 | .44 |
| Post Language | 14 | 8.5 | 5.3 - 12.1 | 1.7 | .47 |
| Change Language | | 0.7 | -1.2 - 3.4 | | |
| Pre A. Computation | 14 | 9.5 | 6.3 - 12.9 | 1.97 | .55 |
| Post A. Computation | 14 | 11.3 | 8.4 - 12.9 | 1.3 | .36 |
| Change A. Computation | | 1.8** | -.7 - 3.8 | | |
| Pre A. Concepts | 12 | 8.3 | 5.4 - 11.1 | 1.58 | .47 |
| Post A. Concepts | 12 | 10.7 | 7.5 - 12.4 | 1.7 | .51 |
| Change A. Concepts | | 2.4 | .4 - 4.6 | | |
| Pre A. Applications | 13 | 10.1 | 7.1 - 12.5 | 1.6 | .46 |
| Post A. Applications | 13 | 10.6 | 8.6 - 12.2 | 1.1 | .32 |
| Change A. Applications | | 0.5 | -1.4 - 2.6 | | |
| OTIS | | | | | |
| Pre | 14 | 90.1 | 81 - 102 | 5.58 | 1.55 |
| Post | 14 | 95.6 | 85 - 107 | 6.44 | 1.79 |
| Change | | 5.5** | 12 - 22 | | |

* $P < 0.05$
** $P < 0.01$

On the Stanford Achievement Test, the M-1 group (TABLE 1) showed significant mean grade level changes on all subtests except paragraph meaning, while the M-2 group (TABLE 2) made significant mean grade level changes on all subtests except paragraph meaning and arithmetic applications. Since the pre-instructional mean grade level on the arithmetic application subtests of the M-2 group was 10.1, one can conclude that the ceiling effect was present during post instructional testing.

The mean grade level change in communication skills, for both the F-1 (TABLE 3) and F-2 (TABLE 4) groups was extremely low. Word meaning was the communications skills subtest which was significant ($P<0.01$) in both female groups while the paragraph meaning subtest in the F-1 group (TABLE 3) was the only other communication skills subtest in either female group whose mean grade level change was significant ($P<0.05$). This strongly suggests that the communication skills curriculum needs further development. As with both male groups, the mean grade level changes in computational skills subtests in the female groups were appreciably greater than the communication skills subtests. Although there were statistically significant gains in many of the subtests for each of the four groups, the mean grade level changes were not of the expected magnitude. This relatively low change was more apparent in the communication skills than in the computational skills subtests. Word meaning was the only communication skills subtest in which any of the four groups achieved a mean change of one or more grade levels and the only subtest with a significant ($P<0.01$) mean grade level change in each of the four groups.

The F-1 group (TABLE 3) had the only mean grade level change in the paragraph meaning subtest that reached significance ($P<0.05$). Inasmuch as paragraph meaning is a measure of the person's reading comprehension, it can be assumed that neither male group nor the F-2 group (TABLE 4) appreciably improved their reading comprehension skill. The F-1 group (TABLE 3) mean grade level change was significant ($P<0.05$), but the change (0.7) was relatively low. It was assumed that the Adult Basic Education Program offered the participant the opportunity to develop this skill. Apparently, this assumption is unfounded. Mollenkopf (1969) administered only the paragraph meaning subtest to measure communication skills. One could conclude that he assumed this subtest in itself would offer an accurate assessment of improvement in communication skills.

In the spelling subtest, both the M-1 (TABLE 1) and M-2 (TABLE 2) groups had mean grade level changes that were significant ($P<0.01$). But, the mean grade level changes in the M-1 (0.7) and M-2 (0.7) groups were relatively small. Neither the F-1 (TABLE 3) nor the F-4 (TABLE 4) groups with mean grade level changes of 0.7 and 0.3 respectively were significant. Since the mean grade level changes in the F-1 group was very similar to that of both male groups, the lack of significance in this female group can be attributed to the smaller number (10) of female participants in this level of the program. In this same line of reasoning, the significant mean grade level change of both male groups can be attributed more to the number of male participants in each level of the program than the mean level change made by either male group.

In the language subtest, both male groups had significant mean grade level changes while there was no significant change in either of the female groups. Again, the mean grade level

change in the M-1 group of 0.9 ($P<0.01$) and group of 0.5 ($P<0.05$) were relatively small but with the number of participants in these groups the change would not have to be great to be significant. Although one could not expect the change of 0.3 in the F-1 group to be significant with a larger number of female participants, the mean grade level change (0.7) of the F-2 group is greater than the M-2 group but the smaller number in the female group results in the change not being significant.

The computational skills subtests quite consistently showed higher mean grade level changes than the communications skills subtests. The exceptions to this which occurred in the arithmetic applications subtest of the M-2 and F-2 groups could be attributed to the high (10.0 plus) pre-instructional grade level scores of both groups in this subtest.

Among all seven subtests, the arithmetic computation subtest had the mean grade level change which was most consistently the highest for the four groups. The mean grade level change was highly significant ($P<0.01$) for all four groups. This pattern is quite similar to the results in another study (McGonnell & Morrison, 1970). Since the curriculum and method of instruction differed in the present study from the McGonnell & Morrison (1970) study and there is no basis on which to conclude the subjects are comparable, it is very difficult to draw any tangible conclusions.

Significant changes occurred in the arithmetic concepts subtest for all four groups. The F-1 group (TABLE 3) was the only one of the four groups with a change of less than one mean grade level ($P<0.01$). The arithmetic concepts subtest of the F-2 group (TABLE 4) was the only subtest in all four groups with a mean change of more than two grade levels

(P<0.01). For both male groups the changes were more than one grade level (P<0.01). For both the M-2 (TABLE 2) and F-2 (TABLE 4) groups the pre-instructional mean grade level was slightly above 10.0 in the arithmetic applications subtest. This suggests the presence of the ceiling effect which results in the lack of a significant change for both of these groups. Although less than one grade level, the mean grade level change (arithmetic applications subtest) of the M-1 group (TABLE 1) was significant (P<0.01). In this subtest, the mean grade level change of the F-1 group (TABLE 3) did not reach significance.

## DISCUSSION

The summary of results, presented in the four tables, clearly indicates that neither the male nor the female groups made the expected changes in the communications skills subtests. It is very doubtful if the grade changes in these subtests would meet the expectations of the administrators of the program. The grade level changes in the computational skills subtests may meet their expectations.

It should be pointed out that the pre-instructional testing occurred approximately one month after the program began. Although it is unlikely, a considerable grade level change could have occurred in this first month.

As in the present study, the pattern of greater mean grade level changes in the computational skills than in the communication skills subtests also occurred in a previous study (McGonnell & Morrison, 1970). Mollenkopf (1969), using the Mind Inc. (Kline, 1969) program as did the McGonnell and Morrison (1970) study, administered the paragraph meaning and arithmetic computation subtests. In the Mollenkopf study the mean change of the computational skills subtest was considerably greater than the communication skills subtest. One could conclude that in adult basic education programs the communication skills curriculum is in greater need of development than the computational skills curriculum.

It is also possible that participants prefer to practice their computational skills rather than their reading with comprehension (communication) skills. When one undertakes and completes arithmetic problems a person knows or can find out if he did the problem correctly. The rewards for his

efforts are more obvious because the skills are more easily defined. Such is not the case for reading with comprehension skills. In addition the higher pre-instructional computational skills can be attributed to the greater continual application of these skills than their reading skills. With the communications revolution, the undereducated make very little demand on their reading skills.

## LIMITATIONS OF THE PROGRAM

1. Instruction was mainly in the hands of teachers with elementary school teaching experience who had little or no special training for dealing with disadvantaged adults. Adult Basic Education Studies (Barnes and Henderickson, 1965) have found that specific training is highly desirable in order to understand the behavioral patterns of the disadvantaged and to be able to provide special kinds of educational treatment.

2. Little use was made of instructional aides to facilitate the learning process.

3. There was no follow-up evaluation on post training employment. Actually a follow-up on a sample of the people throughout the province who participated in the BTSD program would be invaluable in determining the worth of the program.

## STRATEGIES FOR THE FUTURE

As part of any strategy in adult basic education, evaluation should be incorporated into the program from its inception (Harman, 1970). A properly designed method of evaluation would offer an objective basis to facilitate

innovations and revisions in the program. Suchman (1969) points out that evaluative research takes place on a number of different levels with each level needing a conceptualization of the evaluative problem somewhat different from each of the others. The levels from the broadest to the most narrow are (a) social systems (ultimate objective), (b) organizations or institutions (intermediate objective), (c) programs or projects (immediate objective). The evaluative research of the present study was at the program level. If the objective of the program was to increase the grade level of the adult student then according to the results presented in this paper it is questionable as to whether the program reached its objective.

This clearly indicates that the administrators of the program need to re-evaluate program content, method of instruction and level of instructional capability. If the federal government is serious about such manpower training programs as the Basic Training for Skill Development Program and if such an endeavour is more than a method of decreasing unemployment, they must induce provincial governments to vastly improve their programs. The provincial government must then proceed to undertake this first level of evaluation (program level). Present evaluation of these programs concentrates on what Suchman (1969) calls the "effort" category. Such programs are evaluated on their input rather than on their accomplishments. The worth of the program is judged by the amount of money spent and the number of persons supposedly trained. It is an erroneous assumption to conclude on such a basis that the program has been successful.

Adult educators tend to assume that teaching communication and computational skills results in obtaining employment and moving to better employment. This is a questionable

assumption. Suchman (1967) reports that many evaluation studies have indicated that knowledge itself is rarely a sufficient basis for action. This strongly suggests a more comprehensive system of manpower development.

If the objective of the adult education (manpower development) system is to improve the social and economic status of its participants, the system must go beyond training in communication and computational skills. It must be comprehensive in that it should include all stages from recruitment of the participants to job placement. Perhaps modifications of the Prince Edward Island NewStart Inc. Manpower Development System (1970) now in operation would be worth serious consideration.

Training could be facilitated by the creation of permanent adult learning resource centres located throughout Prince Edward Island in a manner that would be advantageous to most adults. A learning resource centre should be placed in each of the educational administrative units planned by the Provincial Department of Education. The centre should be in the same community as the seat of the administrative unit to take full advantage of all the unit's assets. These resource centres would provide the physical plant for the Manpower Development System. Certainly the provision of facilities for the system would be only one of the purposes of the centre.

Traditional approaches borrowed from the public school model and presently in use in many adult basic education programs are inappropriate. The conventional educational model has contributed to the problem of undereducation (Hocker & Sherk, 1970). Individualized programs are essential. It is also essential that a heterogenous group of undereducated

adults be offered an individualized program that will best fit the needs of each program participant. The innovative aspects of the NewStart Manpower Development System in each of the learning resource centres could do this.

To make the system work most effectively efforts would have to be made to improve the quality of its parts and the quality of the whole. A proper method of evaluation is, therefore, essential to the Manpower Development System for adult basic education.

Adult basic education may present more of a philosophical than an educational problem. The educational problem can be managed if the decision makers are willing to make the commitment, which is not so much financial as it is a commitment to planning and evaluation. It was not the purpose of this paper to engage in polemics or to try to solve all the problems of adult basic education on Prince Edward Island. However, it is hoped that the evaluation of the standardized testing on these adults and suggested strategies will receive serious consideration.

## SUMMARY

In view of these results consequent upon a five month period of instruction, it would seem that the program was not effective with the disadvantaged population. The apparent ineffectiveness of the program does not come as a great surprise. For many of the disadvantaged, the school environment has represented a history of failure and ungratifying experiences. Because of their past experience they have developed negative attitudes toward school. Thus, it is not unreasonable for them to reject a simulated model of the

school setting. It would appear that the classroom method is not flexible enough either in curriculum or model of instruction to meet the needs of the disadvantaged. Another method has been suggested to serve these needs and to provide an individualized program to such a heterogenous group as the undereducated adult.

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