In this progress report are descriptions of (1) the 1970 program of Project Catch-Up (PCU), Western Washington State College's (WWSC) 5-week summer residence program of remediation and cultural enrichment for junior high age youth of ethnic minority status or poverty background having high potential and low achievement, and (2) the follow-up evaluation of PCU participants from the 1966-1970 programs. Also presented are an historical overview of PCU; a delineation of modifications in the 1970 program (involving WWSC's Fellowship Program for Experienced Teachers of the Disadvantaged); the design of the follow-up; and a summary of objective findings for the 1968 and 1969 groups in terms of results on the California Mental Maturity Test (CTMM), California Achievement Tests of Reading and Arithmetic (CART), and the California Psychological Inventory. The most significant finding from these measures is said to be that, with the exception of the total arithmetic subscale and female response to the CTMM, both of which remained stationary, all other measures improved significantly over a 2-year period for the 1968 and 1969 groups collectively. In addition, the overall attrition rate for PCU participants (including death, unknown whereabouts, and dropping out of school) is reported as standing at 13% as of July 1971. Appendixed are the financial statement for the 1970 program, "Director's Report for Fellowship Program in Secondary Education for Experienced Teachers of the Disadvantaged," and "Evaluation of Potential for Change in Junior High Age Youth from American Indian, Mexican and Anglo Ethnic Backgrounds." A related document is RC 005 773. (BO)
July 1, 1971

A progress report submitted to the Division of Humanities and Social Sciences, the Rockefeller Foundation

PROJECT CATCH-UP
June, 1966 to July, 1971

An educational program for socially disadvantaged thirteen and fourteen year old youngsters

Submitted by:

Evelyn P. Mason, Ph.D.
Professor of Psychology
Director of Project Catch-Up
Western Washington State College
Bellingham, Washington

For Western Washington State College

Herbert C. Taylor, Jr.
Dean for Research and Grants
(Officer authorized to sign for College)
## CONTENTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>III</td>
<td>A. Junior High Participants for the 1970 Summer Program</td>
<td>B. Total Staff for the 1970 Summer Program</td>
<td>C. Living Facilities for the 1970 Summer Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D. Academic Program for the 1970 Summer Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E. Recreational and Cultural Activities for the 1970 Summer Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>F. Evaluation of the 1970 Summer Program</td>
</tr>
<tr>
<td>V</td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>REFERENCES</td>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**APPENDIX A** Financial Statement

**APPENDIX B** Director's Report for Fellowship Program in Secondary Education for Experienced Teachers of the Disadvantaged

**APPENDIX C** Evaluation of Potential for Change in Junior High Age Youth from American Indian, Mexican and Anglo Ethnic Backgrounds

**APPENDIX D** Reprints of Project Catch-Up for 1971
I. INTRODUCTION

The six-week summer residence program of academic remediation, facilitation and cultural enrichment, which is Project Catch-Up, has operated from 1966 through 1971.¹ This is a description, first, of the 1970 summer program, and secondly, of the follow-up evaluation both of this group during the academic year 1970-1971 and of the progress made by the previous participants from the 1966-1969 programs.²

Perhaps before attending to the 1970 summer program it would be well to review the differences in orientation which have occurred over the various summers. The 1966-1967 summer programs of Project Catch-Up were designed as a demonstration project to test whether experienced public school teachers could effect change in expected high school drop-out rate, in low academic achievement, and in the negative self-images of area representative junior high age youth from American Indian, Mexican, and Anglo ethnic backgrounds (Mason, 1969). The success of the first two summers was primarily measured by a significant reduction in expected school drop-out rate. To further extend the effects of the demonstration program both to participants and in referring potential for effecting change in teacher attitudes, Project Catch-Up was redesigned to extend over five summers with intensive follow-up evaluation over ten years. The summer programs of 1968 and 1969 closely followed the design of the first two summers (Mason, 1970). The summer program of 1970 differed significantly, however, in that it was primarily staffed by 14 Fellows who were enrolled in an E.P.D.A. Fellowship Program for Experienced Teachers

¹Project Catch-Up is funded by the Rockefeller Foundation, the Office of Education, and by Western Washington State College.

²Support for the follow-up evaluation is provided by N.I.M.H. Grant No. 1 R01 MH16852-02.
of the Disadvantaged, on Western Washington State College's campus.\(^3\) A detailed description of the Fellowship Program is appended (see Appendix B). The brief description of the Fellowship program in this report is included to clarify the organization of the 1970 summer program.


From recruitment brochures sent to school districts in Washington, Oregon, California, Idaho, Montana, North Dakota, New Mexico, Arizona, and Colorado, 200 inquiries were initiated, 44 applications completed, and 14 experienced teachers selected. During the academic year of 1969-1970 the Fellows were expected to complete the academic requirements for the M. Ed. degree and to utilize the 1970 summer program of Project Catch-Up as a practicum experience. All 14 Fellows completed the academic requirements but one withdrew before completing the summer practicum because of pressing personal problems.

Planning for the summer program was handled by discussions with the Director, Co-Director, and former staff members of Project Catch-Up. It was completed during winter and spring quarters in conjunction with courses in special curriculum problems and attention to the psychology of the disadvantaged adolescent. Because the Fellows brought to the program from differing areas of expertise from that of staffs of previous summers, a totally new approach to the educational enrichment portion of the summer program was introduced. As a result the 1970 summer program differed considerably from those of previous years.

\(^3\) The E.P.D.A. Fellowship Program for Experienced Teachers of the Disadvantaged was funded by the Office of Education and directed by the Director of Project Catch-Up.
III. SUMMER PROGRAM--PROJECT CATCH-UP (1970)

A. Junior High Participants for the 1970 Summer Program

Unlike previous summers when participants had been selected from nominations from public school junior high teachers and counselors, the Fellows were assigned schools in the area and spent the spring months visiting schools and talking with teachers and prospective participants, a procedure which provided an excellent public relations component for the program. The 47 students selected to participate included 20 American Indians (10 boys and 10 girls), 12 Mexicans (6 boys and 6 girls), and 15 Anglos (7 boys and 8 girls). Of these 40 completed the summer program.

B. Total Staff for the 1970 Summer Program

As in former years the staff included the Director, a member of Western's Psychology department, and the same Co-Director, an able public school administrator. In addition to the 14 Fellows a junior counseling staff of able college students was organized. These included a Mexican male sociology major, a Mexican female, two Indian female education majors, and an Anglo male psychology major. A former Anglo participant was allowed to return as a "junior-junior" counselor but proved to be more of an irritant than an assistant.

C. Living Facilities for the 1970 Summer Program

The college facility used in previous years was a single dormitory with close access to college dining facilities. During the planning sessions for the 1970 summer it was decided to utilize the residence facilities of Fairhaven College, an innovative cluster college with a separate campus in close geographic approximation to Western. The completeness of the campus combined with its comparative isolation appeared to provide the ideal
environment to foster a community feeling. This proved not to be the case, however. Because of the arrangement of the dormitories it was necessary to house the boys in one dormitory, the girls in another, and staff and families in apartments in both dormitories but relatively more isolated than in previous years. This made day-to-day communication somewhat more difficult and reduced the sense of family living which had existed in previous years.

D. Academic Program for the 1970 Summer Program

In contrast to the academic courses of language arts, math, science and art offered previously, the Fellows elected to present to the participants a wide variety of course offerings and allow them to elect from the list those courses they wished to concentrate on for two weeks. At the end of this time the students were to change their courses or continue, as they chose, and this procedure was repeated at the end of the fourth week. The course offerings included language arts, reading, creative writing, sewing, Spanish, black studies, cooking, photography, science, art, typing, music, math, psychology, drama, industrial arts. It was intended that a maximum amount of individual counseling should accompany this decision-making and that this counseling and encouragement should continue throughout the program to increase the students' active involvement and to facilitate their achieving maximum success with the courses of their choice.

E. Recreational and Cultural Activities for the 1970 Summer Program

As in previous years a few recreational and cultural activities were planned for the total participant group but, again, the major portion of activities were arranged on an individual basis or in small groups. These
individual and small group activities included camping, swimming, sailing, water skiing, attending college lectures and art films, dinner in college faculty homes, and use of college athletic facilities. Some of the new activities contributed by the Fellows were integrated with the academic program so that "school" and "recreation" became inseparable. This was particularly true of the industrial arts program, the introduction to picture taking and development of films, culminating in a contest for the most artistic efforts, the cooking class held at various times during the day for both boys and girls, the modern dance program, and golf instruction combined with language arts.

One of the most significant activities was organized by one of the Indian junior counselors, a member of the Swinomish tribe whose family has long been active in tribal affairs. With the total staff collaborating, invitations were issued to all Tribal Councils in the area including the Lummi, Swinomish, Nooksack and Tulalip, asking them to participate in a two-day conference on Indian culture at the Project Catch-Up site. The conference included lectures by Indian tribal leaders to the total Catch-Up community and guests, demonstrations of bone dances, displays of Indian art, demonstrations of totem pole carving, and discussions among tribal leaders, staff and participants.

F. Evaluation of the 1970 Summer Program

As conceived on paper it seemed that the summer program would be excellent. The wide variety of course offerings, a larger staff, and innovative approaches to combining classroom instruction and recreation, all argued for a program that would be even more effective than those of previous years. In actuality, this seemed not to be the case. The
evaluation of the program by the Fellows themselves at the end of the summer ranged from some enthusiastic supporters to one who saw it as a total failure. Perhaps the truth is somewhere in the middle.

In tabulating the actual operation of the program it was noted that class attendance was poor in many situations, that consensus on dormitory rules and regulations among staff and participants was rarely achieved, that actually more participants dropped out of the program than in previous summers, and that there was more physical damage done to the dormitory facility.

Possibly the physical arrangement of the dormitory contributed to less effective involvement of some participants. Or, possibly the number of decision-making situations was greater than young people of this level of maturity were capable of making. The general consensus among the staff after the six week session, however, was that the discrepancy between the 1970 summer program and those of previous years was a "people failure" rather than a "plan failure." Under the stress of the live-in situation a divergence of opinion as to the basic philosophy of education emerged which had probably been latent during the academic year. Though all the Fellows were convinced of the effectiveness of individualized instruction, a difference of opinion emerged as to how best this should be achieved. Some Fellows appeared to prefer to operate in a more highly structured authoritarian situation and found it difficult to maintain the counseling necessary to achieve the individual decision-making the Project was designed to foster. Others followed through with great enthusiasm the approach of working with the individual child to foster maximum development. The split which developed as a result of the two approaches reduced the
effectiveness of the total staff considerably.

Despite these people problems the youngsters who completed the summer program were enthusiastic about their experience. Of the 48 youngsters who began the 1970 program, 40 completed it. Even though this attrition rate was considerably higher than in previous years, contact with the 1970 "graduates" of Project Catch-Up during the academic year has indicated that this enthusiasm has been maintained. Even so, this group has had more casualties during the first academic year than in former years. One Anglo girl is out of school because of a pregnancy, but hopes to return. One Indian boy is in a state institution. However, his mother felt the Project was successful in helping him and will make it easier for him to return to the community.


A. Design of the Follow-Up Evaluation

Since the 1966-1967 programs were designed as demonstration years no detailed evaluation was included in the over-all plan. Contact has been maintained with these participants, however, and is included as a part of the total Follow-Up evaluation.

In the evaluation of the 1968, 1969 and 1970 participant groups the continued subjective evaluation of participants' progress by contact with students in their schools and homes, is part of the Follow-Up study. In addition, a more objective measure of change in behavior has been instituted. For each group objective tests are administered on the first day of the program and repeated after the students have completed the next school year. The four criterion measures used are the California Test of Mental
Maturity (Sullivan, Clark and Tieds, 1947), California Achievement Tests of Reading and Arithmetic (Tieds and Clark, 1957), and the California Psychological Inventory (Gough, 1957). Statistical Analysis of the data obtained for the 1968 and 1969 groups has been completed and is reported in detail in Appendix C. Continued analysis of the 1970 test results is in process.

B. Summary of Objective Findings for the 1968 and 1969 Groups

In the face of previous evidence that academic achievement for disadvantaged students either remains stationary or declines (Deutch, 1964), the most significant finding from this objective measurement was that on no criterion measure did any ethnic group do significantly poorer on the after test. In fact, with the exception of the total arithmetic subscale and female response to the C.T.MM, which remained stationary, all other measures improved significantly. This data then, generated over a two year period of time, shows that some adolescents, after experiencing an intensified summer program, show some improved arithmetic skills, improvement in all reading skills measured, continued development in mental maturity, and generally more positive views of self-worth.

The latter finding was of interest in light of a similar analysis of the 1968 participants' response to the C.P.I. which showed no improvement (Mason, 1971). The present evidence of improved attitudes toward self over time parallels some behavioral observations suggesting that for some participants the effect of the summer program is not realized immediately.

Sex differences, in general, were in the expected direction with boys performing better on non-language tasks and girls better on language. Some evidence that the girls achieved at a higher level was of interest as the follow-up evaluation of the 1966, 1967, 1968, 1969 participant groups showed
that significantly more girls dropped out of school (14 of the 192 participants are school dropouts or cannot be located, 10 of whom are girls).

Finally, despite the positive findings indicating improved performance, the consistent evidence that the Anglos show the greatest improvement while the Indians the least, is a commentary on our educational scene. It would appear that those adolescents who experience comparatively the most advantaged circumstances are the most available for change.


Of the 49 participants who completed the 1966 program five girls are known to have dropped from school, three additional ones are married with babies, and four girls and three boys cannot be located. Hence, by 1971 the 1966 "class" produced a total of eight dropouts (all girls) and seven whose whereabouts is not known (four of whom are girls)--a 30% loss. Of the remaining twenty-four students fifteen have completed high school, four have completed one or more years of college, two are registered for this coming year, and the others are gainfully employed.

Of the 47 who completed the 1967 program one is deceased, three have dropped from school (two girls and one boy), one girl is married, and the whereabouts of four is not known (two girls and two boys)--a 17% loss.

Of the 48 students who completed the 1968 program one is deceased, three are dropouts (one girl and two boys), and the whereabouts of seven is not known (four girls and three boys)--a 22% loss.

Of the 48 students who completed the 1969 program two girls are school drop-outs and one girl and two boys cannot be located--a 10% loss.

Of the 40 students who completed the 1970 program one girl is
pregnant but plans to return to school, and one boy is in a state institution—a 5% loss.

In summary, then, of the 232 students who have completed the five summers of Project Catch-Up, 30 are casualties or over-all 13% loss in participants. Of these, two are deceased, ten are known school drop-outs (nine girls and one boy), four girls are married and one is pregnant, one boy is in a state institution, and 13 cannot be located (seven girls and six boys). It is some significance to note that the casualty list for Project Catch-Up continues to be heavily weighted with girls. Of the 30 individuals considered "non-participating" 21 are girls. The percentage of casualities ranges from a high of 30% for the 1966 class to a low of 5% for the 1970 class. The high of 30% is somewhat above the expected national school drop-out rate of 25% for upper-lower class youth in general, but below the 50% school drop-out rate among people on the lower-lower socio-economic ladder regardless of ethnic group (Cervantes, 1965). Further, it should be noted that casualty list reported includes a high percentage of participants who, because of their highly mobile living circumstance, cannot be located.

V. SUMMARY

The innovative plan for Project-Catch-Up introduced by Fellows in the E.P.D.A. Program for Experienced Teachers of the Disadvantaged, proved to be somewhat less successful than the programs of previous summers. Nevertheless, the 40 junior high students who completed the program did so with enthusiasm and, with the exception of two, continue to do well. Of the 232 students who have completed the five summer programs of Project Catch-Up, 30 are no
longer participating in the program. This represents a 13% loss in participation and is considerably below the over-all national expected rate for school drop-outs.
VI. REFERENCES


PROJECT CATCH-UP EXPENDITURES
EDUCATION PROFESSIONS DEVELOPMENT ACT FUNDS
JULY 1 1970 through JUNE 30 1971

Salaries, stipends, fringe benefits, Director, Co-Director, Counselors, Student Assistants and Secretary

$4,634.73

Cultural activities, recreation and transportation

1,634.53

Staff mileage and travel

1,804.88

Educational materials and supplies

4,461.28

$22,538.47
PROJECT CATCH-UP EXPENDITURES

EDUCATION PROFESSIONS DEVELOPMENT ACT FUNDS

JULY 1 1970 through JUNE 30 1971

SALARIES

DIRECTOR $2,452.50
COORDINATOR 3,000.00
SECRETARY 5,322.72
JUNIOR COUNSELORS (WORK STUDY PROGRAM) 200.00
JUNIOR COUNSELORS, 2 944.80
GRADUATE STUDENT ASSISTANTS (RESEARCH) 250.00

$12,170.02

TOTAL FRINGE BENEFITS, ALL EMPLOYEES $1,056.76

WEEKLY STIPEND FOR 48 PARTICIPANTS ($5.00 weekly) $1,410.00
PROJECT CATCH-UP EXPENDITURES
EDUCATION PROFESSIONS DEVELOPMENT ACT FUNDS
JULY 1 1970 through JUNE 30 1971

CULTURAL ACTIVITIES, RECREATION AND TRANSPORTATION

CULTURAL

Vancouver, B. C. Art Museum tour, no charge
Tour of Seattle Science Center, no charge
Joffre Ballet tickets for four participants and counselor - - - $17.75
"Dress Up" restaurant dinner for all participants - - - - - - 55.00
Ferry trips to Victoria, B. C. (see Staff Mileage)

RECREATION

Visit to Stanley Park, Vancouver, B. C.
Exploring downtown Vancouver, B. C.
Par 3 golf course and driving range fees for all participants -- 87.63
Horseback rides-- - - - - - - - - - - - - - - - - - - - - - - - - 28.00
Trip to Ross Dam, Skagit County (see Staff Mileage)
Water skiing (boat donated by staff member)

The municipal beach at Lake Whatcom was utilized for swimming almost daily for the 6 weeks' session. Also, Western Washington State College's facilities at Lakewood were used for picnics and overnight camp-outs for the students. In addition, science trips and fishing trips to local islands and mountain areas were arranged by the staff. The cost for these trips is included in the staff mileage and miscellaneous costs under "Educational Materials and Supplies".

In addition, Dr. Mason, Project Director has made available to the participants, her Lake Whatcom home. These have been pleasant days, swimming, learning to sail the small boat and learning to water ski. The day is climaxed by a picnic supper served from an authentic Indian dug-out on the Lake shore.

TRANSPORTATION

Bus for trip to Seattle Science Center - - - - - - - - - - - - 128.25
Bus for trip to Ross Dam - - - - - - - - - - - - - - - - - - - - - - - 133.20
Rental of College bus for Science trips to Mount Baker- - - - - - 175.94
73 tickets for Seattle City light tour - - - - - - - - - - - - - - - - 292.00
Staff mileage to transport students to recreational activities - - - - - - - - - - - - 717.76

TOTAL COST CULTURAL, RECREATION AND TRANSPORTATION - - - - - - $1,635.53
PROJECT CATCH-UP EXPENDITURES
EDUCATION PROFESSIONS DEVELOPMENT ACT FUNDS

JULY 1 1970 through JUNE 30 1971

TOTAL COST OF STAFF MILEAGE AND TRAVEL - - - - - - - - - - $1,804.88

Mileage is paid at 9¢ per mile for the first 100 miles driven in any one day - 6¢ for all miles thereafter. (These rates are set by the College).

Mileage is paid to staff members during the program for the purpose of obtaining supplies, driving participants to Lake Whatcom for swimming to picnics, fishing trips and science trips. In sum, the staff cars were transportation to all recreational activities during the 6 weeks' session. In addition, mileage was paid for visits to the home of participants.

During this fiscal year, this mileage cost also included payment to the Field Representative for follow-up contacts with the public schools where all former Project Catch-Up participants are studying and to the homes of the students for family conferences.

Adhering to Western Washington State College's accounting procedures, the cost of the following recreational activities was classified and charged to "Travel Advance" and is included in the total cost of staff mileage and travel noted above:

9 counselors took 42 participants by ferry to Victoria, B.C.- - - - 321.83
Lunch money for 48 participants at Seattle Center Center - - - - - - 75.00
Salmon dinners for all participants and staff at the Swinomish Indian Reservation - - - - - - - - - - - - - - - - - - 50.00

446.83

| Staff mileage | $1358.05 |
| Recreation charged to mileage | 446.83 |

TOTAL STAFF MILEAGE- - - - - - - - - - - - - - - - - - - - $1,804.88
PROJECT CATCH-UP EXPENDITURES
EDUCATION PROFESSIONS DEVELOPMENT ACT FUNDS
JULY 1 1970 through JUNE 30 1971

EDUCATIONAL MATERIALS AND SUPPLIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art class</td>
<td>$175.86</td>
</tr>
<tr>
<td>Cooking class and camping food</td>
<td>255.34</td>
</tr>
<tr>
<td>Industrial arts class</td>
<td>206.13</td>
</tr>
<tr>
<td>Photography class</td>
<td>213.32</td>
</tr>
<tr>
<td>Reading class</td>
<td>228.25</td>
</tr>
<tr>
<td>Sewing class</td>
<td>172.04</td>
</tr>
<tr>
<td>Science</td>
<td>17.69</td>
</tr>
<tr>
<td>Typing class (rental machines)</td>
<td>178.50</td>
</tr>
<tr>
<td>Sports equipment</td>
<td>151.15</td>
</tr>
<tr>
<td>General supplies (soap, popcorn etc.)</td>
<td>102.22</td>
</tr>
<tr>
<td>Personal hygiene supplies</td>
<td>206.02</td>
</tr>
<tr>
<td>Petty cash for emergency supplies</td>
<td>328.70</td>
</tr>
<tr>
<td>Project Catch-Up jackets (48)</td>
<td>526.26</td>
</tr>
<tr>
<td>Consultants</td>
<td>60.00</td>
</tr>
<tr>
<td>Insurance policy for participants and staff</td>
<td>160.00</td>
</tr>
<tr>
<td>Doctor, dentist, hospital bills</td>
<td>207.25</td>
</tr>
<tr>
<td>Postage</td>
<td>163.10</td>
</tr>
<tr>
<td>Phone</td>
<td>340.75</td>
</tr>
<tr>
<td>Printing charges</td>
<td>46.02</td>
</tr>
<tr>
<td>Office supplies</td>
<td>412.38</td>
</tr>
<tr>
<td>Rentals: Office machines, sewing machines,</td>
<td></td>
</tr>
<tr>
<td>bikes, films, sleeping bags,</td>
<td></td>
</tr>
<tr>
<td>guitars</td>
<td>310.30</td>
</tr>
</tbody>
</table>

TOTAL MATERIALS AND SUPPLIES = $4,461.28
<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditures</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries, stipends, fringe benefits, Director, Co-Director, Secretary</td>
<td>$1,108.72</td>
<td>$8,151.00</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td>2,100.00</td>
</tr>
<tr>
<td>Cultural Activities</td>
<td></td>
<td>500.00</td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td>600.00</td>
</tr>
<tr>
<td>Travel, staff</td>
<td>12.60</td>
<td>1,700.00</td>
</tr>
<tr>
<td>Educational materials and supplies</td>
<td>619.64</td>
<td>1,550.00</td>
</tr>
<tr>
<td>Housing and food for 48 participants</td>
<td>11,434.22</td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$13,175.18</strong></td>
<td><strong>$14,601.00</strong></td>
</tr>
</tbody>
</table>
**PROJECT CATCH-UP EXPENDITURES**

**ROCKEFELLER FOUNDATION GRANT 1970 - 1971**

Grant number 120-4188

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries</strong></td>
<td></td>
</tr>
<tr>
<td>Secretary</td>
<td>$663.00</td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>85.72</td>
</tr>
<tr>
<td>Stipend</td>
<td>360.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$1,108.72</td>
</tr>
<tr>
<td><strong>STAFF MILEAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$12.60</td>
</tr>
<tr>
<td><strong>EDUCATIONAL MATERIALS AND SUPPLIES</strong></td>
<td></td>
</tr>
<tr>
<td>Insurance premium for 1971 participants</td>
<td>$169.60</td>
</tr>
<tr>
<td>Postage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15.20</td>
</tr>
<tr>
<td>Petty cash for 1971</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.00</td>
</tr>
<tr>
<td>Educational supplies for 1971 session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>334.84</td>
</tr>
<tr>
<td><strong>TOTAL MATERIAls and SUPPLIES</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$619.64</td>
</tr>
</tbody>
</table>
PROJECT CATCH-UP EXPENDITURES

ROCKEFELLER FOUNDATION GRANT 1970 - 1971

Grant number 120 - 4188

FOOD AND HOUSING, SUMMER 1970

Apartment for Co-Director and family $210.00

Meal tickets for above 315.24

Apartment for H. Price in lieu of salary 235.00

Board and room for 8 junior counselors, 8 weeks 1,432.64

Board and room for 47 students, 6 weeks 9,241.34

TOTAL BOARD AND ROOM $11,434.22
## PROJECT CATCH-UP EXPENDITURES

NATIONAL INSTITUTE OF MENTAL HEALTH FUNDS

Grant number 110-4203

<table>
<thead>
<tr>
<th>Description</th>
<th>Expenditures</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$5,745.97</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>365.36</td>
<td>610.00</td>
</tr>
<tr>
<td>Indirect costs (Institutional Overhead)</td>
<td>1,355.44</td>
<td>1,827.00</td>
</tr>
<tr>
<td>Travel</td>
<td>412.42</td>
<td>150.00</td>
</tr>
<tr>
<td>General contract service (all other expense)</td>
<td>267.85</td>
<td>250.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$8,147.04</strong></td>
<td><strong>$8,837.00</strong></td>
</tr>
</tbody>
</table>
## PROJECT CATCH-UP EXPENDITURES

**National Institute of Mental Health Funds**  
Grant number 110 - 4203

### Salaries

<table>
<thead>
<tr>
<th>Position</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up, Rosie Schwartz</td>
<td>$2,799.97</td>
</tr>
<tr>
<td>Graduate student Richard Locasso</td>
<td>$1,499.96</td>
</tr>
<tr>
<td>(statistical analysis)</td>
<td></td>
</tr>
<tr>
<td>Graduate student Caroll Price</td>
<td>$500.00</td>
</tr>
<tr>
<td>(testing of former participants)</td>
<td></td>
</tr>
<tr>
<td>Graduate student David Palmer</td>
<td>$25.00</td>
</tr>
<tr>
<td>(testing of former participants)</td>
<td></td>
</tr>
<tr>
<td>Graduate student Martin Lobdell</td>
<td>$25.00</td>
</tr>
<tr>
<td>(testing of former participants)</td>
<td></td>
</tr>
<tr>
<td>Secretary</td>
<td>$1,246.04</td>
</tr>
</tbody>
</table>

**Total Salaries** $5,745.97
PROJECT CATCH-UP EXPENDITURES
NATIONAL INSTITUTE OF MENTAL HEALTH FUNDS
Grant number 110-4203

TRAVEL EXPENSES: $412.42

This represents mileage paid to the follow-up Field Representative for visits to all schools in which the former Project participants are enrolled and also, for visits to the participants' homes for parent conferences.

Mileage is paid at the rate of 9¢ for the first 100 miles driven in any one day and 6¢ for all miles driven thereafter. These rates are set by the College.
PROJECT CATCH-UP EXPENDITURES

NATIONAL INSTITUTE OF MENTAL HEALTH FUNDS

Grant number 110 - 4203

MATERIALS AND SUPPLIES

Reunion of all former participants, January 1971 - - - - - - - - $106.20

Testing supplies for recall testing, May 1971 - - - - - - - - 161.65

(C.P.I. test answer sheets, C.A.T. and C.T.M.M.

test booklets and supplies)

TOTAL SUPPLIES - - - - - - - - - - - - - - - - - - - - - - $267.85
APPENDIX B
DIRECTOR'S REPORT

EXPERIENCED TEACHER FELLOWSHIP PROGRAM IN SECONDARY EDUCATION FOR EXPERIENCED TEACHERS OF THE DISADVANTAGED

September 1969 to September 1970

Submitted by

Evelyn P. Mason, Ph. D.
Professor of Psychology
Director of Project Catch-Up
Director of Experienced Teacher Fellowship Program
Western Washington State College
Bellingham, Washington

For Western Washington State College

R. C. Taylor, Jr.
Dean for Research & Grants
Officer Authorized to Sign for College

E. P. Mason
Director EPDA
and PROJECT CATCH-UP
TABLE OF CONTENTS

I. Introduction

II. Operation of the Program
   1. Planning
   2. Participants
   3. Staff
   4. Orientation Program
   5. Summer Program, Project Catch-Up 1970

III. Conclusions

IV. Addendum

V. References


Appendix B: Experienced Teachers Fellowship Program Recruitment Brochure

Appendix C: LaConner, Washington, School District Workshop on the Relationship of Indian Culture and Education
I. Introduction

Experience during the summers of 1966, 1967, 1968 and 1969 with a six-week summer residence program of educational enrichment for junior high youth from American Indian, Mexican and Anglo ethnic backgrounds indicated that these youngsters developed more fully personally, socially and in their learning skills in a total environment designed specifically to meet their needs (Mason, 1970). Though the staff for Project Catch-Up over the four summers was primarily selected from able public school teachers recommended by their administrators as individuals particularly sensitive to the problems of disadvantaged youngsters, it was recognized that experience in the Project proved to be effective in extending and further developing the abilities of the teaching staff. In order to capitalize on this practicum experience for further training of experienced teachers of the disadvantaged the present Educational Professions Development Act Fellowship Program was proposed to and funded by the U.S. Office of Education. This is a summary and initial evaluation of the effectiveness of the Program.

II. Operation of the Program

The Experienced Teacher Fellowship Program was designed to present specific graduate course work during the academic year of 1969-70 and to extend over the 1970 Project Catch-Up summer program to provide additional practicum experience. The academic work was coordinated with the existing

Project Catch-Up is funded in the main by the Rockefeller Foundation and in part by Western Washington State College.
Masters of Education Program at Western Washington State College. Thus, the Fellows were allowed time to complete the M.Ed. degree requirements during the academic year and, in addition, to select, under advisement, elective course work to develop individual proficiencies in areas of specialization.

1. Planning. The original planning for the course of study for the Fellowship Program was organized through the cooperative efforts of representatives from the Departments of Education, Psychology and Sociology-Anthropology at Western Washington State College. The original course requirements as stated in the proposal were adhered to but were continually extended during the academic year by scheduled symposia, guest speakers and opportunities to visit American Indian Tribal groups, migratory centers, public schools, social agencies and contact with students on campus representing minority groups. In addition, when possible visiting lecturers were recruited from the outside.

Depending on schedules, contacts were made during the academic year through Project Catch-Up's Follow-Up coordinator for Fellows to tutor and work with students who had previously participated in the summer program. Also, during the spring the Fellows visited all the local junior high schools and organized the recruitment for the 1970 summer program. (See Appendix A for Progress Report of Project Catch-Up, 1966-70.)

In evaluating the adequacy of the planning of these academic and practicum experiences it should be noted that they were all part of the

Support for the follow-up evaluation has been provided by N.I.M.H. Grant No. 1 RO1 MH 6852-01.
original proposal to the Office of Education, but in the actual operation of the Program some of the Fellows felt that these responsibilities — particularly to the participants of Project Catch-Up — were not spelled out in great enough detail either in the proposal or in the recruitment brochure. In retrospect, it seemed at the conclusion of the Program that this criticism was less the problem of adequate time for initial planning but more the result of the need for actual experience with the total functioning of the Program to learn where improvements were indicated.

In general, the course requirements planned initially seemed adequate to meet the needs of most of the Fellows. The most frequent request for modification of academic requirements for future programs was for more specific courses exploring the nature of cultural-ethnic differences as they relate to the educational process. Some criticism was voiced by the Fellows of the Professional Educational requirements of Western's Master's Degree Program (Education 501, 512, and 513). The concerns voiced were that these courses were too research oriented or not relevant to the needs of the classroom teacher. Also, some of the curriculum courses were criticized as being too general to be of any specific use, but these latter criticisms seemed to reflect individual differences and were not shared by all the Fellows.

2. Participants. Beginning in January, 1969, over 1,000 recruitment brochures were sent to school districts in Washington, Oregon, California, Idaho, Montana, North Dakota, New Mexico, Arizona and Colorado (See Appendix B for example of brochure). Geographic areas were selected in an attempt to reach experienced teachers already working with American Indian and Mexican students. It was also hoped that this might result in applications from possible participants representing these ethnic groups.
From over 200 inquiries initiated by these brochures, 44 applications were completed. The applications were primarily from Washington, Oregon and California, but all geographic areas contacted were represented. Disappointingly, the applicants appeared to be all Caucasian though one was teaching in an Indian Boarding School in Nebraska. Only ten of the initial applicants were female and most of the applicants were specialists in the social sciences or humanities rather than science or mathematics.

A committee of five selected the fourteen participants and alternates. The committee included the Director of the Fellowship Program and Director of Project Catch-Up, a Professor of Psychology; the Co-Director of Project Catch-Up, a public school administrator; an additional member of Western's Psychology Department and national consultant for Upward Bound Programs; and a member of Western's Education Department and Director of Western's Overcome Program. Of the fourteen initially selected, two women withdrew before the beginning of the program and were replaced by the first two alternates (both of whom were men). Of the fourteen who began the program (12 men and two women) all completed the academic requirements for the M.Ed. degree and 13 completed the summer practicum experience (one participant withdrew early because of pressing personal problems).

3. Staff. Instructors for the core courses offered for the Fellowship Program included representatives from Western's Departments of Education, Psychology and Sociology-Anthropology. In addition, a Biologist on leave from Western and representing the Lummi Indian Aquaculture Project consulted with the Fellows. A member of Western's Fairhaven College faculty interested in black culture and problems of minority groups was available
for either group or individual consultation. An American Indian Anthropologist from the University of Oregon conducted a two-day workshop on Indian culture and educational problems. The Public Health Psychiatrist in charge of a newly conceived Mental Health Program for the American Indian in the Northwest presented his view of the psychological problems currently facing the Indian. Two Chicanos from the Ethnic Studies Program of the University of Washington visited the Fellows on three occasions and repeated contacts were made by the Fellows with Western's College of Ethnic Studies. Finally, the Fellows took part in a Workshop on Indian Culture and Education sponsored by the LaConner Public School District which services the Swinomish Indian Tribe (See Appendix C).

4. Orientation Program. A day was set aside prior to the beginning of classes in September, 1969, to acquaint the Fellows with the policies and requirements of the Master's Degree in Education Program at Western. The Dean of the Graduate School discussed the program in general and the Chairman of the Department of Education described the theory behind some of the course requirements. The instructor in charge of the comprehensive exam for the degree elaborated on the intent of this procedure and alerted the Fellows to what their responsibilities would be in this regard. The Director and Co-Director of Project Catch-Up spent the remainder of the day discussing the philosophy and progress of the Project to date.

During the academic year the Fellows met three times with the Director of Research and Dissemination from the Northwest Regional Educational Laboratory to discuss the potential for change both in their own lives personally and in social institutions. These sessions were conceived of
as being part of an ongoing orientation program. When necessary, during the academic year, meetings were scheduled with the Fellows and the Director to discuss breakdowns in communication. Planning for the summer program was initiated in January, 1970, by discussions with the Director and Co-Director. Critical to this planning and orientation was the curriculum course the Fellows were enrolled in for winter and spring quarters in which they discussed the courses they planned to offer during the summer program and their philosophy of operation. Because of their very different academic backgrounds from staff members of previous years it was necessary to develop a totally new approach to educational enrichment and so this became part of the orientation program. Throughout the academic year a high degree of esprit de corps was maintained by the Fellows with a camaraderie exhibited that was characterized by a willingness to help each other and a seeming desire to work together. They emerged as a noticeable group on Western's campus which seemed to result from both their individual abilities and their seemingly unusual cooperative effort.

5. **Summer Program -- Project Catch-Up 1970.** In contrast to the academic courses of language arts, math, science and art offered in previous years, the Fellows elected to present the participants of Project Catch-Up with a wide variety of course offerings and allow them to elect from the list those courses they wished to concentrate on for two weeks. At the end of this time the students were to change their courses or continue as they chose, and this procedure was repeated at the end of the 4th week. The course offerings included language arts, reading, creative writing, sewing, Spanish, black studies, cooking, photography, science, art, typing, music, math, psychology, drama, industrial arts. It was intended that a maximum amount of individual counseling should accompany this decision-making.
and that this counseling and encouragement should continue throughout the program to increase the students' active involvement and to facilitate their achieving maximum success with the courses of their choice.

As in previous years a few recreational and cultural activities were planned for the total participant group of Project Catch-Up by the Fellows, but, again, the major portion of activities were arranged on an individual basis or in small groups. The total intent of the summer program was to individualize the experience as much as possible with the goal of stretching the developmental potential of each student.

As conceived on paper it seemed that the summer program was excellent and that it would be even more effective than the programs of previous years. In actuality, this proved not to be the case. The evaluation of the Program by the Fellows themselves at the end of the summer ranged from some enthusiastic supporters to one who saw it as a total failure. Perhaps the truth is somewhere in the middle.

Of course, the ultimate evaluation of the degree of success of Project Catch-Up 1970, will, of necessity, await the accumulation of follow-up statistics. Certainly the youngsters who completed the summer program were enthusiastic about their experience. However, in looking at the actual operation it was noted that class attendance was poor in many situations, that consensus of opinion on dormitory rules and regulations among staff and participants was rarely achieved, that actually more participants dropped out of the program than in previous summers, and that there was more physical damage done to the dormitory facility.
The apparent discrepancy between the 1970 summer program and those of previous years appeared to be a "people failure" rather than a "plan failure." Under the stress of the live-in situation a divergence of opinion as to basic philosophy of education emerged which had probably been latent during the academic year but had not surfaced or been resolved because of a desire to maintain the good group relations. Though all the Fellows were convinced of the effectiveness of individualized instruction a difference of opinion emerged as to how best this should be achieved. Some Fellows appeared to prefer to operate in a more highly structured situation and found it difficult to maintain the non-directive counseling necessary to achieve the individual decision-making the Project had always fostered. These Fellows were reluctant to relinquish their roles as the authority who would give direction and arrive at the law. As such, they found it difficult to work with and to support the policies of the Project Co-Director and complained about the Director not being more directive. At the same time the Fellows resisted staff meetings, insisting they had been talking about philosophies all year. Several of the Fellows, however, followed through with great enthusiasm, the development of a community which fostered maximum individual development. The split which occurred in the staff as a result of the two approaches was devastating to morale and made it impossible for the staff to function effectively.

Another contributing variable to low staff morale may well have been the Fellows' attitude toward living in the dormitory with the students. In part this may have been because the Fellows were asked to pay for their board and room while previous staff hired by the Project had had this included as part of their salary. The complaints about the
live-in arrangements, however, were voiced most frequently by Fellows whose families were living in with them and who had no opportunity for relief from the pressures of living with 50 active teenagers. Though this arrangement had worked well in the past (Mason, 1969) it was felt that in future years it should be reevaluated.

In summary, then, of the 48 youngsters who began the 1970 summer Program, 40 completed it with a good deal of zest. The staff's attitude as to the effectiveness of the program ranged from very positive to very negative but can possibly best be summed up by the statement of one Fellow who said, "We had the opportunity we've always asked for in our public schools to work with students on an individual basis and we blew it."

III. Conclusions

If the Fellowship Program for Experienced Teachers of the Disadvantaged at Western Washington State College were to be evaluated on the effectiveness of its academic program at least in terms of fulfilling degree requirements it should be regarded as an unqualified success. Of the fourteen candidates for the M.Ed. degree, all successfully completed the Program. If the Program were to be evaluated on the basis of the success of the practicum experience it would be necessarily a somewhat more negative appraisal. The selection procedure for candidates for the Fellowship Program seemed able to predict those who would achieve academically but were much less effective in selecting those individuals who were genuinely willing to give of themselves in a non-structured, highly individualized live-in situation which required maximum personal involvement. If such a program were to be repeated in future years much more information should be obtained from the
certainly one thing is true about the evaluation of such a program. It is necessary to have seen the program through to completion to know what changes need to be made for improvement. It seems wasteful not to capitalize on the experiences — both good and bad — that occurred in the Fellowship Program at Western Washington State College for developing an even better program in the future.

IV. Addendum

At the time of writing this report all the Fellows are actively pursuing their careers in education but not all returned to their school districts. Two will remain at Western in the Department of Education as Instructors and plan to maintain contact with Project Catch-Up participants. Another has moved to the Bellingham School District in Special Education and will also be involved in Catch-Up follow-up. Another will develop a program for minority groups at Pacific Lutheran University in Tacoma, Washington, and still another will be supervising Teacher Corps interns for his district. One other is pursuing further graduate study. All others have returned to their districts and all but one are working with students from disadvantaged backgrounds.
IV. References


Mason, E. P. Project Catch-Up from 1966-1969. Mimeographed,
Evaluation of Potential for Change in Junior High Age Youth from American Indian, Mexican and Anglo Ethnic Backgrounds

Evelyn P. Mason and Richard M. Locasso
Western Washington State College

Abstract

Participants in a six-week, innovative summer residence program of educational remediation and acceleration for junior high students from American Indian, Mexican and Anglo backgrounds showed improved academic achievement, as measured by the California Achievement Test, continued development in mental maturity as measured by the California Test of Mental Maturity, and improved evaluations of self-worth as measured by the California Psychological Inventory. Evidence of slightly greater improvement among the girl participants and superior performance for Anglos with Indians consistently lower were additional findings.
Evaluation of Potential for Change in Junior High Age Youth from American Indian, Mexican and Anglo Ethnic Backgrounds

Evelyn P. Mason and Richard M. Locasso
Western Washington State College

Recognition that only 3 or 4 percent of the American Indian population in Northwest Washington was graduating from high school and that the dropout rate was significantly higher for youth from poverty circumstances was the stimulus for the initiation of Project Catch-Up, an innovative educational program. During the summers of 1966 and 1967, 100 junior high students from American Indian, Mexican and Anglo ethnic backgrounds were enrolled in a six-week residence program of academic remediation and acceleration and general cultural enrichment. The primary intent of the Project was to demonstrate the effectiveness of such a program in effecting a decrease in the expected high school dropout rate but, secondarily, to evaluate whether intervention at the adolescent age would be successful in altering existing behavioral patterns. Follow-up of the first two participant groups showed no significant increment in school achievement as measured by mean grade point average when the participants returned to their schools, but a highly significant decrease in school dropout rate was evidenced. One participant dropped from school, while 11 from the comparable control groups were school dropouts (Mason, 1969).

To further extend the social gains achieved by the program and to measure more objectively its usefulness, Project Catch-Up was redesigned to extend over five summers with follow-up evaluation over ten years.

---

1 Project Catch-Up has been financed in the main by grants from the Rockefeller Foundation, an E.P.D.A. grant from O.E., and Western Washington State College.

2 Support for the follow-up evaluation was provided by N.I.M.H. grant 1 R01 MH6652-01.
This is a report of the follow-up evaluation of the 1968 and 1969 participants.

METHOD


Since the one difference between participant and control groups in the 1966-1967 groups was the significant difference in dropout rate, the usefulness of the control group was questioned. As 50% of abilities labeled achievement are reported to be developed by third grade (Bloom, 1964) and academic retardation for the disadvantaged is cumulative (Deutsch, 1964), it was predicted that without intervention each participant's school progress would remain stationary or decline during high school. Therefore, each participant acted as his own control and the evaluation of the effectiveness of the program was based on measures of mean changes in behavior. For each group objective tests were administered on the first day of the program and repeated after the students had completed the next school year. The four criterion measures were the California Test of Mental Maturity (C.T.M.M.) (Sullivan, Clark and Tiegs, 1947), California Achievement Tests of Reading and Arithmetic (CA.T.) (Tiegs and Clark, 1957) and the California Psychological Inventory (C.P.I.) (Gough, 1957).

B. Participants.

As in previous years participants were selected from junior high teachers', counselors' and school administrators' nominations of those students who best met the criteria of academic potential for at least high school completion, achievement below potential and evidence of socio-cultural deficit. The 1968 group included 26 Indians (14 boys and 12 girls), 11 Mexicans (6 boys and 5 girls) and 13 Anglos (6 boys and 7 girls). The 1969 group included
28 Indians (14 boys and 14 girls), 6 Mexicans (3 girls and 3 boys) and 14 Anglos (7 boys and 7 girls).

C. Staff and Summer Programs.

The Project staff included able public school teachers, college students and administrative personnel from the college. Instructional programs in language arts and quantitative skills were conducted in the morning while individual projects in art and science were completed in the afternoon. Evenings and week-ends were devoted to recreational and culturally enriching experiences (Mason, 1969).

RESULTS

Statistical analyses combines the total results from the before and after testing for both the 1968 and 1969 groups. A mixed analysis of variance (Type VI, Lindquist, 1953) examining responses of the American Indians, Mexicans and Anglos (Ethnic group effect), test scores from the start of Project Catch-Up with corresponding scores taken a year later (Time of test effect), and differences in subscale scores on the criterion measures (Subscale effect) was performed on three of the four criterion measures (CAT. Reading, C.A.T. Arithmetic, and C.P.I.). The mixed analysis of variance for the C.T.M.M. criterion measure examined the effect of Sex in place of Ethnic group. An alpha level of .05 was used for all F-ratio comparisons and subsequent analyses, and all t-tests were two-tailed.

A. California Achievement Test (C.A.T.) - Reading.

Analysis of the CAT-Reading data revealed a significant Time of test effect, Ethnic group effect, Subscale effect, Time of test by Subscore interaction, and Ethnic group by Subscale interaction. All other effects were not significant.
Subsequent analysis of the Time of test effect revealed a significant increase from before to after test times for all groups on all CAT-Reading subscales: Vocabulary, Comprehension, and Total. Of interest is the school grade equivalent of the achievement test scores which increased on the Total subscaled from a grade level equivalent of 7.0 in the before condition to 7.8 in the after test condition. While the scores of all groups improved, the Caucasian group scored significantly higher than either the American Indian or Mexican American groups in both the before and after test conditions.

B. California Achievement Test (C.A.T.) - Arithmetic.

The analysis of data from the CAT-Arithmetic criterion measure revealed a significant Time of test effect, Subscale effect, Time of test by Subscale interaction, and triple interaction. All other effects were not significant.

To analyse the triple interaction, a two factor mixed analysis of variance (Type I, Lindquist, 1953) examining Time of test and Ethnic group effects was performed for each subscale. Reasoning scores for all ethnic groups were significantly higher in the after than the before test conditions, (grade level increased from 7.1 to 7.7.) with Anglos scoring significantly higher than the Indians (8.2 and 7.5, respectively). Although all ethnic groups improved from the before to after test conditions on Fundamentals, only the Indians showed significant improvement, (6.9 to 7.3). No significant differences between Time of test or Ethnic groups were found on the Total subscale.

C. California Test of Mental Maturity (C.T.M.M.)

The use of different CTEM test forms for Group I (summer, 1968) which were found to be non-comparable in the before and after test conditions.
The mixed analysis of variance for Groups I and II combined precluded the mixed analysis of variance for Groups I and II combined. Consequently, statistical analysis of the CEM was done on only the 1969 group. Type VI analysis of variance examining the Ethnic group effect was not performed because of the large differences in Ethnic group sample sizes. To measure the Time of test factor, a mixed analysis of variance (Type VI, Lindquist, 1953) examining Sex, Time of test, and Subscale effects was performed. The analysis revealed a significant Subscale effect, Subscale by Sex interaction, and triple interaction.

To further analyze the triple interaction, a mixed analysis of variance (Type I, Lindquist, 1953) on Time of test and Subscore effects was performed for each sex. Male scores in the after condition were significantly higher than before scores on the Non-Language subscale, with no significant differences between before and after scores on either the Language or Total subscales. Male Non-Language scores were significantly higher than Language or Total scores in both the before and after test conditions. For females no significant Ethnic group or Time of test effects were found. Comparison of male and female scores indicated that females scored significantly higher than males on the Language subscale in both the before and after test conditions, while male scores were significantly higher than females on the Non-Language subscale in the after test condition.

D. California Psychological Inventory (C.P.I.)

A mixed analysis of variance revealed all effects to be significant, including Ethnic group by Time of test by Subscale triple interaction. To further analyze the triple interaction, a mixed analysis of variance (Type I, Lindquist, 1953) examining Time of test and Ethnic group effects was
performed for each of the 18 CPI subscales. Excluding subscales with significant Time of test by Ethnic group interaction, the following 5 subscales contained significant Time of test F-ratios, all with means higher on the second test: Social Presence, ($\bar{X} = 40.2$, to $\bar{X} = 44.4$), Capacity for Status, ($\bar{X} = 27.7$, $\bar{X} = 31.3$), Sense of Well-being, ($\bar{X} = 16.2$, $\bar{X} = 20.6$), Tolerance, ($\bar{X} = 23.1$, $\bar{X} = 26.9$), and Psychological Mindedness, ($\bar{X} = 39.7$, $\bar{X} = 42.8$). Again excluding those CPI subscales with significant interaction, the following 10 subscales contained significant F-ratios for differences between Ethnic groups: Dominance, Capacity for Status, Stability, Social Presence, Self-Acceptance, Sense of Well-being, Responsibility, Tolerance, Communality, and Psychological Mindedness. Subsequent analysis of the significant Ethnic group effects indicated that the Indians scored significantly lower on 9 of the 10 subscales with the Mexicans scoring significantly lower on the remaining subscale, Communality. Anglos scored significantly higher on 9 of the 10 subscales with the Mexicans scoring significantly higher on the final subscale, Dominance. Significant Time of test by Ethnic group interaction was found on the subscales of Self-control, Good Impression, Achievement via Independence, Intellectual Efficiency, and Flexibility. No significant effects were found on the Socialization, Achievement via Conformity, or Femininity subscales.

DISCUSSION

In the face of the previous evidence that academic achievement for disadvantaged adolescents either remains stationary or declines, the most significant finding in the present study was the evidence that on no criterion measure did any ethnic group do significantly better on the
after test. In fact, with the exception of the total arithmetic subscale and female response to the C.T.M.M., which remained stationary, all other measures improved significantly. This data, then, generated over a two year period of time shows that some adolescents after experiencing an intensified summer program show some improved arithmetic skills, improvement in all reading skills measured, continued development in mental maturity and generally more positive views of self-worth.

The latter finding was of interest in light of a similar analysis of the 1968 participants' response to the C.P.I. which showed improvement, (Mason, 1971). The present evidence of improved attitudes toward self over time parallels some behavior observations suggesting that for some participants the effect of the summer program is not realized immediately.

Sex differences, in general, were in the expected direction with boys performing better on non-language tasks and girls better on language. Some evidence that the girls achieved at a higher level was of interest as the follow-up evaluation of the 1966, 1967, 1968, 1969 participant groups showed that significantly more girls dropped out of school (14 of the 192 participants are school dropouts or cannot be located, 10 of whom are girls).

Finally, despite the positive findings indicating improved performance, the consistent evidence that the Anglos show the greatest improvement while Indians the least is a commentary on our educational scene. It would appear that those adolescents who experience comparatively the most advantaged circumstances are the most available for change.
REFERENCES


