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ABSTRACT

The major anti-poverty educational programs are evaluated in this report by comparing those operated by the Office of Economic Opportunity (OEO) with those in the Department of Health, Education and Welfare (DHEW) affecting a similar target population. A comparison of OEO Head Start with DHEW Title I preschool programs indicated that: (1) Title I funds at local level are spent on programs enrolling a lower percentage of the poor; (2) more than three fourths of Head Start participants seemed to be receiving medical and dental examinations; (3) Head Start classes are approximately half Title I class size and involve a larger number of operating personnel per class; and, (4) Head Start offers a variety of preschool services and is more costly than Title I. A comparison of OEO and DHEW Adult Basic Education programs revealed that in general the OEO program was more expensive and more employment-oriented than the DHEW program. Relating to the effectiveness of Upward Bound, it appeared that most students selected were underachievers who meet income qualifications, that college admission rates and retention rates among enrollees indicate marked program success, and that the program ranks as one of the more successful anti-poverty efforts. (RJ)

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UR-051

EVALUATIONS OF THE WAR ON POVERTY
Education Programs

Bonnie R. Cohen
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March 1969

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FOREWORD

This report is one of five prepared by Resource Management Corporation for the General Accounting Office under Contract No. GA-654. Reports in this series, all under the general series title Evaluations of the War on Poverty, are

- UR-060 Status and Prospects at the Office of Economic Opportunity
Authors: Robert N. Grosse, James G. Abert, and George Lady
- UR-047 Health Programs
Author: William W. Walton
- UR-051 Education Programs
Authors: Bonnie R. Cohen and Ann H. Yonkers
- UR-054 The Feasibility of Benefit-Cost Analysis for Manpower Programs
Authors: Harry R. Woltman and William W. Walton
- UR-062 Economics of Poverty
Author: James L. Hedrick

All documents were prepared under the general direction of Milton Margolis, Project Director. These documents have been reviewed by the General Accounting Office, the Office of Economic Opportunity, the Department of Labor, and the Department of Health, Education, and Welfare. Where appropriate, the comments from these agencies have either been incorporated in the text or replied to in a supplement integral to the report.

A number of persons, both within and outside of RMC, contributed importantly to the results of this study. Among the outside consultants were Pat Don Vito; Steven Messner, School of Business Administration, University of Connecticut; and Henry Aaron, Department of Economics, University of Maryland.

Other members of the RMC staff made vital contributions to these documents: Mary Ellen Angell, Robert Crosby, Ken R. Gramza, Girdharilal Gupta, Margaret Houy, Steven Lebowitz, Arturo Madero, Susan Morris (on Status and Prospects at the Office of Economic Opportunity [UR-060]), Yung Whee Rhee, and Phyllis Sanders.

Charles Lerner reviewed all documents, made numerous suggestions for reorganization, and contributed original material. All documents were edited and produced under the direction of K. M. Olmert.

SUMMARY

This report deals with evaluating the major anti-poverty educational programs by comparing those operated by OEO with those programs in HEW that affect a similar target population.

- A comparison of OEO's Head Start with HEW's Title I preschool programs indicates the following:
 - (1) Head Start concentrates to a greater extent than Title I preschool on serving the educational needs of children from low-income homes-- that is, Title I funds at the local level are spent on programs that enroll a lower percent of the poor.
 - (2) Over three fourths of Head Start participants seem to be receiving initial medical and dental examinations; whether this is true of Title I children cannot be determined from available data.
 - (3) Head Start classes are approximately half the size of Title I preschool classes and involve a larger number of operating personnel per class.
 - (4) Head Start incorporates a variety of preschool services and is more costly per participant and per class than Title I.
 - (5) Analysis of information on parent involvement indicates that this is an important component of both programs, but that Head Start has involved a greater percentage of parents in a variety of roles than Title I funded preschool programs.

- A comparison of OEO and HEW Adult Basic Education programs reveals the following:
 - (1) There is a similarity in age, sex, and income among HEW and OEO enrollee populations and a dissimilarity of program design, costs, and enrollee post-program performance.
 - (2) The per-participant costs of the OEO ABE program are approximately three times greater than those for HEW; and the percentage of participants going on to jobs and vocational or pre-vocational training is about two and one half times higher (21 percent as opposed to 8 percent) in the HEW ABE program.

- (3) These differences in costs and enrollee performance seem to result from differences in program structure: In general, the OEO ABE program is integrated with other job-oriented programs, is full-time, and the enrollees receive a stipend. These factors combine to make OEO's program more expensive and more employment-oriented than HEW's program.
- The effectiveness of Upward Bound and its costs and benefits were evaluated with the following results:
 - (1) Most students selected for the Upward Bound program appear to be underachievers who meet income qualifications, but more accurate data on enrollee family income are needed before conclusive statements can be made about the eligibility of program participants.
 - (2) There are few indicators of program success in preparing Upward Bound participants for college, but the college admission rate among enrollees is 300 percent higher than that of their older siblings and double the 1967 national average. In addition, the college retention rates among enrollees are higher than or approximate the rates for the general college population.
 - (3) Assuming discount rates of 5, 7.5, and 10 percent, benefit-cost ratios of 4.8, 3.4, and 2.6, respectively, were developed for the Upward Bound program. While the limitations of using a benefit-cost ratio to evaluate a program like Upward Bound are pointed out, the ratios nevertheless suggest that the program ranks as one of the more successful anti-poverty efforts, and that, in any event, the program is preferable to the transfer-payment alternative.

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A COMPARISON OF HEAD START AND ESEA TITLE I PRESCHOOL PROGRAMS

INTRODUCTION

This chapter compares certain aspects of the Head Start program funded by OEO with those of a sample of preschool programs funded under Title I of the Elementary and Secondary Education Act of 1965 (ESEA).

This comparison was undertaken because of the difficulty of directly assessing the contribution of Head Start to the overall war-on-poverty effort. Head Start, although not exclusively an education program, does relate to children and, thus, has a payoff that is expected much farther in the future than other war-on-poverty programs; a sizable gap exists between the operation of the program and a time when measurement of its impact upon earning capacity is possible. In a program such as Head Start, it is not possible to make any identification between career success and program participation, since a wait of 14 or 15 years is probably needed to evaluate the program in this manner. Furthermore, the comparison of Head Start with other educational programs is bound to make Head Start look unattractive since current discounting procedures tend to depress the value of earnings the farther in the future they are expected to be acquired.

Although the lack of systematic assessment of preschool programs funded under Title I ESEA makes any substantive comparison between Head Start and preschool Title I difficult, it was possible to compare the following characteristics of the programs: the resource inputs, certain participant characteristics, and some output measures--namely the delivery of medical and dental services

and parent involvement. This comparison only refers to preschool programs funded by ESEA Title I. Title I allocations are for programs serving elementary and secondary school children. Further, the amounts being spent for such programs are often more limited (per child) than those of Head Start.

THE COMPARISON

Because of time and resource constraints in conjunction with limited data, it was decided that the analysis would concentrate on the following issues:

- The income level of program participants. (See Appendices A and B for a discussion of Head Start and Title I target populations.)
- The delivery of medical and dental services. An important component of Head Start's comprehensive approach to the problems of the poor child is the provision of health services (see Appendix A). Because of this importance, interprogram comparison information was needed to differentiate sample Title I preschool programs from Head Start in regard to providing these services.
- The degree of parental involvement. Actively involving parents in the operation of the Head Start center is basic to the entire Head Start approach (see Appendix D).

Data for measuring the impact of Head Start and Title I preschool programs on learning readiness were unavailable in any usable form at the local level (see Appendices A and B). Consequently, comparison of the relative effectiveness of the two programs along this dimension could only be carried out somewhat indirectly based upon the following:

- student-class ratio;
- comparative measures of program cost--
 - expenditures per participant quarter,
 - program cost per class, and
 - program cost per teacher;
- measures of personnel services provided in each program--
 - teacher aides per class,
 - paid nonprofessionals per class,

- number of volunteers per class, and
- percent of teachers with kindergarten experience.

Because too little comparative information was available at the national level, the General Accounting Office undertook a limited survey of 39 Title I program administrators and sponsored a client-interview survey in 14 cities of 128 parents whose children participated in Title I preschool programs. In addition, some Title I information was available from OEO's CAP MIS. Considerable information of somewhat limited reliability was available from the CAP MIS on Head Start programs. Additional information on the extent of parental involvement in the Head Start program was collected from 80 Head Start administrators. Unless otherwise specified, Head Start data refer to the Head Start Full Year, Full Day Program.

Because the objective of this study was to compare Head Start with preschool Title I programs, information was collected on the extent of similarity between these two programs. However, no specific operating guidelines are issued for Title I programs; and a community that is operating a Title I funded preschool program may or may not follow the Head Start model as it sees fit. Thus, in the following analysis, Title I preschool programs cannot be criticized for the extent to which they differ from those of Head Start. The objective is rather to examine the full extent of these differences and their impact on the cost and effectiveness of preschool programs.

INCOME LEVEL OF PARTICIPANTS

Justification of Measure

The income-eligibility requirement, established nationally and applied to all Head Start programs, reflects the original concept of the program as one designed to offer the benefits of a comprehensive preschool experience to children of low-income families (see Appendix A). Title I of the Elementary and Secondary Education Act is also directed to the "special educational needs of low-income children";¹ however, the criteria for participant eligibility are primarily residence in an eligible

1. Title I ESEA.

neighborhood and attendance at an eligible school. Therefore, at the neighborhood level the participation criteria shift from the "economically disadvantaged" to the "educationally disadvantaged." No requirement exists for a participant at the local level to prove financial eligibility (see Appendix B). A significant portion of Title I funds are allocated at the national level based on the number of schoolage children within the state from families with annual incomes of \$2,000 or less based on the 1960 census figures. Head Start, on the other hand, sets explicit income criteria for participation in the program, as shown in Table 1.

Table 1
OEO POVERTY GUIDELINES FOR FY 1968^a

Family Size	Nonfarm Income	Farm Income
1	\$1,600	\$1,100
2	2,000	1,400
3	2,500	1,700
4	3,200	2,200
5	3,800	2,600
6	4,200	3,000
7	4,700	3,300
8	5,300	3,700
9	5,800	4,000
10	6,300	4,400
11	6,800	4,700
12	7,300	5,100
13	7,800	5,400

- a. The OEO Poverty Guidelines for 1968 are used by local Head Start program administrators as eligibility criteria. This definition of poverty is used to ensure that 90 percent of the program participants come from economically disadvantaged homes.

Since--at the national level at least--both programs emphasize the special educational needs of low-income children, data were collected to assess the income characteristics of participants. Data were available on a large Head Start population (approximately 100,000 children) from the reporting Community Action

Agencies. Title I data, on the other hand, were collected from a very limited sample of 128 parents. Furthermore, the reliability of these data on Title I participant income is somewhat questionable since individuals reporting their own income in personal interviews may tend to misstate the amount of income.

Discussion

From Tables 2 and 3, it appears that local Head Start administrators have stayed well within the income constraints established by OEO for program eligibility. For instance, the national average indicates that in only one program (the Summer Program) more than 10 percent of program participants are above the poverty line. Further, the participants seldom fall just below the poverty line; in fact, many are from families with incomes \$1,500 or more below the line. Thus it appears that the program--at the very least--can be considered successful in reaching economically disadvantaged children.

The very limited data on Title I, on the other hand, indicate that, of the 128 parents interviewed in 14 cities, 36 percent of the interviewees responding had incomes above \$5,000 a year; 92 percent of the interviewees had incomes above \$2,000 per year. This is of course a small sample and each person's evidence on his own income tends to be optimistic. However, national figures available from CAP MIS data also suggest that the percentage of poor in participating Title I schools is below 50 percent. (This says nothing about the income level of specific program participants within a participating school. Furthermore, it is unclear from the CAP MIS form what definition of poverty is to be used by those filling in the form. It is not specified whether the OEO definition of poverty or the Title I criteria are to be used.)

Table 2

HEAD START PARTICIPANTS:
PERCENT ABOVE OR BELOW POVERTY LINE

	Above	Below		
		\$1-\$499	\$500-\$1,499 ^a	\$1,500 or More
Nursery	7.0	28	26	39
Full Year	8.7	31	29	31
Summer	10.8	30	33	26

a. Median income falls within this category.

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, I, 116.

Table 3

HEAD START: PERCENT OF PARTICIPANTS
BELOW THE POVERTY LINE BY REGION

North-east	Mid-Atlantic	South-east	Great Lakes	South-west	North Central	Western	National
86	91	90	89	92	93	96	87

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, I, 109.

Table 4

TITLE I ESEA PARTICIPANT INCOME LEVELS
Percent Distribution of Title I Families

Welfare			Family income Levels ^a				
Recipients	Non-Recipients	No Response	Below 2,000	2,000-3,000	3,001-5,000	5,000-10,000	Above 10,000
28	65	7	8	21	35	33	3

a. This distribution is based on the 75 percent of the 128 who responded to the questionnaire.

Source: TransCentury interviews with 128 parents of preschool Title I participants.

However, the findings from the CAP M/S and the TransCentury survey do, to some extent, substantiate each other. Both indicate that a more thorough analysis of the Title I preschool program participant characteristics is warranted, since the information available indicates that those benefiting from the program in considerable measure are not low-income children--at least relative to the Head Start program. It may be that the explicit and continuing intent of Congress is that Title I programs be directed solely to educationally disadvantaged children without regard to income restraints, in which case no maximum or minimum percent of the children involved need be from low-income homes. If this is, in fact, the thrust of the Congressional will, it should be clarified in the light of more extensive information on those children currently in the program.

MEDICAL AND DENTAL SERVICES RECEIVED BY PARTICIPANTS

Justification of Measure

A major component of the Head Start program is its provision for medical and dental services. Aimed at providing otherwise unavailable services for the economically disadvantaged, an objective of the Head Start program is to provide medical and dental examinations for all program participants, to diagnose any problems, and to treat diagnosed medical and dental problems. Head Start and Title I program data were examined to assess the extent to which both programs were providing these services.

Because there are no explicit guidelines for localities running preschool programs under Title I funds, they may or may not provide medical and dental services as they deem necessary. Information was collected from parent interviews on Title I preschool programs to tentatively assess the extent to which localities have opted for providing these services. These data reflect only parental knowledge of the provision of services and thus may be unreliable, for a child may have received examinations without the parent's knowledge, or an examination received may not be part of the Title I program service.

Discussion

The quarterly statistics on medical examinations for Head Start participants show that 50 percent of the children are receiving initial medical examinations. However, when this quarterly figure is projected to a yearly rate appropriate to the Head Start full-year program, it appears that essentially all Head Start participants are receiving initial medical examinations. (For the derivation of this conclusion, see RMC Report UR-046, Analysis of CAP MIS Data.) Moreover, of those being examined, 30 percent required additional treatment. Finally, 74 percent of those needing treatment received medical follow-up during the quarter in question.

Information on dental services projected from the 39 percent examined per quarter to the yearly rate likewise indicates that all Head Start participants are being examined. The percentage of those needing dental treatment (60 percent) is higher than the comparable medical percentage of 36 percent, while the percentage of those receiving needed treatment (63 percent) is lower than the comparable medical figure (74 percent). This suggests either that dental services are provided less adequately than medical services or that the time between the establishment of need and the provision of service is somewhat longer for dental services.

Title I data show 74 percent of the participants receiving initial medical exams and 57 percent of the participants receiving dental examinations. As with the Head Start participant statistics, the percent in need of dental aid (21 percent) is higher than the comparable percent (11 percent) for those diagnosed as needing medical services. That is, of the children examined, both in Head Start and in Title I programs, a higher percent are in need of dental treatment than are in need of medical treatment. While Head Start indicates that a smaller percent are receiving dental treatment than are receiving medical treatment, Title I data show that a slightly larger percent of children are receiving dental treatment (38 percent) than are receiving the medical treatment (35 percent) although the small number of interviewees and the limited reliability of their responses lessens the significance of the findings.

Comparisons of Head Start and Title I preschool percentages--such as shown in Table 5--are limited at best, because the Head Start data deal with Community Action Agencies, each one representing programs enrolling a number of children, while the Title I information comes from 128 Title I parents. However, the comparison of these findings points to areas where further investigation is required. It appears that Title I preschool programs are providing some medical and dental care. Further knowledge of the extent to which care is being provided and the cost in the case of both these programs would be useful in assessing the most efficient means of delivering such services to preschoolers.

Detailed data on the costs of providing medical and dental services were not generally available for either program, even though a consistent way to develop these costs for all medical and dental services should eventually be required. The following information on program operation is especially needed:

- the experienced costs of providing medical and dental services to Head Start and Title I participants,
- the unit and per capita costs for specific services and alternative means of providing similar services, and
- cost and performance data relevant to Title I and Head Start health programs, provided on a periodic basis.

STUDENT-CLASS RATIO

Justification of Measure

The student-class ratios presented in Table 6, the average numbers of students per class, are meant to indicate the size of the unit to which the pre-school services are directed. Although a more significant parameter would have been teacher-student ratio, it could not be computed from available CAP MIS data.

Discussion

The data indicate a substantially higher student-class ratio for Title I than for Head Start; Head Start has an average class size of 17, while for Title I it is 31.

Table 5

HEAD START AND TITLE I ESEA MEDICAL AND DENTAL SERVICES

HEAD START						
	Examined		Requiring Treatment		Percent Requiring Treatment That Received Treatment	
	Number of CAAs Reporting	Quarterly Percent of Children Examined	Number of CAAs	Quarterly Percent of Children in Need	Number of CAAs	Quarterly Percent of Children Treated
<u>Medical</u> Full Year, Full Day ^a	172	50	136	39	127	74
<u>Dental</u> Full Year, Full Day	165	39	107	57	101	63
TITLE I ^b						
	Percent Medically Examined		Percent Requiring Treatment		Percent Requiring Treatment That Received Treatment	
	Yes	No	Yes	No	Yes	No
<u>Medical</u> Preschool (Number of Individual Respondents, Parents)	74 (93)	26 (32)	11 (14)	89 (106)	35 (44)	65 (79)
<u>Dental</u> Preschool (Number of Individual Respondents)	60 (72)	40 (48)	21 (26)	79 (100)	38 (48)	62 (77)

a. Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 22-42.

b. Source: TransCentury interviews with 128 parents of Title I preschool participants in 14 different cities.

Table 6
STUDENT-CLASS RATIO

	Regional							National		
	North-east	Mid-Atlantic	South-east	Great Lakes	South-west	North Central	Western	Urban	Rural	Total
Number of Head Start CAAs Reporting	24	24	45	24	26	20	10	94	79	173
Head Start Mean	16	16	18	18	20	16	24	18	18	18
Title I Mean	30	24	--	30	8	61	19	28	35	31
Number of Title I Administrators Reporting	1	4	0	4	1	3	2	7	8	15

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 52, 102.

The Head Start guidelines suggest a staffing ratio of one teacher for 15 to 20 preschool children. Thus our analysis indicates that the program is conforming in a large part at the local level to the national guidelines. Further, the regional breakdowns of class size also follow the guidelines.

There are no nationally issued guidelines for class size for preschool programs funded under Title I. However, in light of the cost of maintaining smaller classes in the Head Start program, rigorous study of the impact of class size upon the effectiveness of preschool education would certainly seem called for and should be of considerable interest to the future planning of both programs.

MEASURES OF PROGRAM COST

This section presents three comparative measures of program cost for both Title I funded preschool programs and Head Start. The costs displayed and analyzed are (1) program cost per class per quarter, (2) expenditures per participant per quarter, and (3) program cost per teacher. Each of these indices is a conglomerate of recurring and nonrecurring cost elements reported in a given quarter and is, therefore, of limited usefulness since it is not representative of a common base. Each measure of program cost is presented separately, with general concluding comments appearing at the end of the section.

Justification of Measures

Program Cost Per Class

Table 7 presents program costs on a per-class basis for both Head Start and Title I funded preschool programs. The cost per class was derived by dividing the expenditures reported for the quarter by the number of classes conducted during that quarter. It should be noted that these costs do not represent only class-related costs, they include all costs incurred by the projects on a per-class basis.

Cost Per Participant Per Quarter

Cost per Participant, Table 8, is used as a proximate indicator of the cost of providing the full range of preschool services to program participants. The cost

Table 7
PROGRAM COSTS PER CLASS PER QUARTER

	National		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	80	69	149
Mean Head Start Cost, dollars	6,162	5,788	5,989
Mean Title I Cost, dollars	3,978	1,420	2,601
Number of Title I Administrator Agencies Reporting	6	7	13

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 20, 94.

Table 8
EXPENDITURES PER PARTICIPANT PER QUARTER^a

	National Totals		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	115	84	199
Mean Head Start Cost, dollars	338	356	344
Mean Title I Cost, dollars	179	68	116
Number of Title I Administrators Reporting	6	8	14

- a. One program for New York City was deleted from the file because it reported an extremely high expenditure related to its program activity. On a per participant basis, the expenditures for this program were \$1,683.

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 13, 90.

per participant for both programs was derived by dividing the total quarterly expenditure reported by the number of program participants.

Program Cost Per Teacher

Table 9 presents costs calculated on the basis of an input--the preschool teacher. Since bringing disadvantaged children before teachers can be viewed as the operating objective, program costs developed on a per-teacher basis reflect the total program cost implication of providing these services. The costs were developed by dividing the total expenditures reported for the quarter by the number of teachers reported. It should be noted that these costs do not represent only teachers' salaries and other costs directly related to teaching, but include the total costs incurred by the projects expressed on a per-teacher basis.

General Conclusions

The average national costs of Title I, whether expressed as Program Cost per Class, Expenditures per Participant per Quarter, or Program Cost per Teacher, seem to be consistently below those of HeadStart. However, the decision-making significance of this difference cannot be understood without an investigation into the typical services provided by preschool programs funded under ESEA Title I. The higher costs for Head Start may simply reflect that program's greater range of services. Furthermore, since Title I programs are run through the local school system (see Appendix B), as compared with Head Start, which is outside the regular school system, the costs may not reflect the full costs of Title I preschool centers. The public school system may contribute facilities, personnel, or public-health services to the local Title I programs; these costs may not be reflected in costs reported here. Further, there may be economies of scale associated with Title I programs because they are part of the operating school system.

However, to the extent that the two programs can be determined to be providing similar services, comparative studies of the efficiency and effectiveness

Table 9

PROGRAM COST PER TEACHER PER QUARTER

	National Totals		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	75	67	142
Head Start Mean Cost, dollars	5,773	5,648	5,715
Title I Mean Cost, dollars	1,734	5,452	3,469
Number of Title I Reporting	7	8	15

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 16, 91.

of these nationally funded preschool programs would be highly desirable but undoubtedly require more extensive, reliable data bases before really meaningful conclusions can be derived.

PERSONNEL PROVIDED PER CLASS

The following measures, computed on data available from the CAP MIS, concern the personnel associated with a preschool class. Three measures--Number of Volunteers per Class, Paid Nonprofessionals per Class, and Teachers' Aides per Class--indicate the comparative concentration of services provided to the classes in the respective programs, while the final measure, Percent of Teachers with Kindergarten Experience, is hypothesized to be an approximate indicator of teacher quality.

Number of Volunteers Per Class

Justification of Measure

One of the objectives of both Head Start and Title I preschool programs is to involve parents and community residents (see Appendices A and B). A measure of involvement is taken to be the average number of volunteers per class. Based on CAP MIS data, the figure is computed by dividing the total number of volunteers by the total number of classes. Table 10 presents data on the number of volunteers per class.

Discussion

The national figure shows Title I to have a higher average number of volunteers per class than Head Start. However, the national mean is weighted by the urban figures for volunteers per class, which show Title I with 3.6 volunteers per class, a higher figure than Head Start's two per class. Figures from rural areas show Title I to have fewer volunteers per class than Head Start. This conclusion, however, should be examined in conjunction with data collected through

Table 10
NUMBER OF VOLUNTEERS PER CLASS

	National Totals		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	60	48	108
Head Start Mean Volunteer	2.0	1.9	1.9
Title I Mean Volunteer	3.6	1.0	2.5
Number of Title I CAAs Reporting	10	7	17

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 64, 98

questionnaire contacts with Head Start and Title I administrators, which suggest that Head Start emphasizes volunteer recruitment to a greater degree than does Title I and involves more parent volunteers than does Title I. Further investigation into the involvement of volunteers is suggested in light of the inexact information currently available. For the overall view of personnel services offered by the programs, the information on volunteers should be reviewed in conjunction with the information on paid nonprofessionals per class, teacher aides per class, and the percent of teachers with kindergarten experience appearing in subsequent paragraphs.

Teachers' Aides Per Class

Justification of Measure

The number of teachers' aides per class is taken as a proximate measure of the direct personnel services being provided to the participants in the classrooms. The measure, based on CAP MIS figures, was calculated by dividing the total number of teachers' aides by the total number of classes in a center. Table 11 presents data on the average number of teachers' aides per class.

Discussion

CAP MIS national and regional data indicate that Head Start uses a higher number of teachers' aides per class. The students-per-class data also show the Head Start classes to be substantially smaller than Title I preschool classes. Further, the section on parent participation suggests that of the teachers' aides hired, Head Start employs a higher percentage of parents than does Title I.

Thus, both the CAP MIS and the questionnaire data suggest that Head Start is involving more teachers' aides per class, to work with smaller classes, and that more parents are aides in Head Start than in Title I. The figures suggest that teachers' aides are important to both programs, and an investigation into the relative performance versus cost of this position would be valuable.

Table 11
AVERAGE NUMBER OF TEACHERS' AIDES PER CLASS

	National Totals		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	82	67	149
Head Start Mean	1.3	1.4	1.3
Title I Mean	0.7	0.6	0.7
Number of Title I CAAs Reporting	10	8	18

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 56, 104.

Paid Nonprofessionals Per Class

Justification of Measure

The number of paid nonprofessional staff members per class was computed to provide a proximate measure of the involvement of local communities in the daily operations of a Head Start program or a preschool Title I program. One of the overriding objectives for the Head Start program is the employment of the indigent residents. Thus, measuring the number of paid nonprofessional staff members per class assesses the extent to which Head Start is employing members of the target population, the objective being to provide vocations for those Head Start employs and to provide support to the professional staff.

The measure is derived by dividing the reported number of paid nonprofessionals by the number of classes reported in the center. The same measure was applied to Title I preschool data simply to assess whether this objective could be perceived to be operating in these programs. It is assumed that paid nonprofessionals are members of the target population. Table 12 presents data on the average number of paid nonprofessionals per class.

Discussion

Head Start data indicate that the program has had significant success in employing paid nonprofessionals in program operation. Table 12 figures seem to indicate that Head Start is conforming consistently to its guidelines of two teacher aides per class. Title I preschool programs, on the other hand, seem to be operating without emphasis on the support of nonprofessionals in daily program operations. A comparison of the kinds of jobs performed by nonprofessionals in Head Start with those performed in Title I programs would be of considerable interest. It may show, for example, that under Title I the same tasks are performed by professionals at higher salaries, or on the other hand that Head Start is providing more services.

Table 12

AVERAGE NUMBER OF PAID NONPROFESSIONALS PER CLASS

	National Totals		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	83.0	62.0	145.0
Head Start Mean	2.4	2.6	2.5
Title I Mean	1.0	0.5	0.7
Number of Title I CAAs Reporting	10.0	8.0	18.0

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 60, 100.

Percent of Teachers With Kindergarten Experience

Justification of Measure

The CAP MIS system reports the number of teachers with previous kindergarten experience--a readily available measure that indicates, at least to the extent that experienced teachers can be assumed to be better teachers, the quality of teaching available in the two programs. Table 13 presents the percent of teachers with kindergarten experience.

Discussion

The summary CAP MIS data make it appear that Title I employs a higher percent of teachers with previous kindergarten experience than does Head Start. This variation should be considered in light of the fact that Title I is administered through the public school systems while Head Start is not. If it is hypothesized that previous experience is an indication of the quality of teaching being provided to participants, further investigation should be done on the methods of recruiting a greater number of experienced teachers into the Head Start program, as well as on the extent to which this can be accomplished best, perhaps through program affiliation with the local school system. This investigation should be preceded by further examination of the teaching effectiveness of teachers with no experience, teachers with kindergarten experience, and teachers with other kinds of teaching experience.

PARENT PARTICIPATION

Justification of Measure

There are several roles open to parents: as members of advisory boards; as volunteers in the program; and as paid aides. The nonprofessional aide--a position that has been called a critical and unique part of Head Start centers--is used to provide individualized attention to the preschooler and, what may be just as important, to involve the parent in community affairs.

Table 13

PERCENT OF TEACHERS WITH KINDERGARTEN EXPERIENCE

	National Totals		
	Urban	Rural	Total
Number of Head Start CAAs Reporting	72	57	129
Mean Head Start Percent	39	40	39
Mean Title I Percent	57	55	56
Number of Title I CAAs Reporting	9	8	17

Source: Evaluations of the War on Poverty: Analysis of CAP MIS Data, RMC Report UR-046, II, 45, 96.

To evaluate the degree to which parents are in fact involved in the Title I pre-school and Head Start programs, data were collected through a questionnaire sent to a sample of CAAs and local Title I administrators. The Head Start sample involves 80 CAAs; the Title I sample, 36 programs. The questionnaire has three quantitative components. The first is the percent of nonprofessional aides who were parents, and whether or not this percentage was more or less than the previous year. If change was indicated, the centers were asked to explain why. The responses to this open-ended question are found in the narrative discussion following the analysis of the objective portion of the questionnaire. The second group of questions concerned the percent of parent volunteers. The third component dealt with parent participation on advisory boards and with an additional question concerning the variety of decisions made by the boards.

Discussion

Objective Portions of the Questionnaire

Tables 14, 15, and 16 indicate that a higher average percent of parents are involved in Head Start in all three capacities--as volunteers, paid aides, and advisory-board members--than in Title I. The higher percentages within both programs for parent volunteer participation, as compared with paid parent aides, suggest that the weight of parent involvement in the programs lies with the volunteer rather than the paid positions.

Findings on parent involvement on advisory boards, Table 16, indicate that in Head Start, the majority of parent board members do actively participate on the boards. The Head Start percentage indicates that, as suggested in the OEO guidelines, over 50 percent of the advisory-board members are parents. Title I, however, fell below the 50-percent line in FY 68. Coupled with the low percentage of advisory boards with monthly or regular meetings and the high percentage of inactive boards, the degree of parent involvement in the decision-making aspect of Title I becomes less than

Table 14

PAID PARENT AIDES

	Percent of Aides That Are Parents	Percent of Programs Reporting an Increase in Parent Aides ^a	Percent of Programs Reporting a Decrease in Parent Aides ^a	Percent of Programs Reporting the Same Number of Parent Aides ^a	Percent of New Programs Established ^a
Head Start	42	18	26	38	18
Title I	26	22	3	47	28

a. All data pertain to comparisons between FY 67 and FY 68.

Source: Questionnaire responses from 80 Head Start Community Action Agencies and 36 Title I Community Action Agencies.

Table 15

VOLUNTEER PARENT PARTICIPATION

	Percent of Volunteers Who Are Parents	Percent of Programs Reporting an Increase in Parent Aides ^a	Percent of Programs Reporting a Decrease in Parent Aides ^a	Percent of Programs Reporting the Same Number of Parent Aides ^a	Percent of New Programs Established ^a
Head Start	56	48	6	29	17
Title I	48	21	0	48	31

a. All data pertain to comparisons between FY 67 and FY 68.

Source: Questionnaire responses from 80 Head Start Community Action Agencies and 36 Title I Community Action Agencies.

Table 16
PARENT PARTICIPATION ON ADVISORY BOARDS

	Percent of Board Members That Are Parents	Centers Reporting Greater Parent Than Non-Parent Participation	Centers Reporting Less Parent Than Non-Parent Participation	Centers Reporting Equal Participation
Head Start	66	47	20	24
Title I	46	46	23	31

Source: Questionnaire responses from 80 Head Start Community Action Agencies and 36 Title I Community Action Agencies.

Table 17
FREQUENCY OF BOARD MEETINGS

	Monthly	Quarterly	Regularly	Irregularly	None or Never
Head Start	71	6	15	4	3
Title I	33	13	20	10	23

Source: Questionnaire responses from 80 Head Start Community Action Agencies and 36 Title I Community Action Agencies.

the 46-percent mean suggests. The recent directive, shown in Appendix C, setting a 50-percent parent membership minimum and specifying duties of the advisory boards, could significantly alter the situation. The effect of this recently issued directive should be investigated. The predominance of monthly advisory-board meetings within Head Start is not surprising in view of the OEO recommendation.

Narrative Responses to the Questionnaire

While the number of parents involved in the programs could be reported quantitatively, the reasons for the involvement and the explanation of the trends in participation were more readily investigated in narrative responses. The following discussion treats the responses to the three question areas--paid parent aides, parent volunteers, and parent advisory-board membership.

Paid Parent Aides and Volunteers. In offering explanations for either a high or a low percentage of paid parent aides within a Head Start center, the responses suggest that community-center relations are the controlling variables. The most common reason for a low percent of parent aides and parent volunteer aides, implying a favorable situation, is that former Head Start parents remain employed as aides after their children have graduated, disqualifying them as Head Start parents. Centers citing a decrease in the number of parent aides between FY 67 and FY 68 frequently offer this explanation.

A second reason for a low percentage of parent aides, both volunteer and paid, which could be said to reflect favorably on the community's economic situation, is the unavailability of parents for center work due to employment elsewhere.

Reflecting a more negative family and community situation are the employment barriers of heavy home duties, i. e., the case of small children or poor transportation facilities to the center. Moreover, the salary for paid aide work was often

cited as inadequate compensation for baby-sitting and transportation costs incurred by the parent. The meaning of poor transportation facilities is unclear, because the centers are supposedly located within the target community. If the transportation facilities are inadequate for parents coming to the Head Start center, there certainly would seem to be some question as to the adequacy of transportation arrangements for their children. A possible explanation for this apparent paradox is suggested by the practice of a certain center that hired parents from centers outside their neighborhood to avoid having parents and children at the same Head Start location.

However, the Head Start personnel also indicated explicit policy reasons for not hiring parents. They often report that qualified parents are few in number and those who are qualified have been hired; that many parents are physically and psychologically unemployable as aides; and that the parent, if hired, would increase family income in excess of the OEO guidelines and, thus, disqualify the child from participation in the program.

Specific examples of Head Start center situations indicate some of the problems confronted. Milwaukee and Los Angeles emphasized that the trained, professional teachers have been reluctant until very recently to have parents in the classroom. In a smaller urban area, one director specifically stated that it was his Day Care Center's policy not to hire parents of the participating children. One center reported that a minimum number of parent aides were employed to maintain staff continuity, because it was found that parents tended to leave as their children graduated from the program. Similarly, Chicago emphasized the large turnover rate among parents.

A number of smaller Head Start centers reported that when the program began, paid and volunteer aides were specifically trained for the positions. Since

these aides have remained with the program, no vacancies are opened for parents to fill. In explaining why a large percentage of the original aides were not parents, most centers indicated that the OEO provision for hiring parents was not applicable at the program's inception.

The relative newness of a local Head Start program also affected the percentage of parent aides, both paid and volunteer, for new programs found it difficult to recruit parents, while older programs more frequently reported increased parent participation. More established programs report that professional teachers and center personnel, through experience, had grown to recognize the potential value of parent aid. Moreover, with experience, they have learned how to use parents, both paid and volunteer, more effectively. Increased center experience and greater parent familiarity with the center were the two major causes of an increase in parent participation between FY 67 and FY 68. Most centers emphasized that even though the aides were not Head Start parents, they were members of the target community.

Turning to the Head Start centers reporting a high level of parent involvement, the most consistently cited explanation for the high percent was compliance with the 1967 OEO guideline. In paid positions, compliance varied from giving parents first priority in hiring, to the policy of hiring only parents as aides. Few centers attributed high parental interest as the sole cause of increased participation. A majority of the centers reporting an increase cite the 1967 OEO guideline as the basis of their policy to give parents hiring priority, to hire at least 50 percent parents, or to hire only parents in FY 68. An expanded program or a budget increase also explained a large number of reported increases in parent employment. Those centers that reported the percentage to be the same as the previous year reported that the number of aides was adequate, that no more parents were available for employment, either voluntary or paid, or that the budget would not allow an increase in paid aides.

As previously indicated, the number of Title I funded preschool program administrators responding to the questionnaire is less than that of Head Start. However, the information obtained suggests that similar situations exist in Title I and Head Start centers. Centers reporting a low percentage of paid and volunteer parent aides cite the barriers of heavy home duties for mothers, transportation problems to the centers, and inadequate remuneration. A low number of parent aides was explained as also resulting from the sparsity of qualified parents and the limitations of funding.

Among the Title I centers that reported a high percentage of parent aides, both volunteer and paid, a number cited the newly issued OE guidelines as an impetus to recruiting parents. However, a sizable number of centers noted either the increased recognition of the usefulness of aides or the expansion of a successful program as forces behind a higher rate of parent aides. For example, New York City encouraged as much parent participation as possible; they felt that parents know the needs of the children better than others. Denver, on the other hand, called it good politics to hire parents.

Advisory-Board Participation. The third area of significant parent participation in the operation of local preschool programs is that of advisory-board membership. Both Title I and Head Start have suggested that 50 percent of the members of these boards be parents, and national guidelines have outlined advisory-board functions. The narrative portion of the questionnaire suggests problems and limitations facing various boards.

The responsibility allocated to an advisory board is planning programs and evaluating program operations. This involves the review of existing curriculum and the revision of existing programs for the staff as well as the children and parents. For example, the Detroit Advisory Board formed training classes for the teaching staff, and Los Angeles organized parent workshops based on the recommendation of their Head Start advisory boards.

A large number of advisory councils also outline hiring policies and aid in recruiting volunteers. Interpreting the work of the agency to the community is a common public-relations duty of the board. Accompanying this duty is often the job of designating better use of community resources. Most of the Head Start boards assume some degree of fiscal responsibility, varying from budget design to budget approval. A number of centers indicated that it was the board's responsibility to adjust the local Head Start program to accommodate budget cuts or budget reallocations.

A number of boards indicated extensive efforts to organize educational parent activities, to conduct parent discussions on parent-child relationships and responsibilities, and to involve large numbers of parents in field trips. East Orange, New Jersey, in particular, emphasized an extensive parent education program. The program, for example, arranged to take parents on field trips prior to the children's trips, so that parents could more effectively discuss the children's experiences with them.

Some of the more unusual board duties included deciding on Head Start locations, as was done in San Diego, or working with the Model Cities task force and the Cities' mental health project, as was done in Seattle.

The major distinction between the boards is the power to implement changes, as compared with simply recommending changes. Most of the boards confine their activities to those outlined in the OEO guidelines, serving in an advisory capacity.

In composition, the boards vary from being solely composed of parents of Head Start participants to having a mixed parent-professional-community membership. As indicated earlier, the average composition is 50 percent parent members and 50 percent community or professional members, which is in accord with the OEO guidelines.

Title I advisory boards were fewer in number and met less predictably (see Table 17). Whereas the majority of Head Start boards met monthly, 10 out of 24, or less than half, of the Title I boards meet monthly.

As with the Head Start boards, the Title I advisory boards are diversified in their duties. Every board, however, listed evaluating the program and proposing changes as one of its primary functions. Some of the boards are entirely advisory, referring their recommendations to higher authorities for implementation, while others have the power to instigate the changes themselves. Even among large metropolitan centers, the degree of decision-making power exercised by the board differs. Los Angeles described its board as strictly advisory--advising on program and priorities and giving community viewpoints were its primary duties. Chicago, on the other hand, allocated the duties of implementing curriculum, organizing parent and parent-pupil programs, and resolving related community problems to its board.

Planning parent activities and recruiting volunteers are common concerns for a majority of the Title I boards, particularly those that meet monthly or regularly. A number of the Title I boards were responsible for selecting participants, establishing personnel criteria, and reviewing budgetary matters.

Conclusions

Some tentative conclusions can be drawn from these data. Generally, Head Start does meet the 50-percent parent-involvement level recommended in the OEO guidelines. Moreover, as indicated throughout the narrative responses, the OEO guidelines were the impetus behind the parent recruitment. The expanded recruitment, in turn, seems to have been facilitated by the target communities' increased familiarity with the program along with an increased awareness of the potential role of parents on the part of the center.

Parent participation on Head Start advisory boards appears to be active and meaningful. The boards vary, however, in their power to implement recommendations. At the very least, all the boards sampled seem to be handling the minimum duties outlined in the OEO guidelines.

Data on Title I indicate that parent participation is becoming an important part of the program but now receives less overall emphasis than in Head Start. The

questionnaire responses indicate that Title I centers do not emphasize parent recruitment to the extent Head Start does.

It can be hypothesized that the past absence of specific guidelines for Title I partially accounts for the differences between Head Start and Title I on these measures. Head Start reported that 71 percent of its boards meet monthly in compliance with the OEO guidelines. Title I, on the other hand, reported only 33 percent of the boards meeting monthly. Moreover, Title I data indicated that 23 percent of the boards were inactive. It thus appears that nationally issued and enforceable guidelines have been influential in establishing minimum standards.

SUMMARY

Table 18 summarizes the analysis of certain attributes of the Head Start program and a sample of preschool programs funded under ESEA Title I. The first index of program operation--income level of program participants--clearly indicates that operational Head Starts concentrate to a greater extent than Title I on reaching the educational needs of children from low-income homes. This may be explained by the fact that Title I concentrates specifically on the needs of the educationally disadvantaged and no participant at the local level must prove eligible by reason of low income. However, it can be hypothesized that children from low-income families comprise most of the educationally disadvantaged; thus, it would seem that preschool Title I funds are not reaching the economically disadvantaged proportionate to their needs. Title I funds at the local level are spent on programs that enroll a lower percent of poor. A more effective allocation of resources--paralleling Head Start--might be to concentrate the funds on fewer school areas where the poverty enrollment is a greater percent of the total enrollment. The advantage of this would be an increase in the likelihood of enrolling a greater number of poor. The national allocation formula, which makes a concentration of funds impossible, seems to result in the program reaching a more inadequate mix of poor children than if funds were more concentrated.

Table 18

COMPARISON OF HEAD START AND ESEA TITLE I PROGRAMS: SUMMARY

Program Attendance	Head Start Full Year Full Day				Title I Preschool			
	Less than 10% ^a				70% ^a			
Income Level of Program Participants (Percent Above Poverty Line)	Quarterly Percent Children Examined	Quarterly Percent Children in Need	Quarterly Percent Children Treated	Quarterly Percent Children Examined	Quarterly Percent Children in Need	Quarterly Percent Children Treated	Quarterly Percent Children Examined	Quarterly Percent Children Treated
Medical and Dental Services	50	39	74	74	11	35	74	35
Medical	39	57	63	57	21	38	57	38
Dental								
Students per Class--National Mean	17.8				31.7			
Program Cost per Class per Quarter-- National Mean	\$5,989				\$2,601			
Program Cost per Participant per Quarter--National Mean	\$ 344				\$ 116			
Program Cost per Teacher per Quarter-- National Mean	\$5,715				\$3,469			
Volunteers per Class--National Mean	1.9				2.5			
Teacher Aides per Class--National Mean	1.3				0.7			
Paid Nonprofessionals per Class-- National Mean	2.5				0.7			
Percent of Teachers with Kindergarten Experience	39				56			
Percent of Paid Aides That Are Parents of Program Participants	42				36			

Table 18 (Continued)

Program Attendance	Head Start Full Year Full Day	Title I Preschool
Percent of Volunteers That Are Parents of Program Participants	52	48
Percent of Advisory-Board Members That Are Parents of Program Participants	66	46
Frequency of Advisory-Board Meetings	71	33
Percent Meeting Monthly	8	33
Percent Meeting Irregularly or Never		

a. For Head Start, this figure represents the percentage of participants above the OEO poverty criteria while for Title I the figure 70%, represents the participants whose income is above \$3,000 per year.

Quarterly data on the Head Start medical and dental examinations indicate that only 50 percent and 39 percent, respectively, are receiving the initial medical and dental exams; however, when these figures are projected to the yearly basis, all Head Start program participants seem to be receiving the initial medical and dental examinations.

Analysis of medical and dental figures for both Head Start and Title I shows a higher percent of children in need of dental follow-up as compared with medical follow-up. The Title I sample, however, is not large enough for this difference to be significant.

The ratio of students per class indicates that Head Start is operating well within its guidelines of 15 to 20 children per class. Title I preschool classes appear to be substantially larger (31.7 children) than the Head Start classes. This, of course, raises the question of the optimal size of a preschool class. Because costs, as will be discussed, appear sensitive to class size, it would be highly desirable to assess as accurately as possible the best class size for a preschool program.

The cost data--program costs per class quarter, per participant quarter, and per teacher quarter--indicate that Head Start is a more costly program than Title I's preschool program. Head Start cost per class quarter and per teacher quarter is approximately twice that of the Title I example, while cost per participant quarter is approximately three times that of Title I. This latter figure is partially explained by the fact that while the expenditures per class are larger in Head Start the class size is approximately half that of Title I. In addition, Head Start costs encompass all aspects of a child-development program (health, social services, community workers, rental in diverse locations, parent services, and career development) plus the more direct costs of teachers salaries and classroom equipment. However, without more information on the type and extent of services provided in preschool Title I programs, no conclusive statements can be made on the relative efficiency or effectiveness of the two programs. Such comparisons are handicapped by the limited

nature of the data available on Title I. At the national level there is an urgent need for the development of a coherent and consistent method of gathering information on the local operations of the Title I programs.

The measures of personnel provided to local programs--volunteers per class, teachers' aides per class, paid nonprofessionals per class, percent of teachers with kindergarten experience--indicate that Head Start programs provide smaller classes with a larger number of personnel per class. This may partially explain the higher costs incurred by Head Start.

Analysis of the information on parent involvement indicates that both programs actively involve parents in their policy decisions and operations. The figures indicate a slightly greater percent of parents involved in Head Start than in Title I. This probably reflects the influence of OEO guidelines on the role of parents in the program.

2

HEW AND OEO ADULT BASIC EDUCATION PROGRAMS: A COMPARISON

This chapter compares the adult basic education (ABE) programs administered by HEW with those administered by OEO. The data sources on which these comparisons are based are described below. The history and characteristics of these programs are described in Appendix D.

EXPLANATION OF DATA SOURCES

Description of Sources

This discussion of the ABE program is drawn from six data sources. The following is a brief discussion of each source including the period of time data were collected, who gathered the data, the purpose for which they were gathered, and the form in which the data appear. The incompleteness and therefore the limited usefulness of quarterly CAP MIS data are understood. Subsequent GAO field work found these limitations to be particularly severe in the case of the ABE programs. Consequently, an attempt has been made to show data for a given program characteristic from at least one other source than CAP MIS and to temper all conclusions based on CAP MIS data alone.

CAP MIS Data

These were collected for the quarter ending September 1967 and for the quarter ending March 1968. The purpose of the CAP MIS data system is to monitor ongoing CAP projects and provide some information on comparable federal, state, and local programs operating in CAP localities. Thus, CAP MIS includes some data on HEW

ABE programs gathered by the CAP office at the local level. The information has been processed and organized by RMC into a set of program parameters and appears in RMC Report UR-046, Evaluations of the War on Poverty: Analysis of CAP MIS Data, December 1968.

GAO Survey of Individual OEO and HEW Adult Basic Education Programs

This survey, conducted by regional GAO personnel during July and August of 1968, secured ABE data from individual HEW projects to augment the OEO ABE data available from the CAP MIS system. Normally HEW Form OE-3058, used to collect ABE data, is only available at the state level in aggregate form and consequently it is not comparable to the CAP MIS type local data. However, using the same forms, the GAO survey obtained information on 58 individual HEW ABE projects as well as 65 OEO ABE projects.

HEW Adult Basic Education Annual Report

The HEW ABE program generates an annual report based on Form OE-3058 aggregated at the state level and then sent into the national office. It is used by HEW to describe its ABE program but is not suited for individual project evaluation.

National Summary of HEW ABF Program

A national survey of students in HEW adult basic education programs was conducted by the Office of Education in conjunction with state and local public school systems. Students were interviewed between February and July of 1967. Only new enrollees were included and the 94,000 interviewed represented one-fourth of the total program enrollment during the 1966-1967 school year.

TransCentury Interviews

TransCentury Corporation conducted 100 interviews with individuals who participated in the HEW ABE program. GAO designed these interviews as a check on the

accuracy of the HEW data collected using Form OE-3058. These interviews were conducted during the summer of 1968, primarily in large urban areas.

Xerox Basic Systems Report

Xerox conducted this large-scale sample survey in ten states, which, by virtue of the size of their poor and illiterate populations, were entitled to 3.4 percent or more of Title II-B funds. The data were collected from September 1966 through April 1967 in what was the first attempt by the federal government to evaluate school programs administered by the states. The result was a comprehensive gathering of descriptive and evaluative data on the HEW ABE program.

State Director's Survey

OEO designed and HEW administered the state-by-state survey of Title II-B administrators. The survey was conducted in the spring of 1966 and contains information on program costs, workload, and retention rates. As a result of the various methods used to gather state data, it is difficult to evaluate the overall reliability of these data.

In the report the HEW and OEO ABE programs are compared with respect to three principal variables:

- participant profiles:
 - family income,
 - welfare status,
 - age, and
 - sex;
- cost per participant;
- effectiveness:
 - program completion,
 - participants with positive results, and
 - employment status.

The final section presents conclusions and recommendations.

PARTICIPANT CHARACTERISTICS

Family Income

Table 19 illustrates the comparative family incomes of OEO and HEW adult basic education program participants. The HEW participant income distribution is shown both in accordance with HEW's \$3,000 absolute-poverty criterion and, as collected by CAP MIS for both programs, in accordance with OEO's family-size-dependent definition of poverty. As shown in Table 19, CAP MIS compiles information for both programs on whether participants are above or \$500, \$1,000, and more than \$1,500 below the Orshansky definition of poverty. The National Summary data are based on the \$3,000 criterion.

The CAP MIS data show a distinct similarity in family income between OEO and HEW program participants, both programs having about 80 percent of their enrollees below the poverty line, distributed among the three categories in much the same manner. The National Summary information on family income of HEW ABE participants does not diverge much from this pattern, showing 70 percent of the population below a more rigorously defined poverty line.

Welfare Recipients

The apparent similarity of participant characteristics between the HEW and OEO ABE programs is also indicated by the data on the percent of those on welfare. The CAP MIS data collected for the March 1968 quarter show 10 percent of both the HEW and OEO participants as welfare recipients. The ratio for HEW participants is corroborated by other reports on the program. For example, the GAO survey data show 13 percent of the HEW program participants on welfare and the 1967-1968 HEW Annual Report data show 18 percent as welfare recipients. Other sources of data on the percent of welfare recipients in the OEO programs do not reinforce the CAP MIS data to the same extent. The CAP MIS figure, as noted above, shows 10 percent as do the other HEW sources. The GAO survey indicates that 20 percent of the participants are on welfare. The fact that the

Table 19
INCOME DISTRIBUTION OF ABE PARTICIPANTS

Program	Data Source	Percent Above or Below the Poverty Line			
		Above	Below		
			By \$1-499	By \$500-1,499	By \$1,500 or More
HEW-ABE ^a	CAP MIS	20	18	36	26
OEO-ABE ^a	CAP MIS	20	19	31	30
HEW-ABE ^b	National Summary	30 ^c	70 ^c		

- a. Figures based on OEO definition of poverty.
- b. Based on the poverty criteria of minus or plus \$3,000.
- c. Based on the assumption that the enrollees for whom no data were available were distributed like those on whom data existed.

CAP MIS data and the GAO survey were prepared at different times and are composed of different samples may explain some of their divergence.

PERCENT OF WELFARE RECIPIENTS: OEO AND HEW ABE PROGRAMS

Data Source	HEW	OEO
CAP MIS	10	10
GAO Survey	13	20
HEW Annual Report	18	--

Age Distribution

The age distribution of the ABE participants is interesting because it shows whom the curriculum is attracting while differentiating the HEW and OEO efforts. It can also indicate whether the ABE program is appropriate and relevant for the population it is attracting. Table 20 displays the age distribution of adult basic education program participants. There are four data sources for HEW and two for OEO.

The information shows that both programs primarily serve 22 to 44 year olds. Showing surprising consistency, the CAP MIS and GAO survey data indicate that the HEW and OEO ABE programs are attracting very similar populations. According to the CAP MIS data, 46 percent of the HEW ABE participants and 49 percent of the OEO ABE participants are between the ages of 22 and 44. The GAO survey data indicate that 53 percent of HEW's participants and 52 percent of OEO's participants are between 22 and 44. The National Summary data on the HEW ABE substantiates this concentration of program participants in this age group and also shows a slight increase in its size between 1967 and 1968, a growth that also appears to be evidenced by the slightly higher percent contained in the more recent GAO survey. Ten TransCentury interviews of 100 HEW ABE program participants deviate from this otherwise consistent picture showing only 34 percent in this age category; however, this survey is based on an unstructured national sample of only 100 interviews.

Table 20

AGE DISTRIBUTION OF ABE PARTICIPANTS

HEW						
CAP MIS	Age					
	Under 22	22-44		45-64	65+	
	27%	46%		23%	5%	
GAO Survey	Age					
	Under 25	25-34	35-44	45-45	55-64	65+
	13%	21% 32% 53%		25% 6% 31%		3%
National Summary FY 1966-1967 FY 1967-1968 ^a	Age					
	Under 25	25-44		45-54	55+	
	18%	47%		16%	11%	
	19%	51%		19%	11%	
TransCentury	Age					
	Under 25	25-34	35-44	45-54	55-64	65+
	26%	19% 16% 34%		17% 11% 28%		11%
OEO						
CAP MIS	Age					
	Under 22	22-44		45-64	65+	
	26%	49%		21%	5%	
GAO Survey	Age					
	Under 25	25-34	35-44	45-54	55-64	65+
	17%	20% 32% 52%		16% 11% 27%		4%

a. A more detailed breakdown indicates the following: Under 25--8.7%, 25-34--23.5%, 35-44--27.6%, 45-54--18.8%, 55-64--7.91%, 65+--3.5%. To maintain classification consistency between the national reports, several of the age groupings were combined into one.

Sex Distribution

The data on the sex of ABE program participants, shown in Table 21, tell a story consistent with the findings of the Xerox report, namely that the majority of ABE participants are women. The CAP MIS shows similar patterns

Table 21

SEX DISTRIBUTION OF ABE PARTICIPANTS: HEW AND OEO

Source	Male, percent	Female, percent
HEW		
CAP MIS	39	61
GAO	44	56
National Summary FY 1966-1967	43	56
HEW Annual Report FY 1967-1968	48	52
TransCentury	36	64
OEO		
CAP MIS	39	61
GAO	55	45

for HEW and OEO, patterns that are reinforced by the other data sources available for HEW. The only data that give evidence to the contrary were collected by GAO from a sample of five OEO ABE centers. These data show a 54.9-percent male and a 45.1-percent female distribution. However, the size of the sample is small and not necessarily a meaningful contradiction of the general pattern.

When the above data on sex and age distribution of ABE participants are considered jointly, they show that the majority of program enrollees are female and middle aged (25-44). These data, when considered in conjunction with National Summary information on race and family status, indicate that the present ABE enrollee is similar to

the typical ABE participant described in the Xerox report on Title II-B programs as a "nonwhite, middle-aged, married female." The Xerox report pointed out that the large number of older-age females attracted by Title II-B programs was not fully consistent with ABE's employability goals because the greatest job payoff usually comes when a young male with a working career ahead of him has his employability enhanced. The fact that the program is still apparently training substantial numbers of females and middle-aged enrollees indicates that the ABE program has been unsuccessful in attracting a population more consistent with its stated goals. Judging from their relatively similar age distributions (Table 20), both the OEO and HEW programs have apparently been unsuccessful in implementing the Xerox recommendations.

COST PER PARTICIPANT PER QUARTER

Table 22 displays quarterly costs per participant for both the HEW and OEO adult basic education programs. As can be seen, there is only one data source for OEO program costs to the four available for HEW. The four data sources used in the table differ as to period and form of collection. The CAP MIS data are for the spring quarter ending March 1968; the GAO survey was conducted during July and August of 1968, using an annual reporting form OE-3058; the Xerox report was prepared between September 1966 and June 1967; and the HEW annual report data are based on the average of ABE expenditures per student for 1966 and 1967.

These data point up two differences in participant costs: those among the costs shown for the HEW program and that between the HEW and OEO programs.

CAP MIS and the Xerox report show similar quarterly costs. The GAO survey cost per participant is high because it is based on data from 18 ABE locations, all within Pennsylvania, where educational expenditures and costs are greater than the average for the United States.

The distinct difference in the CAP MIS costs shown for the HEW and OEO programs--\$37 as opposed to \$146 per quarter--may have its explanation in one or all of the following:

Table 22
COST PER PARTICIPANT PER QUARTER

Source	Cost per Participant per Quarter, dollars ^a
HEW	
CAP MIS	37.00 ^b
GAO Survey	57.50 ^b
Xerox Report	39.25 ^c
Annual Report	21.60 ^d
OEO	
CAP MIS	146.00

- a. Includes federal costs only.
- b. Based on annual costs of \$230 per participant, reported by 18 Pennsylvania Prison Projects. Costs not reported for the other 40 HEW ABE projects in sample.
- c. Computed from per capita federal expenditures of \$157 in the Xerox ten state sample.
- d. An average of \$86.42 per year per student was used based on ABE expenditure per student in 1966 of \$80.83 and the estimated expenditure in the 1967 ABE budget of \$92.02.

- differences in services offered,
- enrollee stipends,
- location of classes, and
- differences in the definition of participant and/or dropout.

Preliminary resurvey of descriptive data on local ABE projects indicates a wide variation both within and between HEW and OEO programs. Nevertheless, aside from the ten special projects¹ that are more akin to OEO's approach, it is possible to generally characterize the programs. HEW ABE projects are usually non-intensive remedial programs making use of public school facilities and closely related to established educational institutions. Conversely, the typical OEO ABE project is part of a general anti-poverty manpower program. Oftentimes, ABE is a component in an Opportunities Industrialization Center (OIC), closely linked to manpower Development and Training (MDTA) programs or in conjunction with a Concentrated Employment Program (CEP), where learning is placed in a pragmatic scheme so that the enrollee is able to see and economically profit from incremental income.

In addition to providing ABE in a functionally integrated form, the OEO programs are generally more intensive, i. e., full time as opposed to six hours per week per student. The intensive approach, especially in the pre-employment environment, is in some cases made possible by granting stipends to the enrollees so that they can attend full time. This may explain the significant difference in OEO and HEW costs.

Most HEW ABE projects meet in public school buildings, thereby freeing some costs that the OEO programs must bear. In light of data collected in the 1966 ABE Director's Survey, facility costs amounted to about 9 percent of total program costs.

1. HEW's special projects were inaugurated with the discretionary funds allowed the Office of Education by the Adult Education Act of 1966.

The difference in cost per participant per quarter between OEO and HEW, and also within HEW, might be due to varying definitions of program participant and/or differences in dropout rates. Table 23 shows the reported dropout rates for both programs, the reported cost per participant per quarter, and the new participant cost adjusted for the program dropout.

Table 23

IMPACT OF DROPOUT RATES ON COST PER PARTICIPANT

Data Source	Percent Dropping Out		Unadjusted Cost per Participant per Quarter		Adjusted Cost per Participant per Quarter	
	HEW	OEO	HEW	OEO	HEW	OEO
CAP MIS	18.0	20 ^b	37.00	146.00	43.66	174.70
GAO Survey	28.0 ^a	28 ^b	57.50 ^c	--	73.60 ^c	--
Xerox Report (1967-1968)	40.0	--	39.25	--	54.95	--
State Director's Survey ^d	--	--	75.00 ^c	--	75.00	--

- a. A sample of less than 50 ABE projects reporting both number of dropouts and number of participants.
- b. Based on a sample of six OEO projects reporting number of participants and dropouts.
- c. Based on 18 HEW ABE prison projects in Pennsylvania.
- d. Annual cost per program slot of \$300 presented as a quarterly figure.

The adjusted cost per participant per quarter had the same general relationship as it did when previously adjusted. As pointed out, the GAO survey costs tend to be high because they are based on a small sample where educational costs are above the national average. Both the Xerox report and the State Director's Survey were conducted when the ABE Title II-B program was new and still in the process of initial recruiting and administration, procedures that would tend to increase average costs. Therefore, the 1968 CAP MIS quarterly figures should be more representative of normal costs per participant in the program, at least to the extent that they are reliable.

PROGRAM SUCCESS CRITERIA

To compare the relative effectiveness of the HEW and OEO ABE programs two positive criteria will be discussed: program completion rates and percent of participants with positive results. In addition, the employment status of HEW ABE participants will be displayed and discussed.

The data available on program completion rates show quite disparate patterns. Some of this disparity apparently results from the variation in sample sizes and the use of different definitions of completion.

ABE COMPLETION RATES

	HEW	OEO
GAO Survey	17% ^a	39% ^b
HEW Annual Report (1967-1968)	10% ^a	N/A

- a. Completion figures are based on those who completed the advanced level (7-8).
- b. Sample is composed of only five ABE centers.

Because of the stratification within the HEW ABE program (grades 1-3, 4-6, and 7-8), the quoted completion rates only apply to a portion of its enrollment--those completing the eighth grade-level category. The same stratification does not exist in most of the OEO programs; therefore, a larger proportion of participants are eligible for completion.

The second measure was developed using the CAP MIS data. The percent of participants with positive results was defined as the percentage of enrollees going on to vocational training, jobs, or pre-vocational training. The HEW ABE program showed a rate of 8 percent with positive results as compared to 21 percent of OEO ABE enrollees. Considering the previous characterizations of the two programs, it is not surprising that OEO has a higher percent with positive results. The OEO program is generally integrated with job-oriented programs and, therefore

often provides a direct route to training or a job; this cannot be done by most HEW programs in their present form.

In light of the stated HEW employment goals, it is interesting to see data on the employment status of HEW ABE participants. (Unfortunately, similar data are not available for OEO programs.) The following is a breakdown of enrollee employment status appearing in the HEW 1966-1967 National Summary:

Employed ¹		Unemployed		
Full Time	Part Time	Seeking Employment	Not Seeking Employment	Not Stated
42.6%	11.8%	14.0%	25.9%	5.8%

This shows that a majority of HEW ABE program participants are the working poor who are not so much seeking employment (14 percent) as seeking a new job. In total, approximately 84 percent were not in need of a job since 26 percent were not seeking employment and 54 percent were currently working at full- or part-time jobs. These employment data give evidence that HEW ABE programs are generally part-time propositions since over 50 percent of the program participants appear to have jobs. In addition, the fact that the program attracts such a low percent of unemployed participants who are seeking employment suggests that, despite the employment-oriented language of the Adult Education Act of 1966, ABE is not attracting people who are looking for a job. The program is instead attracting a majority of people (63 percent) who are "in the program for general self-improvement." Of the approximately 40 percent of unemployed enrollees, about 26 percent were not seeking employment at the time of the survey. Whether these enrollees have long-term employment goals cannot be determined from the available data. On the basis of available data, however, it appears that a large number of enrollees do not have immediate employment goals.

1. National Summary percentages do not total to 100 due to rounding.

CONCLUSIONS AND RECOMMENDATIONS

Data Sources

The primary obstacle to the proper analysis of the ABE programs is the deficiency of relevant data. This deficiency has prevented even the most rudimentary program comparisons. For example, OEO program personnel and literature maintain that their adult education activities differ quite radically from HEW's in the following areas:

- population group served,
- curriculum,
- institutional sponsors,
- use of subprofessionals,
- place where classes are held, and
- community participation.

From a review of the data presented in this paper and available to the analyst, the existence of these differences is difficult to document. The CAP MIS only collects information on one of these program characteristics--population group served--and these data indicate a similarity (instead of a difference) between population groups served. On the basis of existing data, it is only possible to say that the OEO ABE program has higher costs per participant and this apparently stems from the more intensive and comprehensive services it offers.

A general revamping of data systems for both programs is warranted. The most comprehensive list of data necessary to describe and evaluate the ABE effort was drawn up by Jeffrey Weiss in a 1966 program memorandum on adult basic education. Adoption of the proposals outlined in this memorandum, which is reproduced in full as follows, is recommended.

1. Information on the age, sex, race, and number of children of each participant in the program.
2. The level of educational attainment (as measured by test scores) and the number of years of formal schooling of each individual at time of entry into the program.
3. The level of educational attainment (as measured by test scores) and the number of individuals who remain in the program after they have been exposed to a specified number of instructional hours.
4. The demographic characteristics of those individuals who drop out of the program before obtaining the 8th grade level of educational attainment.
5. The number of instructional hours each dropout received before he or she elected to drop out of the program.
6. The total number of instructional hours per quarter in each State (number of participants actually in the classroom times the number of hours of classroom instruction) and the total sum of Federal, State, and local funds which was actually expended in the quarter. These cost data should be broken down to reflect the costs of the specific inputs which were necessary to carry out each Adult Basic Education Program.
7. Information on the educational background and teaching experience of each of the teachers and ancillary teaching personnel in the program.
8. Information on the earnings of participants before and after their participation in the program.
9. For each participant, the source of referral to the program and whether the participant was subsequently referred to placed in a job training program.

These data, supplemented by data from pilot studies of the relative effectiveness of various instructional materials and programs of instruction, as well as follow-up studies of rehabilitants to obtain earnings and employment histories, are necessary to properly manage and evaluate the program.¹

1. "Program Analysis, Human Investment Program," Adult Basic Education (September 1966), p. 16.

ABE Program Weaknesses

In substance, recommendations for program change in ABE relate back to the issue of what are, or ought to be, the program goals of adult education. It appears that the following question should be asked: Should the ABE program primarily concern itself with illiteracy or poverty? If the primary goal is treating functional illiteracy, then the program should seek to provide its enrollees with skills that would enable them to function properly in their environment. The type of enrollee (laborer, welfare mother, etc.) should be the determinant of what skills are appropriate and relevant. The functional side of illiteracy is stressed here because this is a condition that may not be responsive to academic-type literacy instruction. For example, raising the reading-comprehension level of a welfare mother probably will not enable her to function better in her everyday roles of mother, consumer, and provider. It is also highly questionable whether an eighth-grade certificate will assist the welfare mother (or, for that matter, a short-order cook, custodian, etc.) earn a higher salary in the labor market. There is a chance, however, that a course in consumer purchasing or health care would be of immediate assistance by reducing functional illiteracy in specific areas that are of everyday relevancy.

On the other hand, if ABE's purpose is to combat poverty, then attempts should be made to strongly direct the program toward employment goals. Program guidelines should be adopted that give preference to the employable enrollee, courses through the high-school level should be offered, and a strong job placement service should be instituted.

If no decisions are made about the purpose of ABE, the development of programs consistent with ABE's goals will never materialize. Consequently, the ABE program will continue to assume different forms, more or less effective depending on the local sponsoring institution, and their interpretation of approximate target population and the goals of adult educational services.

3

EVALUATION OF THE UPWARD BOUND PROGRAM

Upward Bound is a CAP sponsored pre-college preparatory program designed to help bright underachievers from low-income families gain admission to college. It proceeds from the notion that a college education represents an academic, social, and cultural watershed and that earning a college diploma is the single best ladder out of cyclical poverty for a certain percent of the young, low-income population. This notion of a college diploma as an anti-poverty device results from the correlation between an undergraduate degree and incremental income gains and, also, the degree of social and economic mobility experienced by those who possess college degrees.

Upward Bound is designed as a cycle-breaking activity, the cycle at issue here being poverty. The effectiveness of the program largely depends on the incremental gains in education made by the program participants once they are in college because it is these educational gains that correlate with income gains. Thus, while the program task is to intercede for the poor young person with college potential assisting him to gain college admission, the success of the program (as an anti-poverty measure) depends on how many earn college degrees. This relationship between the program's anti-poverty goal and program operation will be discussed later in more detail when the question of program evaluation is treated.

Upward Bound also has secondary goals. Thomas Billings, the Director of Upward Bound, summarized these goals in the following manner: "Beyond getting a number of poor kids out of poverty by way of higher education, Upward Bound

has set for itself two other goals: (1) opening American colleges and universities to bright poor youngsters, and (2) making the American high school more responsive to the needs of the . . . [poor] child."¹ Both of these goals aim at institutional impact and reflect a concern with bringing about permanent change so that the goals of Upward Bound will continue to be realized beyond the actual life of the OEO program.

HISTORY

The conceptual origins of the Upward Bound program can be found in the American Council on Education sponsored work to prepare pre-college curricula for use with low-income black students, and the Carnegie and Rockefeller Foundation funded experimental programs to develop the basic skills necessary for college among low-income high-school students. The formal origin occurred when individual colleges and universities submitted independent, unsolicited proposals to the CAP office, many of which had in common the idea of a pre-college program. It was this idea that eventually came into being in the summer of 1965 as a national OEO program called Upward Bound.

Eighteen pilot programs were funded on eighteen college and university campuses, involving approximately 2,000 high school students from America's rural and urban slums. The assumption undergirding the program was: there are many bright youngsters born into America's poor families. These youngsters, though generally poor performers (underachievers) in high schools are bright and promising nonetheless and, if given hope and a program of enrichment and remediation, would demonstrate that promise in academic motivation and achievement. . . . Upward Bound was one of many experimental programs designed to test the effectiveness of 'higher education' as a way out of poverty for American youth.²

1. Thomas Billings, "Address to the American Educational Research Association Convention" (February 8, 1968).

2. Billings.

The results of this first summer were sufficiently encouraging to induce Mr. Shriver to designate Upward Bound as a National Emphasis program. In 1966-1967 217 regular and 4 research and development Upward Bound projects were funded through CAP. These projects enrolled approximately 20,000 students, and were located in 47 states and 3 territories. Since that time, program-funding levels and enrollment have continued to grow, but at a reduced rate. Table 24 displays the funding levels, participants, and number of projects by year.

Table 24

UPWARD BOUND PROGRAM AND BUDGET LEVELS, 1965 TO PRESENT

Academic Year	Total Federal Funds ^a (millions of dollars)	Number of Students	Number of Institutions ^b
1965-1966	2.6	3,261	18
1966-1967	28.2	20,883	221
1967-1968	30.1 ^c	23,500	258
1968-1969	31.1 ^d	26,000	300

- a. These totals include CAP research and development funds but exclude the local contributions.
- b. In some instances an institution may have more than one grantee.
- c. Assumes a carry-over of \$800,000.
- d. This and the other figures for 1968-1969 are estimates based on information prepared by OEO Upward Bound offices.

After being in operation almost two full years, the Upward Bound program was incorporated into the Economic Opportunity Act amendments in 1967. The program was conceived and operated independently of a specific legislative mandate during its early developmental period. And, indeed, when the program was given a statutory basis, it did not constrain program operation but only described it. The Upward Bound goals remained the same--to "generate skills and motivation

necessary for success in education beyond high school among young people from low-income backgrounds and inadequate secondary school preparation."¹

DESCRIPTION

Upward Bound is a pre-college preparatory program designed to generate the skills and motivation necessary for success in education beyond high school among young people from low-income backgrounds and inadequate secondary school preparation. It acts to remedy poor academic preparation and motivation in secondary school and thus increase a youngster's promise for acceptance and success in a college environment.²

Upward Bound is directly administered by OEO, usually through individual colleges and universities, which have the responsibility for developing the curriculum and selecting participants. In contracting to operate an Upward Bound project, the educational institution commits itself for approximately three years or for the amount of time necessary to assist each participant gain admission to an appropriate higher education institution, with the financial assistance that is needed.

The typical project offers a six-to-eight week residential summer program followed by school year activities such as Saturday classes and periodic cultural enrichment programs.

Upward Bound focuses on students completing the tenth and eleventh grades. The typical enrollee is from a low-income family. He is judged to have the potential for success in a two- or four-year college, but his present achievement level and/or lack of motivation would prevent his acceptance into such an institution. This student "is one for whom a college education may become possible given experiences and instruction necessary to overcome earlier obstacles. Without this kind of experience, these students would probably not have considered college, or might even have dropped out of high school."³

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1. Economic Opportunity Act, as amended in 1967 (Section 222 of Title II).
 2. Guidelines, Upward Bound 1968-1969, Office of Economic Opportunity, Community Action Program (October 1967), p. 1.
 3. Guidelines, p. 4.

Individual Upward Bound projects usually enroll between 50 and 150 students. As a participant, the enrollee receives room and board during the on-campus summers, medical care, travel funds and, usually, a weekly stipend. Although Upward Bound projects differ, there are enough characteristics common to programs that the State University of Iowa project can be used as an illustrative example.

About 100 students entering the 10th, 11th, or 12th grade, from varied racial and educational backgrounds, are enrolled. Included are delinquents, deserted youngsters, the physically handicapped, and dropouts. The basic summer program is built around a core of language arts, social studies, science, and mathematics. Supplementary instruction is offered in music, art, dramatics, photography, debating, and elementary tutoring. Enrollees select and plan their own extra-curricular activities. As a follow-up, the staff meets with enrollees twice a month during the next year for tutoring and counselling sessions, in addition to informal meetings held in the enrollees' home communities. The youngsters return to the campus twice during the academic year.¹

TARGET POPULATION AND RECRUITMENT

The target population for Upward Bound is estimated to be 600,000. This universe of need is expected to remain constant through 1973. Students comprising this universe of need should have the potential for success in a two- or four-year college despite the low level of achievement and motivation that often characterizes them. Ninety percent of the students meeting the above criteria must also come from a family whose annual income meets the poverty criteria. Up to ten percent of the Upward Bound enrollees in each project may be drawn from the near-poor population. The criteria used to define both populations are presented in Table 25.

Residence in public housing and a family on public welfare can qualify individual students when annual family income is not available. Students coming from homes whose family income is above the poor and near-poor criteria may also enter the program when there is evidence that serious money mismanagement deprives the student of the benefits of this additional income.²

1. OEO Appropriations Hearings, FY 1968, p. 275.

2. Guidelines, p. 5.

Table 25
TARGET POPULATION

Number of Persons in Family	Poor		Near Poor	
	Nonfarm	Farm	Nonfarm	Farm
1	\$1,600	\$1,100	\$2,000	\$1,500
2	2,000	1,400	3,000	1,900
3	2,500	1,700	3,500	2,300
4	3,200	2,200	4,000	2,600
5	3,800	2,600	4,500	3,000
6	4,200	3,000	5,000	3,400
7	4,700	3,300	5,500	3,800
8	5,300	3,700	6,000	4,200
9	5,800	4,000	6,500	4,600
10	6,300 ^a	4,400 ^b	7,000	5,000

a. Above 10--add \$500 for each additional member.

b. Above 10--add \$350 for each additional member.

Source: Guidelines, p. 4.

The Upward Bound program concentrates on students completing tenth and eleventh grade. "However, for areas or among particular groups of students showing severe dropout rates at an earlier age, Upward Bound will consider proposals reflecting the need for intervention at the end of eighth- and ninth-grade levels."¹ This early-intervention practice has frequently prevailed in Indian communities.

The guidelines suggest that individual Upward Bound projects use a wide variety of sources for student recruitment in addition to the secondary schools.

1. Guidelines, p. 6. Extremely high dropout rates experienced in Indian high schools have necessitated the expansion of grade-level focus in these areas.

OEO will require the applicant to show evidence that it sought students through a varied recruitment program, including, but not limited to, referrals from present Upward Bound students, cooperation with CAAs, neighborhood visits, Youth Opportunity Centers, VISTA Volunteers, Neighborhood Youth Corps, juvenile court officers, settlement houses, churches, and other community organizations."¹

The 1967 profile of Upward Bound students indicates that most of the program enrollees learn about the program from some member of the high school staff (37.0 percent from guidance counselors and 10.1 percent from teachers). Other important sources of information are Upward Bound students (13.7 percent) and school friends (10.1 percent). Since outside school sources account for only 8.3 percent of the recruiting, it appears the CAAs are playing a limited role in student recruitment, as are the churches and other community organizations.

This requirement of recruiting students from a variety of sources naturally stems from Upward Bound's emphasis on finding poor students who have potential, but may not show potential when usual measures are applied. This emphasis places a premium on intuitive evaluations which, in turn, necessitate drawing from a wide variety of sources since those personally acquainted with students will necessarily be scattered throughout the community. This emphasis on intuitive judgment downgrades reliance upon usual quantitative measures. "Recommendations from persons who know the applicant . . . and intuitive judgments are as important for selection as patterns of grades and test scores."² Furthermore, the program guidelines urge looking beyond negative behavioral patterns and lack of the normal credentials:

Typically this student may be apathetic or even hostile because he comes from a disadvantaged environment unable to help him release his real talent, or he has shunned meaningful educational pursuits because of inadequate school experiences. Quite often the potential that such a student possesses may not show in traditional measurements, such as standardized test scores or grades.³

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1. Guidelines, p. 6.
 2. Guidelines, p. 7.
 3. Guidelines, p. 4.

THE PROJECTS

An Upward Bound program is usually operated by colleges and universities that receive direct grants on the basis of an application submitted to and reviewed by the Upward Bound staff. The requirement for an application and obtaining program approval permits the national monitoring of plans in the areas of staffing, community relationships, and curriculum.

On the subject of staffing, the Upward Bound guidelines are quite specific. A certain academic-staffing pattern is suggested: one third consisting of the regular teaching faculty of the host university; one third secondary school teachers drawn, where possible, from the schools where Upward Bound students are enrolled; and one third composed of personnel, such as specialists and/or graduate students, selected at the discretion of the individual project heads.

Information of the 1967 Upward Bound programs indicates a close adherence to the staffing guidelines. According to national data 40.4 percent of the teaching staff were drawn from the sponsoring institutions, 29 percent were drawn from secondary schools where Upward Bound students attended, and 30.6 percent came from other sources.

The guidelines also discuss the importance of controlling the overall staff-to-student ratio so that it remains appropriate to the program goals. "Such ratios should evolve from a clear understanding of the nature of an Upward Bound class where maximum student participation is of importance."¹ During 1967, the reported student-teacher ratio was approximately one teacher for every seven students.²

Tutor-counselors are a new element in the traditional Upward Bound formula for providing maximum individual attention to program participants. These tutors live in the dormitories with the enrollees and may be students from within or outside

1. Guidelines, p. 17.

2. Hunt and Hardt, National Profile of 1967 Upward Bound Programs (November 17, 1967), p. 13.

the host institution. Their job is to establish rapport with the program enrollees, which indicates why approximately 84 percent of the tutors are between 19 and 22 years old.

In addition to stipulating overall considerations for project staffing, the guidelines state a preference for a substantially full-time project director during the academic year as well as during the summer. Among his activities, special priority is given to his placement of Upward Bound graduates in appropriate colleges and universities. There has been a significant disparity among the performances of Upward Bound project directors concerning this function. This is a key function, and one of the main criteria upon which a project director is evaluated. OEO emphasizes it in the guidelines.

The guidelines call for the establishment of Academic Policy Groups to link Upward Bound and the university community. The Academic Policy Groups serve the project in such areas as curriculum development and administration. Also called for in the guidelines is the community equivalent of the Academic Policy Group, the Public Advisory Committee. Such a committee serves "to assist in identifying potential students, developing community interest . . . and providing ideas and information for the sponsoring institution."¹ This committee fulfills OEO's statutory mandate for "maximum feasible participation" of the target group served and is expected to meet a minimum of six times a year. Cooperation with the area secondary schools is suggested by including their personnel on the advisory committee.

Each host university or college designs its own curriculum. To encourage a curriculum that motivates and educates those with whom the public-school system has failed, OEO has sought innovative and experimental teaching approaches in their review of project applications and their evaluation of on-going projects. Thus, a considerable effort has been made to encourage changes in current educational approaches to students from low-income families.

1. Guidelines, p. 12.

THE ROLE OF EAI

The administrative feature unique to Upward Bound and within the CAP structure is the contractual relationship between Educational Associates, Inc. (EAI), and the OEO program. Established in anticipation that the primary grantees would be universities and colleges, the contractual arrangement made it possible to engage a group that both had some standing in the academic community and could maintain maximum program flexibility. It was felt that this aspect of Upward Bound would make the program more attractive to potential grantees and ease the task of locating new projects.

From March to June of 1965, a grant from the Carnegie Foundation enabled 1,200 high school students to attend pre-college enrichment programs at Dillard, Fisk, Howard, Morehouse, Texas Southern, and Webster Universities. The first Upward Bound contract covering the period October 1965 to June 1966 was with the Institute for Services to Education (ISE), an organization set up by the American Council on Education that developed, demonstrated, and produced materials and teaching techniques used in the six pre-college centers. For fiscal year 1967 Educational Projects, Inc. (EPI), an offshoot of ISE, held the Upward Bound contract and performed duties for an increasing number of pre-college programs. From July 1967 to the present the prime Upward Bound contractor has been Educational Associates, Inc. (EAI), a group initially part of the EPI Washington office that separated itself from EPI and underbid the parent company for the Upward Bound contract.

The OEO contract with Educational Associates, Inc., calls for EAI to screen and recommend project applicants, draft program guidelines, hire and orient consultants used for program monitoring, develop a data system, evaluate individual projects and, when necessary, aid in the preparation of project applications. EAI was also given the responsibility for monitoring research performed by the Syracuse University Youth Development Center and the American College Testing Service for Upward Bound. The pervasiveness of EAI and its importance to the operation of Upward

Bound is illustrated by the fact that the normal OEO Upward Bound staff consisted of no more than six professionals, while EAI operated with a staff eight or nine times that size. In short, EAI performed a staff support role for Upward Bound.

This unusual contractual arrangement has important implications for resource allocation within the Upward Bound programs. The questions it raises are ones concerning efficiency and program decision-making: Did the contract with EAI produce a good product at a good price, and what impact has the EAI arrangement had on program design and operation? Administrative questions are something of a moot point at this juncture, however. The House-Senate Conference Report on the Higher Education Amendments of 1968 calls for "consolidation and revision of Talent Search and Upward Bound programs," transferring the Upward Bound program to the Office of Education as of July 1, 1969, and thereby ending the unique Upward Bound-EAI contractual arrangement.

EAI has shown administrative competence in its handling of the Upward Bound program. For project monitoring, EAI developed a system of biannual project visiting. The fact that college professors and persons having the same racial background are hired as consultants to perform an on-site monitoring function reveals a sensitivity to the problems of central office monitoring of individual dispersed projects. Professional or racial characteristics, in common, often work to increase the consultant's perception of project operation and make more probable a frank discussion between consultants and project personnel.

These biannual on-site visits result in reports and ratings containing a brief synopsis of program status (doing well, in trouble, etc.), and a discussion of enrollee performance and future plans. The reports are then returned to Washington where they become part of the EAI project file forming a longitudinal record on each Upward Bound project, and where they are reviewed by OEO Upward Bound staff. These individual project files are then consulted and used at project funding.

RESOURCES AND DATA AVAILABLE

The data available on Upward Bound are extensive. The individual project files kept by EAI are augmented by a series of Syracuse Youth Development Center studies

that report on student motivational change, academic achievement, and attitudes. In addition, EAI's system of computerized data files on each student gives program achievement and post-program status. This amounts to a considerable file of accessible information relevant to program evaluation. Research activities within Upward Bound, both those subcontracted by EAI and those directly let by OEO, appear to be responsive to operational needs of the program. Concern about the availability of financial assistance for the growing number of Upward Bound students enrolled in colleges each year led to the study performed by the American College Testing Service (ACT) that investigated the extent of the unmet financial needs among Upward Bound students. The concern was that the expanding demand on limited financial sources would increase financial need and force Upward Bound graduates out of college, thus negating the program aims. The relevance of the issue to program success is certainly clear.

Another ACT study compared a sample of Upward Bound students with a general population on the basis of college preparedness test scores. The purpose was to compare attitudinal and achievement patterns and to test the Upward Bound population using standardized instruments for projecting student success to determine the validity of this method of testing for a low-income population.

The impact of individual Upward Bound projects in "making the American high school more responsive to the needs of the [poor] child" is the point at issue in the on-going Greenleigh Associates research report for Upward Bound. The results of this survey of selected Upward Bound projects and their respective feeder schools have not yet been released.

In addition to these research programs, EAI is engaged in several other projects relevant to program evaluation and operation. A study to track bridge-student enrollees in Upward Bound projects during 1965 and 1966 was conducted this past summer under the direction of John Gardenhire. Its purpose was to develop college retention rates for these populations because the only data available on the post-secondary experience of these students were limited to the information on the original

six pre-college programs being monitored by Primary Prevention Research and Development Center. The tracking was successful, and these college retention rates will be discussed later. To aid in the description and evaluation of Upward Bound participants, the following research was also performed:

- the collection of student dropout data from colleges with Upward Bound graduates in attendance, and
- the categorization of colleges where Upward Bound students are enrolled by size, source of revenue, geographical location, and predominant racial makeup.

In light of the above efforts, EAI would appear to have become familiar with the aspects of operating and evaluating Upward Bound. The Upward Bound-EAI arrangement appears to be quite satisfactory as evidenced by the able administration and appropriate documentation that characterizes the program. Moreover, the pitfalls of a private company performing research for a governmental agency, particularly when that private company holds, as its single source of revenue, a contract from the program that it evaluates, appear to have been avoided.

DATA SOURCES

Data on the Upward Bound program are found in two major forms:

- individual project files, and
- national program information.

Both types of data aid in the administration and evaluation of the program, although the individual project files are used more frequently for administrative monitoring of the program than are the national data.

The individual project reports are prepared by consultants to the Upward Bound program who perform site visits. Every program site is visited twice per year--in the summer and during the academic year. The site-visitor reports comprise a longitudinal narrative of the program's performance vis-a-vis certain criteria. This is augmented by annual reports prepared by Education Associates, Inc. on every project. Together, these reports comprise the individual project file, which is used extensively in the administration of the Upward Bound program.

The first national project monitoring and evaluating system for Upward Bound was developed in 1966 by the Syracuse University Youth Development Center under contract to OEO. In 1968, it was superceded by a more quantitatively oriented data system developed by EAI. Together, these systems provide a remarkable amount of data on the Upward Bound student, program, and performance.

The Syracuse Reports

David E. Hunt and Robert H. Hardt authored a series of Syracuse reports that began with their Characterization of 1966 Summer Upward Bound Programs.¹ The reports were of two types: a summarization of the summer programs, and a report on the status of the Upward Bound program and students during the academic year. The objectives of this Syracuse data system were to characterize

- enroilees as a basis for comparing them with high school students in general,
- programs as a basis for determining differential program effectiveness, and
- the impact of summer programs on attitude and motivation in areas related to college success.

Information relating to these above issues was collected from a sample of 21 Upward Bound programs (out of the total number of 221 1966-1967 programs) in an effort to approximate ten percent of the Upward Bound population. The students were characterized on the basis of (1) responses to a Biographical Questionnaire, and (2) responses to a Pre-Program Student Questionnaire. Programs were characterized from (1) site visits or ratings of a majority of summer programs, and (2) responses of students in the sample projects to a Program Climate Questionnaire. Reported changes in pre- and post-program student questionnaires were used to demonstrate program impact.

1. In total, eight reports were produced under this contract. In subsequent citations, each report is distinguished only by its date of publication.

The Syracuse reporting system contains a wide range of attitudinal measures, which can be best described as an attempt to measure change through the use of motivational and achievement criteria. These data are used to describe the following motivational shifts occurring as a result of the 1966 summer program:

The summer Upward Bound programs produced significant increases in (1) motivation for college, (2) importance of possibility of college graduation, (3) self-evaluation of intelligence, (4) interpersonal flexibility, (5) self-esteem, and (6) internal control or self-responsibility. Whether or not these increases in academically relevant areas will be sustained and transformed into increases in academic accomplishment remains to be seen, but they give considerable encouragement in terms of the effects produced by a relatively short-term program. No significant increases were noted on the measures of (1) importance of college graduation, (2) future orientation, and (3) alienation.¹

Evaluation using these same attitudinal measures continued during the 1966-1967 academic year. A longitudinal charting and summarization of them appear in Figure 1.

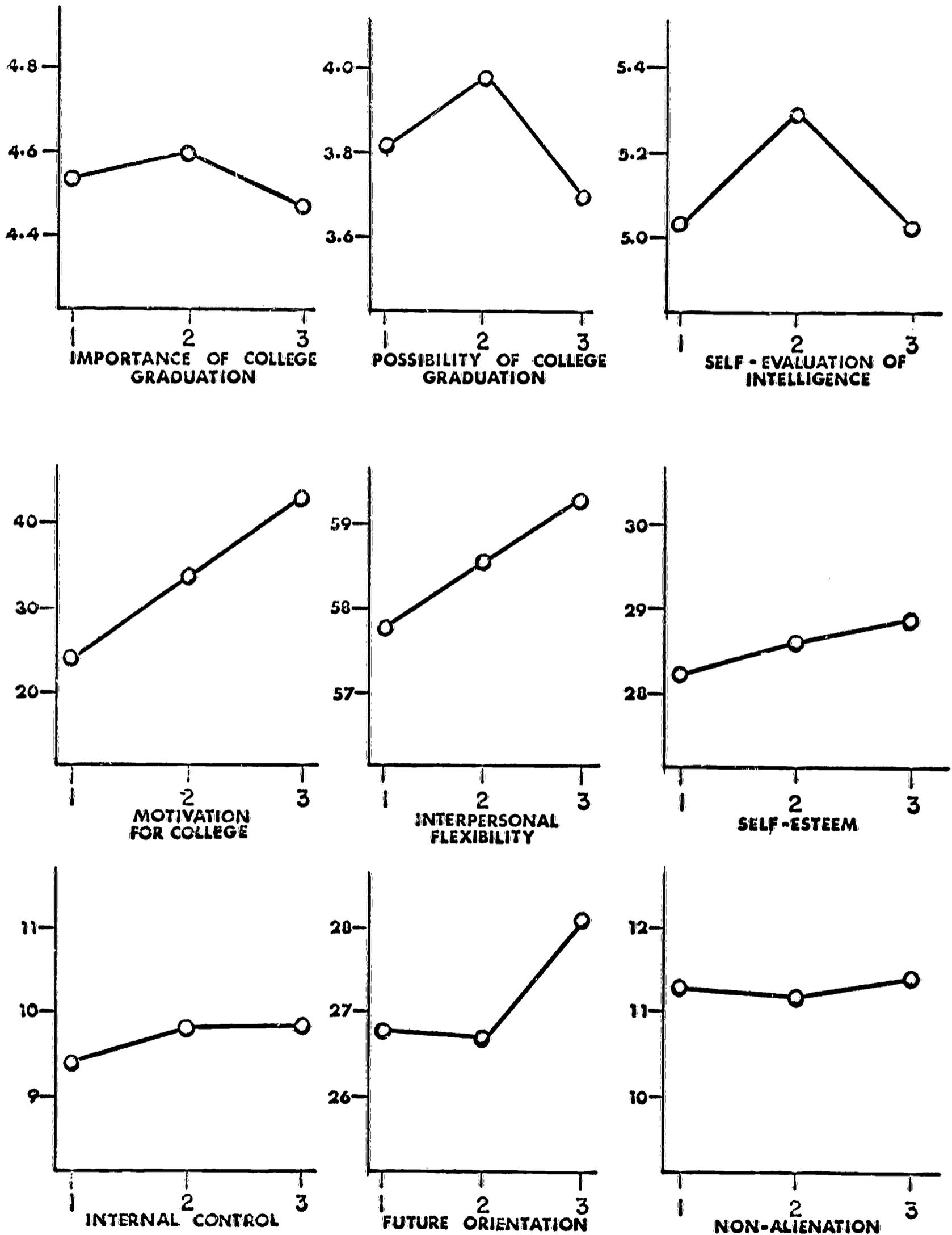
The graphic presentation in Figure 1 of scores on primary change measures at Time 1 (June 1966), Time 2 (August 1967), and Time 3 (Spring 1967) permits a consideration of the cumulative pattern of results. All six measures which increase indicate attitudes held by the student about himself and his goals, goals not so directly influenced by academic success or failure.

The decrease in the two areas of academic adequacy which had shown an earlier increase (possibility of college graduation and self-evaluation of intelligence) is probably a case of the student's returning to the old circumstances where he was not academically successful. The reversion to earlier attitudes about his academic adequacy were probably influenced by the experience of objective accomplishment, e.g., test scores, and by the unchanged attitudes of the school staff.²

1. Hunt and Hardt, November 22, 1966, p. 31.

2. Hunt and Hardt, July 1967, p. 6. Figure number changed for this report.

FIGURE 1
SCORES ON PRIMARY CHANGE MEASURES



Source: Hunt and Hardt, July 1967, p. 7.

The July 1967 Hunt and Hardt report added two achievement measures to the characterization of change in attitudes: the grade-point averages of the Upward Bound students, and their scores on the Iowa Tests of Educational Development compared with those of a matched control group.

Table 26 presents the first achievement measure, the mean grade-point average (GPA) before the Upward Bound program (June 1966) and during the academic-year program (February 1967) for 1,302 students by target program and total.

As Table [26] indicates, the GPA trend for both groups is downward. . . . the UB group decrease of $-.08$ was slightly worse than the $-.06$ However, the general conclusion from the results in Table [27] must be that there was no difference between the UB group and the control group in the change in GPA from June 1966 to February 1967.¹

The comparison of Upward Bound student performance with that of the control group emphasizes how difficult it is to reverse the downward academic achievement pattern of culturally disadvantaged high school students. This GPA decrease in both groups is "in keeping with findings for younger culturally disadvantaged students which consistently report that they continue to lose ground with the passing of each school year when compared with the other students."²

This downward GPA pattern is also a disturbing addition to the already abundant evidence that the public school system is not succeeding with the disadvantaged student. The student who makes progress in an extra-school environment almost immediately falls back into old patterns when he returns to the regular school system. Whatever motivational changes have occurred are reversed; and academic achievement, given the methods and materials used in high schools in low-income areas, becomes irrelevant or uninteresting. The seriousness of this downward trend in grades is more evident when the simultaneous dropout of the poorest students from the high schools is pointed out. This means

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1. Hunt and Hardt, July 1967, p. 15. Table numbers changed for this report.
 2. Hunt and Hardt, July 1967, p. 17.

Table 26

COMPARISON OF GRADE POINT AVERAGES FOR UB AND CONTROL STUDENTS BY PROGRAM^a

Program Number	N	Upward Bound Student GPA			Matched Control Student GPA			Difference Between Change Source ^b
		February 1967		Change	February 1967		Change	
		June 1966	February 1967		June 1966	February 1967		
12	33	2.30	2.09	-.21	2.38	2.51	+.13	-.34
13	110	1.88	2.07	+.19	1.87	1.82	-.05	+.24
15	19	1.62	1.67	+.05	1.65	1.44	-.21	+.26
21	45	2.46	2.49	+.03	2.48	2.45	-.03	+.06
22	78	2.26	1.93	-.33	2.22	1.88	-.34	+.01
23	115	2.25	2.16	-.09	2.23	2.13	-.10	+.01
25	75	2.82	2.70	-.12	2.81	2.78	-.03	-.09
27	85	1.94	1.56	-.38	1.92	1.79	-.13	-.25
31	59	2.33	1.89	-.44	2.37	2.10	-.27	-.17
32	63	1.87	2.03	+.16	1.86	2.00	+.14	+.02
41	65	2.11	1.78	-.33	1.74	1.58	-.16	-.17
42	20	1.38	1.26	-.12	1.31	1.14	-.17	+.05
43	6	1.69	1.91	+.22	1.95	1.93	-.02	+.24
51	84	2.51	2.60	+.09	2.50	2.57	+.07	+.02
53	56	2.53	2.52	-.01	2.42	2.30	-.12	+.11
54	68	2.63	2.66	+.03	2.62	2.59	-.03	+.06
61	71	2.26	2.18	-.08	2.25	2.25	.00	-.08
62	42	1.90	1.80	-.10	1.76	1.64	-.12	+.02
71	121	2.09	1.99	-.10	2.09	1.94	-.15	+.05
73	87	1.84	2.01	+.17	1.82	2.12	+.30	-.13
	1,302	2.19	2.11	-.08	2.16	2.10	-.06	-.02

a. Hunt and Hardt, July 1967, p. 16.

b. + = UB group change greater than control group change

- = Control group change greater than UB group change

that a generally improving student body gets poorer and poorer grades, and students with college potential like those in Upward Bound are only maintaining a C average.

The similarity of grade-point averages between the Upward Bound enrollees and matched students is interesting in light of information concerning the differences in course of study. Table 27 shows that a higher proportion of Upward Bound students are engaged in an academic curriculum, which may help explain why their grade-point averages showed no improvement over those of the matched group.

Table 27

PROPORTION OF UPWARD BOUND AND CONTROL STUDENTS IN
ACADEMIC CURRICULUM DURING 1965-1966 AND 1966-1967

	1965-1966	1966-1967	Change
Upward Bound	39%	43%	+4%
Control	37%	35%	-2%
Difference	+2%	+8%	+6%

Source: Hunt and Hardt, July 1967, p. 22.

The shift of 4 percent of Upward Bound students to an academic curriculum was significantly greater (0.01) than the 2-percent decrease for the control group.

There was a tendency for more Upward Bound students to enroll in Mathematics and Science during the 1966-67 year than control students. Although these differences are small, they give quantitative support to the qualitative impression of Upward Bound and school staff members that enrollees were electing more academically oriented, presumably more difficult, courses. Viewed in this light, the lack of difference (grade point average) in GPA change in Table 26 may reflect in part the fact that UB students were enrolled in more difficult courses during the 1966-67 year than were the control students.¹

1. Hunt and Hardt, July 1967, p. 22. Table numbers changed for this report.

While the number changing to an academic curriculum is not large, the fact that there has been a shift at all is an indication of Upward Bound program impact. Apparently, the program has had the effect of raising some participant expectations.

The EAI Data System

In October 1967, Education Associates began development of a new data system for Upward Bound, a system that became operational in April 1968. The system was designed to meet the need for a body of continuously updated, reliable, and readily usable statistical data about current and former Upward Bound students. The system is based on a body of data collected on each student while he is in the program. Part of these data, augmented by some additional items obtained when or after the student leaves the program, will be stored separately and used as the basis of a routine for following the subsequent educational process of Upward Bound students.

The core of the data base consists of 33 student-centered items such as date of birth, social security number, and date of entrance into the program. The core data subject to change (e.g., high school grade) will be updated annually while entry and exit of students will be updated quarterly.

Data covering two areas will be added to these core items. The first area is a College Admissions Progress Survey, whose primary use has been to assist in improving the quality of college counseling, and to develop preliminary gross statistics on college placement. The other area will contain scores on standardized and nonstandardized scholastic aptitude tests. Negotiations have been initiated with testing organizations for the direct collection of these data. In the meantime, information on tests administered by individual projects can be entered and stored in this part of the data system.

[Once] a student leaves a project, whatever the reason, most of the core and some of the extended data will be moved to a data base consisting of data on former UPWARD BOUND students. At the time a student leaves a project, the project will be expected to provide as much as

possible of the data on the circumstances of his leaving and on his current educational and employment situation. Afterwards, EAI will make vigorous efforts to keep up to date only the records of students who enter two or four year colleges and universities. This information will be collected partly from the student's UPWARD BOUND project and partly from the enrolling institution. The system will, of course, accommodate project-initiated updates to the records of former students not enrolling in two or four year schools.¹

The forms used to collect data from the individual projects are listed and briefly described below:

- (1) UBDS-1: add a new student or add to or correct core data on a current student.
- (2) UBDS-2: a computer-prepared form to be used to record bridge students' experiences in applying to colleges and universities. This form may also be used to record PSAT and SAT scores.
- (3) UBDS-4: report a student's initial departure from a project or add to or correct data on a former student.²

This data system can monitor program operation as well as guide program planning and analyses. Its specific role in program evaluation will be discussed later in this paper.

The Program Effectiveness

The goal of Upward Bound is to get "poor kids out of poverty by way of higher education." The program proceeds from the belief that higher education has, does, and therefore will get your people out of poverty. The validity of the college diploma process is not an issue in this paper; it is an assumed anti-poverty device. What is at issue about Upward Bound is whether the program is preparing and motivating its enrollees for success in a higher education system. Therefore, the degree of success that the program achieves is inherent in the number of participants it moves through colleges and universities.

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1. Upward Bound Data System Manual, p. 3.
 2. Upward Bound Data System Manual, pp. 3-4.

Getting a number of poor students out of poverty through higher education is a continual process. For analytical purposes, it is useful to break this process into its component parts. The necessity of analyzing performance at each stage of the process becomes particularly clear when a new and long-term program like Upward Bound is being evaluated. To date, this program has produced a limited final output (i. e., graduates), which means interim measures of effectiveness are needed. These intermediate measures of effectiveness can be developed for Upward Bound if the program is viewed as a process consisting of certain critical components. Each component can then be regarded as a separate activity and evaluated using conformance to the program guidelines and program goals as the criteria.

The Upward Bound program lends itself to a division into four functions, each of which represents a successive stage in the program's attempt to get young people out of poverty through higher education. The effectiveness of the program is, in fact, determined by the success of the program at each successive function:

- selection of program participants,
- preparation for college entrance,
- college admission, and
- college retention.

The analysis of the Upward Bound program, which immediately follows, consists of a presentation of data relevant to each of the above functions and an evaluation of these program data in light of the Upward Bound guidelines.

Selection of Program Participants

This section describes the Upward Bound student population and compares it with the designated poverty population in income, intelligence, and academic achievement.

The best available data on the family income of Upward Bound students seems to be that collected by Syracuse University in its system of biannual program characterizations. Unfortunately, this information does not report family income by family size.

Table 28 contains data collected in the summer of 1967 by the Project Director's Summary Questionnaire. The distribution of Upward Bound family income is displayed and the median income noted.

Table 28

ANNUAL INCOME OF FAMILIES OF UPWARD BOUND STUDENTS^a

Median Family Income: \$3,401.30			
Annual Income	Number	Percent	Cumulative Percent
\$ 0-1,499	1,624	8.6	8.6
1,500-1,999	1,571	8.3	16.9
2,000-2,499	2,030	10.8	27.7
2,500-2,999	2,001	10.6	38.3
3,000-3,499	2,741	14.6	52.9
3,500-3,999	2,116	11.2	64.1
4,000-4,499	1,889	10.0	74.1
4,500-4,999	1,476	7.8	81.9
5,000-5,499	1,422	7.6	89.5
5,500-5,999	845	4.5	94.0
6,000 and over	1,137	6.0	100.0
No estimate	<u>2,774</u>	<u>--</u>	--
Total	21,626	100.0	

- a. The source for these data is more recent and the data more explicit than those appearing in RMC's Report UR-060; these changes reflect recent agency comments.

Source: Hunt and Hardt, National Profile of 1967 Upward Bound Programs (November 17, 1967), p. 6.

These income data indicate that there is a prevailing pattern of low income among Upward Bound enrollees' families. When considered in conjunction with data collected in the summer of 1967 showing the distribution of family size among Upward

Bound enrollees--less than six persons, 46 percent; six to eight persons, 34 percent; nine or more persons, 19 percent--the data suggest more strongly that Upward Bound enrollees generally meet the poverty criteria. Nevertheless, the lack of income information on Upward Bound enrollees' families that is consistent with OEO's official criteria makes it impossible to draw final conclusions about the eligibility of the Upward Bound students. This lack of sufficient income-eligibility data appears to be a definite oversight in the program data structure and should be remedied either through the EAI profile currently being prepared on Upward Bound family income or through another system. This innovation is suggested in spite of the availability of CAP MIS data¹ on the income distribution of Upward Bound families because the reliability of this source is questionable.

The second guideline criterion for an Upward Bound participant is that he have the potential for success in college. Finding data to demonstrate the intelligence of the Upward Bound student, or, in program terms, whether he has the potential for success in college, is extremely difficult because of the nature of the issues. Testing on conceptual levels,² reported in Hunt and Hardt's Characterization of 1966 Summer Upward Bound Programs, indicates a wide distribution in intellectual potential among the enrollees (see the table below). This testing for conceptual level was not repeated in later Syracuse reports so there is no pattern from which to generalize. Based on this very slim evidence, slightly more than two-thirds of the students appear to have intelligence equal to college demands (intermediate and high conceptual level). However, the reliability of the paragraph test instrument used to determine these conceptual levels is questionable, since it has not been used with a population comparable to Upward Bound; and the impact of cultural and social factors is not known.

1. Also see data collected from the CAP MIS on the distribution of Upward Bound families above and below the poverty line (RMC Report UR-046).

2. This rating based on a paragraph completion test that typically begins as follows: "What I think about rules"; "When I am criticized"; and "When I am not sure"; etc.

CONCEPTUAL LEVEL OF UPWARD BOUND ENROLLEES

Conceptual Level	CL Score	Percent of Students
Low	1.3 or less	32.0
Intermediate	1.4-2.0	37.2
High	2.1+	30.8

Source: Hunt and Hardt, November 22, 1966.

The abundant data on grade-point averages of Upward Bound students can be used as a proximate measure of both college potential and underachievement, although a certain caution is advisable in the use of these data. Under the best circumstances--relevant and suitable teaching and a motivated, hard-working class--grade-point averages can indicate relative potential and/or achievement levels. This combination of best circumstances rarely occurs in the real world. Instead, and particularly in schools where the low-income Upward Bound student goes, teaching and learning circumstances are minimal. Therefore, the probability that these Upward Bound grade-point averages give a true picture of college potential or achievement is low. Good grades or passing grades may represent nothing more than a reward for being quiet, just as poor grades might be traced to apathy.

The grade-point average for Upward Bound enrollees in June 1966 was 2.19 on a four-point scale. In February 1967 it had decreased to 2.11, a loss of 0.08 points. The GPA of a control group compared with the Upward Bound students showed a decrease during the same period from 2.16 to 2.10. These data corroborate the steady decrease in achievement level among low-income students that tends to occur inversely with grade level.

The median GPA of the new students coming into the 1967 summer program was 2.37, slightly higher than the 1966 average. The distribution of grades shows a concentration of students with below a C-level average (see table below).

GRADE-POINT AVERAGE DISTRIBUTION OF
UPWARD BOUND ENROLLEES, 1967

Grade-Point Average	Number	Percent	Cumulative Percent
0.0-0.99	318	4.9	4.9
1.0-1.99	1,769	27.4	32.3
2.0-2.99	3,110	48.1	80.4
3.0-3.99	1,162	18.0	98.4
4.0-	106	--	100.0
Not available	<u>3,751</u>	--	--
Total	10,216		

Source: Hunt and Hardt, November 17, 1967, p. 6.

In general, the GPA data show an average high school academic performance among Upward Bound participants. Whether this indicates that the program is enrolling underachievers is difficult to assess just as it is unlikely that GPA data are a reliable criterion of college potential among these Upward Bound students. The suitable definition of an underachiever is one who performs significantly below his intellectual level, but measuring both this potential and achievement proves to be difficult. So, the following is left to hypothesize: If the Upward Bound students do possess the potential they are reputed to, then their poor performance in poor schools indicates that they are underachievers.¹

Preparation for College Entrance

According to the Upward Bound guidelines, the program is designed to generate "the skills and motivation necessary for success in education beyond high school"² Therefore, the success of the program in preparing the enrollees for college entrance should be evidenced by some improvement in academic performance and motivational shifts. Upward Bound has collected data that relate to signs of preparatory success.

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1. The relatively high college retention rates among Upward Bound students seems to indicate that their average high school records do represent underachievement.
 2. Guidelines, p. 4.

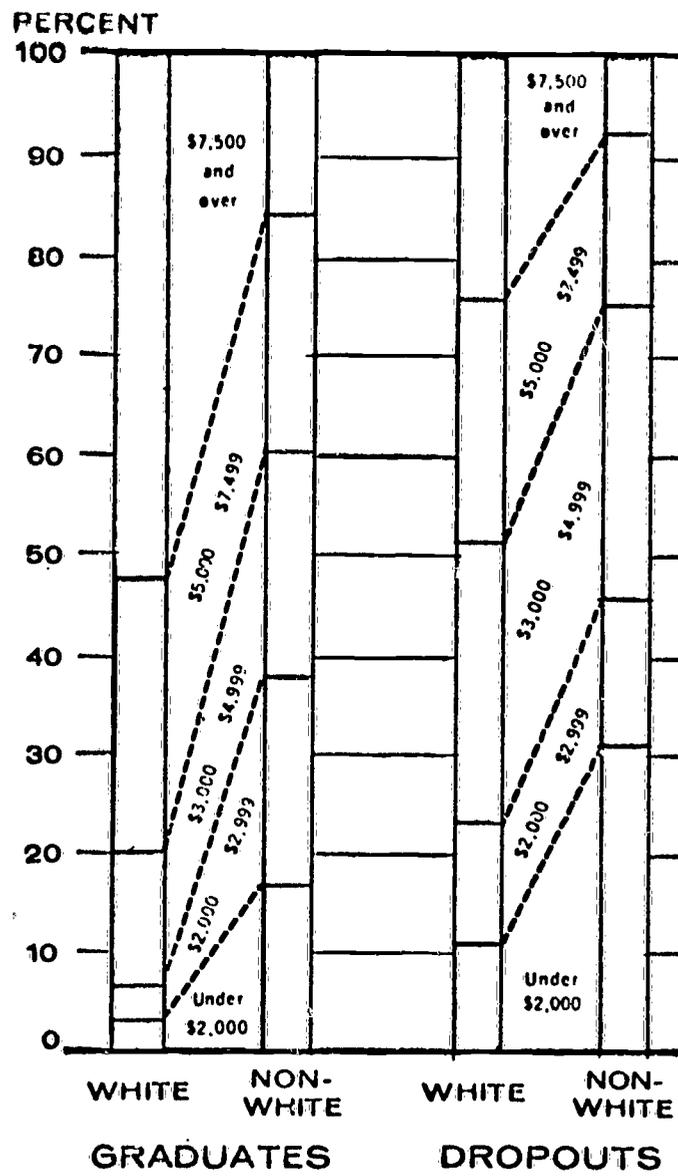
Some of these indicators, such as curriculum change and enrollee grade-point averages, have already been discussed in another context and will only be briefly noted here. One indicator, reduction in the rate of high school dropouts among low-income students, will be discussed at length. The indicators demonstrating the attitudinal impact of the program including those mentioned above will be discussed later.

As evident from Table 26, Upward Bound has not succeeded in raising the grade-point averages of its enrollees. In fact, the enrollee and control-group grade-point averages show a downward trend from June 1966 to February 1967. This gradual downward trend in GPA of Upward Bound participants can perhaps be explained by a positive sign: 8 percent of the students made a curriculum shift to a college preparatory program during the academic year 1966-1967. This significant curriculum change, which suggests an upward adjustment in motivation, may also have resulted in lower grades among the enrollees who attended more difficult classes. To summarize, these indicators tell us that (1) the program has not changed the normal GPA pattern among low-income students, and (2) enrollee transfers to an academic curriculum during the 1965-1966 period (+2 percent) and the 1966-1967 period (+8 percent) give evidence of rising motivation.

Retardation of High School Dropout Rates. The measure to be discussed at length, retardation in high school dropout rates, is a negative way of measuring whether the generation of skills and motivation is evidenced in the modification of educational patterns among the low-income students.

Figure 2 demonstrates how large a percentage of students from low-income families never complete high school. For those in families with incomes below \$5,000, approximately 51 percent of the white and 74 percent of the nonwhite drop out of high school. While the national population differs from the Upward Bound target group in aptitude level, the data nevertheless show the difficulty of retaining low-income students in secondary schools, the minimal condition for exposure to a college education. These high dropout rates also mean that a program like Upward Bound moves against formidable negative educational values and patterns,

Figure 2
 FAMILY^a INCOME OF HIGH SCHOOL GRADUATES AND DROP OUTS,
 AGES 16 to 21, BY COLOR, OCTOBER 1966



a. Includes only families of unmarried persons living with, and related to, head of household.

Source: Elizabeth Waldman, "Employment of High School Graduates and Dropouts in 1966," Monthly Labor Review, 90, 7 (1967), 20.

the reversal of which is difficult but, nonetheless, central to program effectiveness. It also indicates that Upward Bound has a motivational as well as preparatory function within the high school.

In addition to these national data, Upward Bound also gathered information through the Syracuse system of reports on the grade levels achieved by older siblings of enrollees. These are the most comparable data available since motivational and intelligence levels within family units are probably closer to enrollee characteristics² than those among the general low-income population.

UB students were asked to report the highest school grade completed by each of their older brothers and sisters. These data provide an important standard of comparison against which to assess the educational progress of UB students now and in future years.¹

The data reported in Table 29 indicate that 3 percent of Upward Bound students have brothers who are college graduates, 9 percent who are still in college, and 5 percent who are college dropouts. Among Upward Bound older sisters, nearly 5 percent are already college graduates, another 10 percent are currently in attendance, and 5 percent are college dropouts.

Table 29

HIGHEST GRADE COMPLETED BY OLDER BROTHERS AND SISTERS OF UPWARD BOUND STUDENTS

Highest Grade Completed	Older Brothers, Percent	Older Sisters, Percent
School dropout	30	23
Still in high school	9	8
High school graduate	37	41
Business or technical school	7	8
College dropout	5	5
Still in college	9	10
College graduate	3	5

Source: Hunt and Hardt, October 31, 1967, p. 9.

1. Hunt and Hardt, October 31, 1967, p. 9.

2. The correlation between siblings' intelligence test scores averages about plus 0.50. Arthur Jensen, "How Much Can We Boost IQ and Scholastic Achievement?," Harvard Educational Review, 39, 1 (Winter 1969), 35.

Utilizing these data and making certain provisional assumptions that allow the allocation of older siblings still in high school or college to certain grade levels, it can be estimated that¹

Among Older Brothers

67 percent will finish high school
19 percent will attend college
6 percent will graduate from college

Among Older Sisters

75 percent will finish high school
22 percent will attend college
10 percent will graduate from college

These data, of course, assume similar educational patterns will prevail within families. While this assumption is not documented, there is intuitive appeal in the idea that educational achievement is strongly influenced by parental and sibling behavior. Therefore, for the purposes of arriving at normal educational levels for this population, sibling attainment will be used.

Data on the high school dropout rates of Upward Bound program participants are not available since, until the new EAI data system, the only recorded dropout rate of students was program dropout, which does not necessarily indicate high school dropout. However, a question asked Upward Bound students about the coming year's educational plans gives a rough idea of the magnitude of the anticipated dropouts among program participants; the following table presents the results of that question:

1. "The first assumption is that older brothers still in high school would be similar to all other older brothers in the rate at which they graduated from high school, entered and completed college. The second assumption is that older brothers still in college would graduate at the same rate as all other older brothers with college experience." Hunt and Hardt, October 31, 1967, p. 10.

THE EDUCATION PLANS OF UPWARD BOUND ENROLLEES, 1967

	(1) Total, percent	(2) New, percent	(3) Returning, percent
Students still in high school	(82.7)	(92.0)	(73.9)
(1) Will return to the same school	74.9	82.1	68.0
(2) Will attend new school	7.7	9.8	5.7
(3) Will not attend school	0.1	0.1	0.2

Data collected from September 1966 to June 1967 showed a 26-percent dropout rate for the program, but there is evidence that this rather high program dropout rate occurs largely before the bridge summer¹ (after graduation and when college admission is secured) and is partially due to the success of the program: About 40 percent of the high school graduates who did not return for the Upward Bound 1967 bridge seminar cited summertime work for college money as their reason.

One estimate of enrollees who become high school dropouts was used by Judith Segal of OEO's RPP&E staff in a cost-benefit analysis² that she prepared on Upward Bound. The rate was estimated at 2.6 percent, but since the average Upward Bound student spends two summers in the program and the dropout pattern among low-income students is high, an annual rate of 5 percent will be used.

To get some idea of the relative impact of the program on educational patterns, the Upward Bound rate of 5 percent can be compared with the 35-percent dropout rate experienced in the general low-income student population and the 29 percent of Upward Bound older siblings who drop out of school. Compared with these latter patterns, the Upward Bound dropout rate is a definite improvement.

Performance of older siblings in school should not be equated with Upward Bound student performance, but it can serve as a reliable guide for predicting the kind of educational pattern likely to prevail. Therefore, the hypothesized dropout rate of 5 percent among Upward Bound participants probably represents a reduction

1. Data collected between September 1966 and June 1967 by EAI on the program dropout rate among nonbridge students because of lack of interest showed a rate of 4 percent.

2. Judith Segal, "Benefits and Costs of the Upward Bound Program," June 1967 (mimeograph).

in the dropout rate, which could be as high as the 29-percent rate experienced by enrollees' older siblings. While the exact magnitude of this improvement is uncertain, it does appear from the differences in dropout rates between the two groups that Upward Bound has significantly altered this pattern.

Motivational Change. Three measures developed in the Hunt and Hardt series as indicators of motivational change have already been discussed in this paper. Therefore, their treatment here will be brief. Evidence of attitudinal change using the nine primary change measures (see pages 71 and 72) appears to be inconclusive. The same is generally true of the enrollee grade-point averages (see discussion on page 83).

In addition to these measures, the attitude of the program enrollee towards the program may also indicate motivational shift (supportive of college success). Signs of a positive reaction among participants, given the mechanics of recruitment, were that 14 percent¹ of the 1967 new enrollees heard about Upward Bound from an enrollee and that 48 percent of Upward Bound enrollees reported very favorable opinions of the program from their best friends.

College Admission

The most direct way to determine the effectiveness of Upward Bound in changing college admission patterns among the low-income student is to compare program participant rates with those of other populations.

Of course, the improvement in college admission and retention is not wholly a function of academic achievement and improvement among Upward Bound students. Factors such as financial aid, notifications of college admissions officers, communication of sources of aid, and assistance with employment greatly improve the student's chances of success. The program justifies intercession on the basis that low-income students are usually at a great disadvantage in the admissions procedure. It is not until the second, third, and fourth years of college that individual performance becomes the primary determinant in program success.

1. Hunt and Hardt, October 31, 1967, p. 16.

To detect what success the program has had in changing educational patterns within the low-income group, and how these college-going rates among the poor compare with those of the general population, Table 30 was prepared.

Table 30
COMPARATIVE COLLEGE ADMISSIONS RATES

College Admissions	Percent Enrolled		
	Upward Bound ^a	Upward Bound Older Siblings ^b	National Population
1965	76.7	20	(c)
1966	80.9	20	(c)
1967	79.5	20	41

- a. Figures compiled and made available by Charles Cole and his staff at Education Associates, Inc., based on provisional assumptions about allocation of Upward Bound older siblings.
- b. Number and percent of 17 year olds expected to attain various levels of education. Data obtained in the fall surveys of the U.S. Department of Commerce, Bureau of the Census, and reported in Current Population Reports, Series P-20, reprinted in American Education, September 1968, p. 20.
- c. Figures not available for these years.

Approximately 79 percent of the eligible Upward Bound students enrolled in two- and four-year colleges as compared with an average of 20 percent for their older siblings. Thus, the college-going rates were 400 percent higher; and Upward Bound participants showed an actual 300 percent improvement in college admissions as compared with their older siblings.

College Retention

College retention rates appear to be a good indication of program effectiveness and individual student achievement. The EAI data provide for the direct collection of this information via its individual student files. However, because this system became operational in April of 1968, it did not include matriculation and retention data for the first two years of program operation.

Data on college matriculation and retention rates for 1965 and 1966 were collected and have been tabulated. Out of the 17 pilot projects in 1965, 11 are included (five did not have bridge students and the data from one project, Tennessee A&I, was incomplete and inconclusive). Therefore, out of the 1,307 bridge students in the pilot programs, data are available on 1,277 enrollees or approximately 98 percent of the students. The same high percentage of reporting is found for 1966. Out of 1,312 bridge students at 29 institutions, data are available on 1,275 or 97 percent. These data, augmented by data based on a 39-percent sample of 1967 Upward Bound students, show that entrance and retention in two- and four-year colleges for Upward Bounders is higher than the national average (see Table 31).

The Office of Education reports that among the present 17 year olds, 20.3 percent--about half of the 40.9¹ percent who will attend college--are expected to earn bachelor's degrees. The Muscatine Report, prepared by a special committee

Table 31
UPWARD BOUND
COLLEGE MATRICULATION AND RETENTION

Year	Number of Bridge Students	Number Enrolled in College	Percent Enrolled	Number Remaining	Percent of Enrollees Remaining
1965	1,277	1,028	80.5	791	76.9
1966	1,275	1,047	82.1	863	82.4
1967	4,855	3,861	79.5	3,383 ^a	82.4 ^a

a. Extrapolated from data based on a February 1968 sample of 39 percent of Upward Bound students enrolled in two- and four-year colleges.

Source: Figures compiled and made available by Charles Cole and his staff at Educational Associates, Inc.

1. Number and percent of 17 year olds expected to attain various levels of education. Data obtained in the fall surveys of the U.S. Department of Commerce, Bureau of the Census, and reported in Current Population Reports, Series P-20, reprinted in American Education, September 1968, p. 20.

of the Berkeley faculty, reports a similar pattern; of those who enter as freshmen only about half graduate and the others either drop out or transfer.¹ Compared with these national rates, the Upward Bound student retention rates are an improvement. The same applies when a comparison is made with the performance of Upward Bound older siblings. It is estimated that only 40 percent of the older siblings who enter college earn a bachelor's degree.

Although a higher proportion of students from the general population gain admission to college, the retention rates for the general and low-income (Upward Bound older siblings) populations are quite similar: 40 to 50 percent of those originally admitted remain to graduate. In contrast, Upward Bound students in their third year have retention rates of 80 percent, a rate well above the 50-percent graduation rates experienced by the general population and Upward Bound older siblings. While these Upward Bound college retention rates are not strictly comparable with these cited college graduation rates, the percent of Upward Bound students remaining after three years is sufficiently large to justify the expectation of higher college graduation rates.

Data collected by EAI on the retention rates at nine four-year colleges during 1960, 1961, and 1962² provide another interesting contrast. According to these data, 70 percent of the entering freshmen remained to enter their sophomore year, 57 percent remained to enter their junior year, and 52 percent remained to enter their senior year. Compared with the retention rates shown by the study of students at the end of two and three years of college, respectively, Upward Bound's 1965 and 1966 rates are considerably higher. On the basis of the most recent data on the Upward Bound class of 1967, 70 to 34 percent³ returned to enter their second year--rates that approximate the national patterns among the college-going population.

1. Daniel Bell, "The Scholar Concerned," The American Scholar, 37, 3 (1968), 402.

2. Data Systems Office, Educational Associates, Inc., "College Retention and Attrition: A Sampling of Some Upward Bound Host Institutions" (mimeographed).

3. This figure differs from that appearing in RMC's Report UR-060; this revision incorporates the most recent agency data and comments.

[Charles] Cole [Director of the EAI Data Systems Office] cautioned that it would be unwise to expect repetition of high retention rates for later bridge classes. As UPWARD BOUND has grown in size, it has become more heterogeneous. He stated that patterns of college enrollment for the 1967 bridge class and college acceptance for the 1968 class (which together include five times as many students as the 1965 and 1966 groups combined) have shifted significantly towards that prevailing for the college-going population as a whole.¹

While these retention rates are lower than the 1965 and 1966 percentages, they do not necessarily indicate program failure. As the program expands and recruitment, of necessity, becomes less selective (including more risk students), the retention percentages will probably decline. The fact that young people from low-income families, 12,000 of whom Upward Bound has aided in getting into college, can approximate the national patterns of college retention is no small achievement, and Upward Bound personnel still find this performance acceptable.

The scores of 3,000 Upward Bound enrollees on a standardized college aptitude test in the spring of 1967 give some indication of why the approximation of normal college retention rates among enrollees is viewed as an acceptable goal. For rating college potential, the American College Testing Service developed four classifications: bottom range, low middle, high middle, and high. The bottom range is the high-risk college admission group, the group that normally has the highest dropout rates. As can be seen from Table 32, 60 percent of the Upward Bound students scored in this bottom range compared with 14 percent of the general population, and a total of 86 percent scored below the national mean for the college-going population.

These low achievement scores among Upward Bound students--the only rating we have of them compared with the average college population--indicates that their college retention will be considerably lower than national rates. However, this did not occur. As noted above, this 1967 class is experiencing retention rates comparable with or slightly higher than those among the normal college-going population.

1. James Mulligan, "Study Shows High Entry, Retention of UB Students," Idea Exchange (October 1968), p. 24.

Table 32

ACT SCORES, UPWARD BOUND AND THE GENERAL POPULATION

Level of Achievement	Upward Bound	General Population
Bottom Range	60%	14%
Low Middle	26%	32%
High Middle	12%	35%
High	2%	14%

Source: Charles Cole, EAI, based on ACT Upward Bound Student Profile.

There is the possibility, of course, that the apparent contradiction between the low ACT rating of Upward Bound students and their strong college performance to date indicates that the test is not suitable for predicting patterns of college retention among low-income students. While the reliability of the ACT test instrument should be investigated, for the present the normal college retention rates of Upward Bound students, despite the classification of a majority of them (86 percent) as "risky" college admissions, give evidence that the Upward Bound program has effected a change in the college-going and retention patterns among students from low-income homes.

CAP MIS STATISTICAL ANALYSIS

In the CAP Management Information System, Upward Bound is reported separately for summer and academic-year follow-up activities. The summer quarter covers July through September, and the follow-up data are for one quarter during the academic year. Since Upward Bound enrollees often participate in the program for a full year or longer, treating the two sets of data as additive results in double counting. This additive approach is necessary, however, because CAP MIS annual enrollee figures do not exist.

The following is a summary of the data collected on four program parameters. Multiplying the academic-year quarterly costs shown in the CAP MIS by three

and adding this to the summer CAP MIS quarter cost gives us a yearly cost per participant of \$1,286. This closely corresponds to the OEO planning figure of \$1,250.¹ However, it is lower than the \$1,475² annual cost per enrollee used in our cost-benefit analysis of the program, a figure computed by taking an average of the Upward Bound appropriations and participants for the years 1966 and 1967. The lower CAP MIS costs could be explained by a double counting of program enrollees participating in both the academic year and summer phases of the program. The data used to compute the higher \$1,475 cost per participant delineated old and returning students and, therefore, this estimate appears to be more reliable. Furthermore, the CAP MIS cost-per-participant figures are based on a more limited sample, and the \$700 to \$4,000 range in costs is wide enough to indicate the existence of certain data irregularities.

Table 33
UPWARD BOUND CAP MIS PARAMETERS

	Summer		Academic Year	
	Mean	Standard Deviation	Mean	Standard Deviation
Expenditures Per Participant Per Quarter	\$680	\$284	\$267	\$202
Percent of Actual Participants Dropping Out	4	3	4	3
Percent of Actual Participants With Positive Results ^a	96	5	91	22

a. Those continuing high school or going to post-secondary education.

1. Cited in Sar Levitan, Fighting Poverty With a Sheepskin, p. 4.

2. Computed from the Upward Bound appropriations and total enrollees in 1966-1967 and 1967-1968.

CAP MIS summer and academic-year data both show a program dropout rate of 4 percent. Since these are quarterly figures, an additive annual dropout rate is 16 percent. Other data on Upward Bound collected by Educational Associates, Inc. in a 1967-1968 profile of 18,000 Upward Bound students show a 4-percent annual program dropout rate due to lack of interest.

If program dropout is to be used as a parameter of program effectiveness, it seems important to also know the reason for participants' dropping out, as dropping out is probably only significant when it reflects a negative view of the program. Therefore, the gross 16-percent program dropout rates contained in the CAP MIS seem to be less reliable for determining program effectiveness than the program dropout rates collected by EAI, which reflect lack of interest.

The parameter developed for actual to planned participants will not be discussed since Upward Bound personnel feel there was a widespread misunderstanding of this question. Further, program size was so limited that the demand for entrance always exceeded the spaces available.

This is the inverse statement of the program dropout parameter. The percent of participants with positive results are those enrollees who continue high school and go on to post-secondary education. Although the mean percentages of the summer and academic year do not diverge widely (96 and 91 percent, respectively), the number of programs reporting summer data is six times greater than those in the follow-up sample. This larger sample probably makes the summer quarter data more reliable. These data show 96 percent of the participants having positive results.

UPWARD BOUND BENEFIT-COST ANALYSIS

Unlike Head Start, whose participants are more than ten years away from full-time employment, and even ABE, one quarter of whose students are currently non-working mothers, we expect practically all of Upward Bound's graduates to be job market entrants. This fact, coupled with interest in the program derived from its

apparent success in furthering the education of disadvantaged youth and the availability of adequate data to carry out such an analysis, seemed to suggest the possibility of preparing an overall estimate of income gain attributable to Upward Bound in order to view the program in a benefit-cost context. Such an analysis requires the association of mean income level figures with various levels of educational achievement. However, meaningful calculation of the income gain attributable to an Upward Bound-type program can still be based on such average income numbers after appropriate adjustments for sex, race, age, and regional variations have been made. Furthermore, in the case of Upward Bound, the availability of data on older sibling educational records provide a convenient and uniquely appropriate control group against which to measure program participant performance.

Briefly stated, a benefit-cost computation was initiated by assuming that Upward Bound enrollees would have followed educational patterns similar to their older siblings. Incremental achievements relative to older siblings were all attributed to the existence of the program. The educational level differentials were then translated into income streams by use of the mean income level figures associated with high school dropouts, high school graduates, those completing one to three years of college, and college graduates. Values for these income differentials were then computed and extrapolated as fixed amounts over the expected working life spans of those adjudged to have acquired incremental education as a result of program participation, i. e. , to age 65 with adjustment for normal attrition.¹ (This procedure probably produces a somewhat modest estimate of income gain since one expects the income differentials associated with higher educational levels to increase over time.)

Costs for the comparison were calculated to include the program costs to the government and both the foregone wages and the costs of sending those Upward Bound participants through college whose presence at such educational levels is

1. Department of Health, Education, and Welfare, Public Health Service, Life Tables, II, 5, Table 5-3.

identified with the existence of the program. (The stipends paid to Upward Bound enrollees are treated as a transfer payment and are shown both as program benefits and costs.)

Applying discount rates of 5 percent, 7.5 percent, and 10 percent to both program benefits and costs, benefit-cost ratios of 4.8, 3.4, and 2.6, respectively, were then calculated. These ratios would certainly seem to indicate that the economic impact of funds allocated to Upward Bound is significantly greater than transfer payments and, in fact, would suggest that Upward Bound ranks as one of the more successful federal anti-poverty programs. However, the assumptions and procedures required to develop a benefit-cost ratio are sufficiently involved to make the comparison of such values tenuous except in the case of like programs, and only then if they are prepared in some standardized fashion. Since Upward Bound is relatively unique, the usefulness of its benefit-cost ratio for interprogram comparison is quite limited.

It can be argued that a benefit-cost evaluation employing direct income gain as the sole measure of program achievement would significantly understate the value of Upward Bound as an anti-poverty device. For one thing, it has frequently been pointed out that benefit-cost analysis takes no account of income distribution effects. In a number of respects, Upward Bound has loftier ambitions insofar as the economic and social status of its participants are concerned than any other public program. Income differential alone falls considerably short of describing the anti-poverty implications of transforming a would-be ghetto dropout into a teacher or an engineer as compared with equipping him or her to hold down a job as an automobile mechanic or a hairdresser. Benefit-cost would have difficulty properly evaluating the social and economic mobility gains accruing from Upward Bound participation that would probably occur downstream and would tend to excessively discounted.

While the program has not been in existence long enough for empirical evidence to exist, it seems fair to assume that a sizable proportion of those introduced to higher education by Upward Bound will eventually depart from ghetto communities. In the case of minority groups whose residence mobility may be restricted, successful program participants who remain in the ghettos would serve as a focus for effecting changes in local social structures. In either case, long-run anti-poverty benefits might be expected to accrue, but again, of a variety that benefit-cost analysis would tend to neglect.

Computation of Benefits and Costs

The cost per participant per year developed for this analysis is an average of the expenditures per Upward Bound student during 1966-1967 and 1967-1968. It was computed by dividing the total appropriations for each year by the number of participants and then taking the average of these two figures.

Table 34
UPWARD BOUND PROGRAM PARTICIPANTS AND COSTS

Number of Students	1965-1966	1966-1967	1967-1968
Summer	2,061.0	20,812.0	23,128.0
Bridge	1,139.0	1,306.0	4,855.0
Full Year	1,761.0	19,240.0	18,000.0
Total Appropriations, millions of dollars	2.7	30.6	33.9 ^b
Cost per Student per Year, dollars ^a	827.0	1,456.0	1,433.0

a. Computed by dividing total dollars by number of participants.

b. Assumes \$800,000 carryover from 1966-1967.

Source: Upward Bound Report submitted to the General Accounting Office, April 4, 1968.

Program costs were adjusted to reflect length of time in Upward Bound. It was estimated that participants who dropped out of high school were in Upward Bound no more than two thirds of a year. For a high school graduate, a full-year cost of \$1,475 per participant was used. For college graduates and college dropouts, the cost of an additional summer was added to the year cost and totaled \$2,458.

Included in the program cost for each level were calculations of wages foregone and college cost figures (discounted over a two-year period within the one to three years of college category and discounted over a four-year period within the college graduate category). The college costs used in the analysis were also weighted according to a public-private factor using percents and annual college costs developed by Froomkin in Students and Buildings.¹

Table 35
COSTS

	High School Dropout	High School Graduate	1-3 Years College	College Graduate
Percent Incurring Costs	5	15	45	35
Number of Participants Incurring Cost ^a	3,682	11,047	32,403	26,512
Costs/Participants (Present Value) ^b	\$976 (\$976)	\$1,475 (\$1,357)	\$2,458 (\$2,229)	\$2,458 (\$2,229)
Aggregate Program Costs (in millions)	\$3.6	\$14.8	\$68.8	\$56.3
Wages Foregone (in millions)	\$1.3	\$3.7	\$20.6	\$16.8
College Costs (in millions)	--	--	\$76.6	\$120.3
Total Costs (in millions)	\$4.9	\$18.5	\$97.2	\$237.1

a. Computed using the total number of students enrolled in Upward Bound to date, 73,644.

b. Assuming 5 percent discount rate.

1. Joseph Froomkin, Students and Buildings: An Analysis of Selected Federal Programs for Higher Education, Planning Paper 68-2, U.S. DHEW-OE, Washington, D. C., Government Printing Office, May 1968, pp. 10-11.

Benefits

The income benefits attributed to Upward Bound were based on the differential in educational attainment between program enrollees and their older siblings. This differential is displayed in Table 36.

Table 36
EDUCATIONAL ATTAINMENT TRENDS

	Percent of High School Dropouts	Percent of High School Graduates	Percent Who Went 1-3 Years of College	Percent of College Graduates
Upward Bound Enrollees	5	15	45	35
Older Siblings	29	51	12	8
Percentage Differential	24	36	33	27

To avoid counting benefits twice, each percentage differential represents the number of students who attain a certain educational level but go no further. For example, benefits within the one to three years of college category were accrued by 33 percent of the total population, i. e., the difference between the 12 percent attendance rates among Upward Bound older siblings and the 45 percent attendance rate of program enrollees.

These differentials were then converted into benefits by determining the incremental income gains that would occur because of increased educational attainment to these levels: high school graduate, one to three years of college attendance, and college graduate. The benefits were computed up to age 65 using 19 years as the average age of an Upward Bound enrollee. The steps in this process are outlined below.

Table 37
BENEFITS

	High School Dropouts	High School Graduates	1-3 Years of College	College Graduates
Percent Incurring Incremental Benefits	--	24.0	33.0	27.0
Number of Students Incurring Benefits	--	17,675.0	44,186.0	19,884.0
Amount of Student Stipends (dollars)	200.00	270.0	340.0	340.0
Aggregate Student Stipend (millions of dollars)	0.74	2.8	10.1	8.2
Marginal Salary Increases (dollars)	--	750.0	651.0	1,265.0
Salary Benefit per Year (millions of dollars)	--	13.3	22.4	41.1

These income gains attributable to Upward Bound were then projected to age 65, adjusted for attrition, and discounted by use of three rates: 5, 7.5, and 10 percent. The resulting benefit figures were then compared with the program cost figure of \$357.7 million:

- 5 Percent

Benefit figure discounted to age 65	\$1,703.2 million
Cost figure	\$ 357.7 million
Ratio	1:4.8

- 7.5 Percent

Benefit figure discounted to age 65	\$1,228.7 million
Cost figure	\$ 357.7 million
Ratio	1:3.4

- 10 Percent

Benefit figure discounted to age 65	\$ 946.4 million
Cost figure	\$ 357.7 million
Ratio	1:2.6

APPENDIX A

EVALUATION OF THE HEAD START PROGRAM

At the 1964 hearings of the House Education and Labor Committee, Sargent Shriver was asked what was the War on Poverty's greatest measurable success. His response was a categorical commendation of Project Head Start--it "is OEO's greatest single measurable success."¹ Yet as a specific program, Head Start was neither mentioned nor conceived at the time of the passage of the Economic Opportunity Act of 1964. The implicit authority for creating Head Start comes from Title IIA, Section 205(a) of the Economic Opportunity Act, which reads as follows:

The Director is authorized to make grants to, or to contract with, public or private nonprofit agencies, or combinations thereof, to pay any part or all of the costs of community action programs which have been approved by him pursuant to this part, including the cost of carrying out programs which are components of a community action program and which are designed to achieve the purposes of this part. Such component programs shall be focused upon the needs of low-income individuals and families and shall provide expanded and improved services, assistance, and other activities, and facilities necessary in connection therewith. Such programs shall be conducted in those fields which fall within the purposes of this part including employment, job training and counseling, health, vocational rehabilitation, housing, home management, welfare, and special remedial and other noncurricular educational assistance for the benefit of low-income individuals and families.

1. U.S. Congress, House Committee on Education and Labor, Hearings on the Economic Opportunity Act of 1964 (Washington 1964), pp. 1336-46.

The emphasis of this statute is on "employment, job training . . . and vocational rehabilitation," focusing on the problems of young adults in poverty. In fact, it was argued during the Congressional Hearings that the act placed too much emphasis on 16-to 22-year-olds. Dr. Urie Bronfenbrenner, a psychologist, testified that a program for preschoolers could accomplish much more with the same funds.¹ During these hearings, many Congressmen indicated a preference for the inclusion of a pre-school program. In the War on Poverty's Congressional Presentation of March 1964, "Programs for the Benefit of Preschool Children" were included as an activity to be undertaken in a Community Action Program.

However, it was not until the early part of 1965 that Head Start as an entity was created. Sargent Shriver, Director of the President's War on Poverty, asked Dr. Robert Cooke, Professor of Pediatrics at the Johns Hopkins University School of Medicine, to form a panel of experts to consider programs to increase the opportunities offered to children of the poor. The resulting memorandum, "Improving the Opportunities and Achievements of the Children of the Poor," submitted by Dr. Cooke as chairman of the Planning Committee, Project Head Start, outlined the components of the future Head Start program. President Johnson's Education Message of January 19, 1965, announced the decision to fund Head Start. On February 19, 1965, Sargent Shriver presented the aims of the Head Start program to prominent women at the White House.

HEAD START CONCEPT

Originally, the purpose of Head Start was, in the words of the Head Start charter, to offset the progressive retardation observed in deprived children during their years of schooling, because the "academic achievement gap between disadvantaged and middle-class children shows up very early in the school years and increases dramatically in the higher grades."² Participation in preschool programs as of 1966 seemed to be

1. Hearings on the Economic Opportunity Act of 1964, pp. 1336-46.

2. John Leonard, "Why Not Use TV for a Head Start Program," New York Times Magazine, July 14, 1968, p. 26.

directly related to family income level (Table A-1) with children of minority groups less likely to have attended a preschool program. In 1966, 53 percent of five-year-old nonwhites were enrolled in preschool programs as compared with 64 percent of the white population.¹ Thus, in the first instance, Head Start was directed toward closing the preschool gap between middle- and low-income children.

Table A-1
PERCENT OF CHILDREN IN KINDERGARTEN OR NURSERY SCHOOL
BY FAMILY INCOME LEVEL, OCTOBER 1966^a

	Annual Family Income			
	Under \$3,000	\$3,000 to \$4,999	\$5,000 to \$7,999	\$7,500 and Over
3-Year-Olds	5.4	3.5	3.9	8.8
4-Year-Olds	13.2	11.1	15.1	29.1
5-Year-Olds	40.1	49.6	66.5	72.2

a. U. S. Department of Health, Education, and Welfare, Office of Education, "Nursery-Kindergarten Enrollment of Children Under Six" (October 1960).

Responding to the original conception, i. e. , directing the program to the needs of low-income preschool children, the memorandum of the Head Start Planning Committee emphasized the following general objectives:

- The overriding goal of each program should be to create an environment in which every child has the maximum opportunity and support to develop his full potential.
- Programs must be comprehensive in nature to achieve maximum effectiveness. This requires extensive activities in health, social services, and education.
- Careful attention must be given to the evaluation of the child's abilities and deficiencies, and to the correction of deficiencies and strengthening of abilities.
- Programs should focus on the parent as well as the child.

1. Levitan, p. 407.

- There should be support for a variety of programs tailored to fit local community conditions. OEO should encourage innovative and experimental ideas accompanied, of course, by adequate research and evaluation.
- These programs can and should be initiated very quickly. There already exists an adequate understanding of the problems and processes involved to permit immediate and massive intervention in the poverty cycle.¹

In further specifying the objectives of Head Start, the panel wrote that a comprehensive program should include:

- improving the child's physical health and physical abilities;
- helping the emotional and social development of the child by encouraging self-confidence, spontaneity, curiosity, and self-discipline;
- improving the child's mental processes with particular attention to conceptual and verbal skills;
- establishing patterns and expectations of success for the child that will create a climate of confidence for his future learning efforts;
- increasing the child's capacity to relate positively to family members and others while strengthening the family's ability to relate positively to the child and his problems;
- developing in the child and his family a responsible attitude toward society, and fostering constructive opportunities for society to work together with the poor in solving their problems; and
- increasing the sense of dignity and self-worth within the child and his family.²

Similarly, in a February 1965 release, OEO announced that Head Start would

- involve both the children and their parents, which, according to OEO, "is fundamental to the child's development";
- provide for diagnostic, remedial, and developmental effects;

1. Cooke, p. 1.

2. Cooke, p. 3.

- include health services, social services, and preschool developmental and learning experiences; and
- utilize professionals, volunteers, and neighborhood residents.¹

Thus, from the beginning Head Start was viewed as a broad-guage approach to the problems of preschool children. At no time during its development or operation was it viewed as strictly an educational program designed to raise IQs. This point must be stressed because it has important implications for the evaluation strategy appropriate to Head Start, which will be discussed later. In summing up the Head Start concept, the Planning Committee wrote

It is clear that successful programs of this type must be comprehensive, involving activities generally associated with the fields of health, social services, and education. Similarly, it is clear that the program must focus on the problems of child and parent and that these activities need to be carefully integrated with programs for the school years. The Office of Economic Opportunity should generally avoid financing programs which do not have at least a minimum level and quality of activities from each of the three fields of effort.²

Head Start finally became law with the passage of the Economic Opportunity Act of 1964, as amended through December 23, 1967. The Act in Title II, Part 3, Section 222(a) states

A program to be known as "Project Head Start" focused upon children who have not reached the age of compulsory school attendance which (a) will provide such comprehensive health, nutritional, education, social, and other services as the Director finds will aid the children to attain their full potential, and (b) will provide for direct participation of the parents of such children in the development, conduct, and overall program direction at the local level.

1. "Project Head Start: Parents are Needed," OEO Memorandum, p. 1.

2. Cooke, p. 2.

Program Components

Head Start became an operational part of the Community Action Program in the spring of 1965. The first programs were run that summer by local communities. The initial decision was that all communities with a sincere interest could participate. Thus, originally, restrictions on a local community program from OEO headquarters were few and communities with a limited number of trained personnel and physical resources received funding. That initial summer, 500,000 children took part in Head Start programs at a cost of \$84 million, with \$11 million spent on the staff training.

Since that time, Head Start has expanded to include a full year program. Consequently there are now two Head Starts--the full year (full day or part day), and the summer program. Table A-2 describes the number of children involved in Head Start and the resource allocations associated with the program since its inception.

Table A-2
CHILDREN AND DOLLARS BY FISCAL YEAR,
millions of dollars

Fiscal Year Budget	Total Dollars	Summer Head Start		Full Year Head Start ^c		Training, dollars	Research and Evaluation, dollars	Parent and Child Centers, dollars
		Children	Dollars	Children	Dollars			
1965	103	560,000	84.0	20,000	8.0	11	--	--
1966	198	573,000	99.0 ^a	160,000	81.0	16	2	--
1967	352	466,000	117.5 ^b	215,000	212.5	16	6	--
1968	325	465,000	102.5	204,400	193.5	18	6	5
1969 ^d	330	450,000	99.0	202,000	202.0	18	6	5

- a. An additional \$14 million was obligated in FY 1967 to supplement the 1966 summer programs in nine large cities. This amount includes \$2 million for follow-up activities for children in 1966 summer programs.
- b. Includes \$14 million obligated in FY 1967 to supplement summer 1966 programs, and \$1 million for NYC aides in 1967 summer programs.
- c. Dollars are for planning grants only, and from FY 1967 Head Start funds.
- d. Estimates for 1969 based on \$1,050 per child for full year programs and \$220 per child for summer programs.

Program operations have been analyzed by both OEO staff members and outside consultants in an attempt to establish operational guidelines. These guidelines are to ensure that a community provides the minimum package of services felt necessary to meet the objectives of the program while allowing each community to tailor its program, to some extent, to local needs; "creativity is encouraged as long as the comprehensive nature of the program is maintained."¹

The operational guidelines described below recognize that the program is implemented in different regions of the country on children of different ethnic origins, family stability and structure, sociocultural impoverishment, and linguistic environment. Simultaneously, the communities in which the children live may vary according to the trained personnel available, physical resources, and socioeconomic makeup. Even in a single Head Start classroom, differences will occur in the following characteristics:

- the physical context in which the program operates (e.g., physical plant and materials, indoor and outside space and facilities, toys and educational materials, etc.);
- the adult personnel who implement the program (e.g., their personal and behavioral attributes, attitudes, qualifications, and training, exposure to, and interaction with, each child);
- the peer group of the class (e.g., their collective characteristics in terms of age, sex, or racial distribution, average intellectual ability or average socioeconomic status, structure and function as a group, etc.);
- the services offered by the program (e.g., medical-dental diagnosis and treatment, psychological diagnosis and treatment, social services to the family, etc.); and
- the curricular patterns of the program (e.g., the formal characteristics of organized activity in the classroom, availability and usage of materials in direct training both within and outside the classroom, specific modification of behavior through systematic modeling or reinforcement, etc.).²

1. Head Start Child Development Programs, a manual of policies and instructions, (September 1967), CAP, OEO, p. 1.

2. The Evaluation of Project Head Start: A Conceptual Statement, John. W. McDavid, Director, Research and Evaluation, Project Head Start, p. 5.

Yet, all these programs follow certain broad guidelines to ensure that those services needed for the economically disadvantaged preschool child's development are provided.

The income-eligibility requirement applicable to all Head Start programs attempts to ensure that 90 percent of the participants are economically disadvantaged, reflecting the original conception of the program. Table A-3 indicates, by household size and gross level of income, those families considered eligible. Children from families on welfare are considered eligible even though the family income may exceed the poverty level.

Table A-3
OEO POVERTY GUIDELINES FOR FY 1968^a

Family Size	Nonfarm Income	Farm Income
1	\$1,600	\$1,100
2	2,000	1,400
3	2,500	1,700
4	3,200	2,200
5	3,800	2,600
6	4,200	3,000
7	4,700	3,300
8	5,300	3,700
9	5,800	4,000
10	6,300	4,400
11	6,800	4,700
12	7,300	5,100
13	7,800	5,400

- a. The OEO Poverty Guidelines for 1968 are used by local Head Start program administrators as eligibility criteria. It is this definition of poverty that is used to ensure that 90 percent of the program participants are from economically disadvantaged homes.

As a result of the income restrictions, Head Start children often come from broken homes, homes with the unemployed parents, and homes with female heads of the household. This is indicated in Table A-4.

Table A-4
HEAD START CHILDREN AND FAMILY INFORMATION^a

	Summer 1965	Full Year 1966	Summer 1966	Full Year 1967	Summer 1967
Father living with child^b					
Yes	69.3	73.7	78.0	68.7	77.1
No	21.9	25.6	20.7	30.0	22.7
Not reported	8.8	0.7	1.2	1.3	0.2
Current employment status of father					
Employed	59.2	85.0	85.4	82.0	86.4
Unemployed	7.4	12.9	11.5	15.4	12.5
Don't know/not reported	33.4	2.1	3.1	2.6	1.0
Current employment status of mother					
Employed	28.3	26.0	24.8	30.3	25.5
Unemployed	54.8	70.6	70.0	65.2	71.2
Don't know/not reported	16.9	3.4	5.2	4.5	3.3
Heads of households					
Male		74.3	79.2	69.6	78.5
Female		25.6	20.7	30.3	21.5
Not reported		0.1	0.0	0.1	0.0

a. Data from Bureau of Census National Survey, 1967.

b. Includes natural father, stepfather, and foster father.

As a further indication of the environment of the children participating in the full year 1967 and summer 1967 programs, 40 percent of the fathers had no more than an

8th grade education, 14 percent of the childrens' homes had no running water, and over 30 percent of the homes had no use of telephones.¹

Given the deprivation that these figures reflect, the OEO guidelines for the "Child Development Center" are designed to ensure the comprehensive nature of the program. The Summer Program is "for children who will be attending kindergarten or elementary school for the first time in the fall, [while] Full Year Head Start programs are primarily for children from age 3 up to the age when the child enters the school system."² The activities include: "medical and dental care, psychological counseling, nutritional support, and a program of daily activities designed to provide the child with a variety of fruitful and constructive services."³ Desired staffing patterns are published to ensure that people in sufficient numbers with the necessary background and experience are involved in implementing the guidelines within each program.

The Health Services program is perhaps the most obvious difference between Head Start and traditional kindergartens. It is stipulated that

Every program must correct or alleviate all existing medical and dental problems and promote future health through immunizations, dental fluoride treatment, health education of children and parents, and introduction of the family to physicians and dentists who can be responsible for its future health care.

Merely examining children without ensuring that the medical and dental problems will be treated is a purposeless exercise. Plans which do not assure that each child will receive all necessary treatment and preventive measures will not be funded. To assure treatment, the medical and dental evaluations should be performed by physicians, dentists, and clinics that can provide treatment for the defects discovered and continuing care and supervision, even after the Head Start program ends.⁴

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1. Bureau of Census data through September 1967.
 2. Head Start Manual, p.7.
 3. OEO request for funds, FY 1969.
 4. Head Start Manual, p.38.

Emphasizing the individual development of each child, daily activities "designed to affect the child's motivation and attitudes as well as his social, cognitive perceptives and language skills,"¹ are carried out in small classes of, optimally, 15 children. The staffing ratios advocate one teacher and two aides (one paid, one voluntary) for every 15 children.

In fact, the nonprofessional aide is a critical and unique part of Head Start centers. Through the aide program, Head Start should "create opportunities for the development of adults as well as children."²

In line with other community action operations, Head Start has emphasized the employment of subprofessionals and volunteers to relieve the workload of the teacher and provide additional attention to the child.

Many of the subprofessional workers and volunteers have been parents, primarily mothers, of children participating in the program. Parental involvement is a major goal of the Head Start effort, for it is recognized that the child's needs cannot usually be met without parental cooperation and even changes in the home environment. Bringing parents into the day-to-day operation of the centers has proved an effective way to enlighten parents concerning child-rearing practices and increase their interest in the schooling of their children.³

Stating that "every Head Start program must have effective parent participation," the guidelines go on to describe the Policy Advisory Group:

Policy Advisory Groups, the structure for providing a formal means for involving parents in decisions about the program, will vary depending on the kinds of agencies involved. There should be, in every case, a parent committee at the center level. There must also be a Policy Advisory Committee at that administrative level where most decisions are made.

Policy Advisory Groups should perform meaningful functions in the management of the program. It is expected that, at a minimum, they will:

1. Head Start Manual, p. 36.
2. Head Start Manual, p. 16.
3. Levitan, p. 413.

(a) Assist in the development of, and give approval to, the application before it is submitted.

(b) Participate in the selection of the Head Start Program Director. Decisions on selection of the Director should reflect a consensus between the Policy Advisory Committee and the administering agency. The formal appointment action should follow whatever procedures are appropriate in the particular community.

(c) Have a voice in establishing criteria for the selection of staff personnel.

(d) Initiate suggestions and ideas for program improvements.

(e) Serve as a channel for hearing complaints on the program.

(f) Assist in organizing activities for parents.

(g) Assume some degree of responsibility for communicating with parents and encouraging their participation in the program.

(h) Serve as a link to public and private organizations.

(i) Represent the professional organizations, public agencies, and parents involved in the program.

(j) Aid in recruiting volunteers and assist in mobilizing community resources.

Meetings must be frequent, with prepared agenda. One or two meetings during the course of the program is not sufficient.¹

The importance of parent participating is emphasized in the 1964 OEO Act, as amended in 1967, requiring that Head Start "will provide for direct participation of the parents of such children in the development, conduct, and overall program direction at the local level."

Head Start also provides nutritional services to "develop more fully the physical resources each child will bring to the learning process."² And finally, psychological and social services are provided to program participants. Thus, the sum of all these services is designed to ensure that

1. Head Start Manual, p.10.

2. Head Start Manual, p.41.

Project Head Start [be] not merely a preschool readiness program, but a comprehensive intervention into the entire process of early childhood development. Many aspects of the child's development are to be served, with basic objectives including improvement of the child's physical and mental health, emotional and social development, conceptual and verbal skills, self-confidence and aspirations, family relations, and attitudes toward society and social institutions. The program is oriented toward affecting the child as an individual most directly, but is secondarily intended to influence the family and community to which he belongs.¹

CRITERIA FOR EVALUATION

A national assessment of the impact of a program should direct itself to answering the following broad questions:

- Is the program reaching the defined target population?
- What is the program's impact on the participants; i. e. , does the program, nationally, meet its stated objectives?
- To what extent are the specified services provided? And at what cost?

In the light of the program's objectives it is clear that, for instance, a national assessment of Head Start should not determine whether a flexible, permissive approach or a more structured approach is more effective to teaching the pre-school child. Rather, a national assessment should analyze the services bought with the Head Start dollar and determine whether the results are commensurate with the program's objectives. This definition of the role of national assessment will be used in the following sections describing past educational approaches and present evaluative efforts. From this definition, appropriate criteria for national evaluation can be developed and the worth of the evaluation can be judged. The national study of unique programs does not permit descriptions of the variables within individual programs. The evaluation of "both the relative effectiveness of different program techniques and the operational assessment of individual projects [is the responsibility of] program offices."²

1. McDavid Conceptual State, p. 1.

2. RPP&E Draft, 18 January 1968, J. W. Evans.

The information for developing proximate measures to answer the basic questions of national program assessment can be found in Section II of "The Head Start Concept," and Section II of "Head Start Program Components." (Those measures followed by asterisks are addressed specifically by RMC in Task II on the basis of CAP MIS data and supplementary information collected by GAO. Analytical information was not readily available on items not followed by an asterisk.)

Questions to be Addressed in Effective National Assessment	Proximate Measures
(1) To what extent does the program reach the target population?	Participant Characteristic Data Age* Ethnic Group* Language Family Socioeconomic Status Head of Family Average Family Income*
(2) Are the comprehensive services of the program provided?	Program Characteristics Provision of dental exam* Provision of medical exam* Average class size* Teacher/Student Ratio Provision of meals Aide/Teacher Ratio*
(3) Is the program effective? a. Physical improvement of the child. b. Parent participation in development, conduct, and overall program direction.	Performance Measures a. Number of diagnosed problems treated* Number of diagnosed dental problems treated* b. Number of paid aides* Number of paid aides that are parents Number of volunteer aides* Number of volunteer aides that are parents Number on the Advisory Council Number of those on Council who are parents

Questions to be Addressed in
Effective National Assessment

Proximate Measures

c. Development of the child's
learning potential.

c. Does the scholastic performance of
children who have been through
Head Start differ on a national
average from comparable children
who have not been through Head Start?

If so, about how much improvement,
on the average, does Head Start
bring about?

What is the relative benefit of Summer
Head Start versus Full Year Head Start?

Does the Head Start net benefit depend
on whether the children are in the first,
second, or third year of school (pos-
sibly attributable to changes in Head
Start over the years or to a leveling
effect)?¹

d. Development of positive emo-
tional and social attitudes in
the child.

d. Does a child who has participated in Head
Start differ on a national average in his
confidence, expectation of success, and
sense of self-worth from comparable
children who have not been through
Head Start?

Has the child's capacity to relate positively
to his family and society increased during
the course of the program?

If so, about how much improvement, on
the average, does Head Start bring about?

What is the relative benefit of Summer
Head Start versus Full Year Head Start?

Does the Head Start net benefit depend on
whether the children are in the first,
second, or third year of school (possibly
attributable to changes in Head Start over
the years or to a leveling effect)?

1. OEO RPP&E Office, Draft, Prospectus to Evaluate Head Start.

**Questions to be Addressed in
Effective National Assessment**

Proximate Measures

(4) What is the cost of providing
Head Start services and
benefits to the pre-school
child?

Cost Measures*

Total number of children versus total cost*

Cost breakdown of services provided

Variable cost per child

APPENDIX B

EVOLUTION OF ESEA TITLE I

In Title I of the Elementary and Secondary Education Act of 1965 (ESEA), Congress committed itself to overcoming the educational disadvantages of children from low-income homes. Passed in the spring of 1965, the policy declaration of this act states that

In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.¹ (Italics ours.)

Amendments in 1967 extended ESEA until June 30, 1970, while providing for increased aid to children who are handicapped, neglected, delinquent, or who come from migrant homes.

ESEA Title I has now been operating for four years. However, due to the timing of funds, only the 1967 and 1968 school years were full-year operations. Data for the first two years of operation indicate that the program has reached over 9 million educationally disadvantaged children in more than 18,000 school districts. It is estimated that 500,000 (5½ percent) of the children participating in Title I programs are of preschool age. The various local programs are run at a total cost of approximately \$1 billion per year; however, there is no accurate

1. ESEA Amendment, 1967, PL 89-10, Title I, Section 101.

estimate of the proportion spent on preschool programs. There has been little systematic evaluation of the impact of Title I funds on the learning of educationally disadvantaged children in spite of both the large number of children and school districts involved, and the vast resources in terms of personnel and facilities invested in the program. Furthermore, there is almost a total absence of meaningful analysis of the programs aimed at educationally disadvantaged preschoolers. The absence of systematic evaluation is best understood in light of the decentralized administration of the program.

ALLOCATION OF RESOURCES

To ensure that the \$1 billion available for Title I are directed specifically to the needs of educationally disadvantaged children, the allocation formula is based on the number of low-income families in a state. Funds are initially earmarked (approximately \$80 million) for the special needs of handicapped, neglected, delinquent, and migrant children. The remaining funds are allocated to state and local education agencies based on the number of children from families with an income of \$2,000 per year or less. On this point, the law says the following:

Amount and Methods of Support (Sections 202 and 205). The Act establishes a three-year program of Federal grants to the States for allocation to school districts. The maximum amount that can be granted to a school district is based on the number of school age children (5 - 17) from low-income families multiplied by the "Federal percentage" of the State average per pupil expenditure. For FY 1966 "low-income" families are those with earnings less than \$2,000 annually, and those who receive more than \$2,000 in aid to dependent children under the Social Security Act. A "Federal percentage" of 50 percent is specified. For the two subsequent fiscal years, Congress is to establish the "Federal percentage" and the "low-income" factors to be applied.

Title I funds are allocated by the Office of Education through state education agencies to counties within the state based on the income criteria. The state agencies, in turn, allocate funds within the counties based on the best available indices of poverty. However, at the local level, Title I undergoes a subtle but important

shift in focus. The major criterion for education at the local level is that school authorities concentrate their programs on attendance areas of schools with at least 50 percent of their enrollment from the poverty area.¹ But of most importance, residence in an eligible attendance area is sufficient for participation in Title I programs; all the children from the area are eligible and no child must prove his or her income eligibility. The criterion of being educationally disadvantaged for eligibility in a program has a significant impact on the size of the target population. Defining the target population, it has been written that

The Social Security Administration has estimated that there are 16.7 million children from families below the low-income levels who are between the ages of 4 and 17 (i. e., of preschool and school age): . . . The Office of Education estimates a school-age and preschool population of 13.3 million children from "culturally deprived" families (as defined by the father having less than 8 years of school). Based on the Coleman Report findings, 84 percent of this group perform below the median for "non-deprived" children on objective tests of achievement. This 84 percent is the target population for compensatory education -- about 11.2 million children of preschool, elementary, and secondary school age.²

The shift in focus at the local level from economically disadvantaged children to educationally disadvantaged children has two important results regarding Title I programs in general and the preschool programs in particular.

- (1) There are some children from low-income families who are excluded because they live outside eligible attendance areas.
- (2) There are some children from families above the poverty line who are included because they live within eligible attendance areas.

The size of both of these groups is not known, but they have a significant impact on evaluation attempts. Income is often used as the key descriptor of a target group's socioeconomic status, and many researchers infer certain other population characteristics from income data. However, Title I programs at the local level are open to all children within an educationally disadvantaged area; therefore, there is no

1. Other schools are eligible if the schools' median retardations are at specified levels and over 30 percent of the schools' enrollments are eligible for free lunch.

2. James Posner, "Evaluation of Successful Projects in Compensatory Education," Office of Planning and Evaluation, Occasional Paper #8, April 10, 1968.

shorthand way to establish the poverty status of children within a Title I program. In practice this means that one cannot be sure that children in different Title I programs are from the same target populations. Thus, a researcher can make comparisons between the services offered and the impact on the participants, but cannot assume without careful documentation that the children are from similarly deprived backgrounds. OEO established strict income guidelines for participation in Head Start to ensure that it conforms to the basic purpose of the War on Poverty. In contrast, the basic criterion for eligibility in Title I preschool programs is geographic. Hence, for purposes of evaluation, no similarity in populations can be assumed; thus, researchers have not made a comparison between Title I preschool programs and Head Start programs because there are no systematic studies of the target-group characteristics of the children involved.

TYPES OF PROGRAMS

Having determined the attendance areas, eligible school districts are given almost complete autonomy to establish the programs they deem most important and most likely to be successful. If they wish, school systems can concentrate the funds on relatively few students and programs in hopes of having a significant impact. However, most districts favor spreading their funds to include as many children as possible.

A few school systems were so intent on reaching large numbers of children through Title I, that they began their second year of operation by doubling the number of children in the program, although they did not receive a proportionate increase in funds. Although more money was expended in fiscal 1967 under Title I than in fiscal 1966 (\$980 million compared with \$970 million), more children were counted for the purpose of determining local educational agency (LEA) allocations. Over six million children were counted in 1967 -- up a half-million from 1966 -- but the average LEA allocation per disadvantaged child declined from \$175.37 in 1966 to \$164.66 in 1967.¹

This means that a given locality may or may not allocate their resources to a pre-school program. It is up to the community to determine what program is most important in the context of their local needs.

1. National Advisory Council on the Education of Disadvantaged Children.

Further, localities have few restrictions on the kinds of programs they can develop to cope with specific educational problems. A survey by the National Advisory Council on the Education of Disadvantaged Children indicated that 50 percent of the programs studied concerned either in-school remedial reading or language instruction. Those remaining were special all-day programs, special programs for difficult students, preschool programs, or extended-day programs. The preschool programs account for a small percent of the overall Title I allocations. Reading programs seemed to be the most common activity funded. Thus, it is clear that Title I funds are directed at children from all different age groups with dissimilar problems.

Even when the problems addressed are similar, there is no reason to think that two localities will use the same approach (program) in solving a specific problem. Programs funded by Title I and directed to the needs of preschool children vary from each other as well as from Head Start. For example, a preschool program may be a day care center where a mother drops off a child before going to work. While at the center, the child's play may be supervised and he may be provided with a meal. At the other end of the spectrum, the local preschool program may duplicate Head Start by providing medical, dental, nutritional, family, and learning services. It is impossible, then, to assume any uniformity in preschool programs funded under Title I aside from the age groups served.

Comparisons between Head Start and preschool Title I programs are made difficult because there is no preschool entity under Title I. There are, instead, a variety of different programs providing varying services to a given age group. Therefore, analysts have not had a distinct entity to systematically study. Information does not exist on a national level that could provide a meaningful comparison between the resources provided preschoolers under Title I and the costs or effectiveness of Head Start.

EVALUATIONS

Both the development of an adequate information base and the analytical examination of the preschool programs under Title I are hindered by the delegation of the evaluation responsibility to the local level. The Elementary and Secondary Education Act says that all local programs must be evaluated but the design and scope of these evaluations is left up to the localities working in conjunction with state education agencies. The act states that

The local education agency will make an annual report and such other reports to the State educational agency, in such form and containing such information, as may be reasonably necessary to enable the State educational agency to perform its duties under this part, including information relating to the educational achievement of students participating in programs carried out under this part, and will keep such records and afford such access thereto as the State educational agency may find necessary to assure the correctness and verification of such reports.

Although evaluation is required, there is no prescribed measure of the effectiveness for any program objective. There is also no generally accepted measure within the educational community for assessing program effectiveness, especially the effectiveness of preschool programs. The evaluation of preschool programs is severely limited by the age of the children -- they are too young to read and are just developing verbal ability. Because localities design their own evaluation instruments and the educational community does not employ uniform measurement techniques in evaluating progress, variations occur from locality to locality.

In school year 1967, only one half of the states administered any standardized tests.¹ Localities argue that standardized tests are inappropriate to their programs. Administrators say that instruments created and tested on middle-class children are inappropriate to children from low-income, educationally disadvantaged backgrounds. In addition, states used different tests. In New York, for instance, the Wide Range

1. Title I, Year II, p 99.

Achievement Test in arithmetic and reading was given to children from kindergarten through tenth grade to measure program effectiveness. Arizona used tests of verbal expression and vocabulary for children in the first through the seventh grades. In Texas, migrant children were tested on paragraph reading and arithmetic. Furthermore, standardized tests are rarely used on preschool children. Rather, local preschool program evaluators most often use the opinions of teachers and administrators collected on locally-designed questionnaires to assess the program. These factors have contributed to an absence of data to assess a preschool program impact on a national level. Combining the results of local evaluations to assess overall effectiveness does not seem to be productive. "However, it seems appropriate to remember that the evaluations of practically all educational programs have been largely inconclusive, and we should not expect more definitive (or positive) results from education programs for pupils from culturally and economically disadvantaged backgrounds than those for other students."¹

However, Title I administrators still have the responsibility to attempt to provide some meaningful evaluative data on the impact of funds spent on preschool programs, especially the \$1 billion per year spent on educationally disadvantaged children. One encouraging area of research just underway in the Title I office is Project Anchor. This project will attempt to develop valid test conversion methods for the various standardized tests, a step towards making overall comparisons between states on the impact of ESEA Title I funds.

The lack of authority at the national level to prescribe evaluation tools and techniques has been a major impedance to systematic national assessment. State education agencies work very closely with localities aiding them with evaluation design; the significance of the results (as found in the yearly reports) varies directly with the expertise and attitudes of the state agencies.² The agencies that realize the importance of national assessment as a decision-making tool have cooperated with HEW in designing evaluations. Others view this assessment as a possible measure of their competence,

1. Risner, ii.

2. Conversation with Title I administrators, HEW, July and September 1968.

expertise, or accomplishments, and they have not been eager to provide conscientious evaluation results. Thus, there is virtually no significant information available at the national level that permits comparisons of different preschool programs within Title I or between preschool Title I programs and Head Start. Some original information on these programs was collected on a limited scale by GAO, and the analysis of the information indicating areas of future analysis is found in Task II. The Task II analysis focuses on the family income characteristics of the children participating in both Title I preschool programs and Head Start, the delivery of health services in both programs, and the extent of parental involvement in the administration and operation in a sampling of local programs.

Authority for program design, implementation, administration, and evaluation has been delegated to the local level. Consequently, the information to fully assess Title I's impact on the special educational needs of children from low-income families in general and preschool children in particular is inadequate on the national level. Decentralization of program responsibility to the state and local level seems to be an increasing trend not only in educational programs but in a number of domestic program areas. Hence, the issue becomes: Is there some method of program evaluation that permits those making resource-allocation decisions at the national level to assess the impact of the resources on the major objective while encouraging autonomy in program design and operation that will meet the special needs of different localities?

The objective of national evaluation is to assess the nationwide progress toward certain goals. The concern at the national level should not be whether one city outperforms the other; the concern should be the extent to which this investment -- as compared with a competing investment -- accomplishes the purposes for which it is designed.

The first step in such an analysis is defining the broad goals of a program like Title I. The Title I legislation talks of meeting the special educational needs of disadvantaged children, but the specific needs are not defined. Perhaps it can be

inferred that the interest is in raising the skill and aptitude level of children from low-income families to a level competitive with children from middle-income families. To assess the progress towards this hypothesized goal, standardized tests could be administered periodically on a sample basis. To those who argue that standardized tests are not reliable, the only response is that they are the best instruments available. To those who argue that children are over-tested, this sample national assessment will be far less burdensome and far more informative than the variety of tests now administered. To those who argue that such standardized tests are inappropriate to the program's objectives, the response is that no individual program is being evaluated. What is being evaluated is the national impact of alternative resource allocations relative to given national goals, and it is appropriate for localities to continue to evaluate, in depth, the impact of local programs on local objectives. Thus, it would seem that decentralization of program design, administration, and evaluation has not freed national Office of Education administrators from the responsibility for overall program assessment; only at the national level can a program's national accomplishments be assessed.

APPENDIX C

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
Washington, D. C. 20202

ESEA Title I Program Guide #46
DCE/P&P

July 2, 1968

TO: Chief State School Officers

FROM: Harold Howe II
U.S. Commissioner of Education

SUBJECT: Community and Parent Involvement in Title I, ESEA, Programs

Item 2.1 of the revised criteria for the approval of Title I, ESEA applications requires a finding that:

- 2.1 The priority needs of educationally deprived children in the eligible attendance areas (target populations) were determined in consultation with teachers, parents, private school authorities and representatives of other agencies which have a genuine and continuing interest in such children. The evidence of need and the bases for the assignment of priorities have been documented.

Authority: 20 USC 241e (a)(1)

The criteria also require, as indicated in item 3.1 and the discussion following that item, that the same groups, agencies, parents and others be involved in a comprehensive analysis of the resources available to meet those needs and in the development of a comprehensive compensatory educational program for the coordinated use of Title I funds and of the resources from other programs and agencies.

To carry out effectively the intent of these criteria, each Title I applicant must have an appropriate organizational arrangement. This means, in effect, that local advisory committees will need to be established for the planning, operation, and appraisal of a comprehensive compensatory educational program.

I. Composition of the Local Advisory Committee

- A. It is suggested that at least 50 percent of the membership of the committee consist of parents of disadvantaged children attending schools serving the area where projects will be conducted, representatives of

the poor from the Community Action Agency and parent members of the Head Start advisory committee, if there is a Head Start project in the community, and representatives of other neighborhood-based organizations which have a particular interest in the compensatory educational program.

- B. The committee should also include school staff members representing the regular and special programs to be offered in the project areas, representatives of private schools, and leaders of other agencies and organizations. Where model cities or neighborhood service center projects are being planned, representatives from those projects should also be included on the advisory committee for the comprehensive compensatory educational program.

II. Principal Functions

The local advisory committee should have specific functions, such as:

- A. Supply information concerning the views of parents and children about unmet educational needs in the Title I project areas and establish priorities among these needs.
- B. Recommend a general plan for the concentration of funds in specific schools and grade levels.
- C. Participate in the development of proposals which are particularly adapted to bridging the gap between the needs of the pupils and the curriculum of the school.
- D. Make written concurring or dissenting comments to be forwarded with the application.
- E. Act as a hearing committee for suggestions to improve the compensatory educational program.
- F. Hear complaints about the program and make recommendations for its improvement.
- G. Participate in appraisals of the program.

Each State educational agency should be prepared to assist local educational agencies in achieving full community involvement in the development and implementation of the local compensatory educational program. In this connection, please note that

the new application form in Section II-A provides opportunities for LEA's to outline their comprehensive planning activities, including the involvement of other programs and agencies. Applicants should also outline the activities that they carried on through their local advisory committees and describe the membership of those committees.

Some States have already established requirements or developed guidelines or handbooks for community involvement. We would be interested in receiving copies of any such materials you may have circulated and also descriptions of specific local activities designed to bring about community involvement in the development of compensatory educational programs in your State.

Advisory committees, of course, present only limited opportunities for parental participation. Careful attention in the appraisal of a Title I program should also be given to item 5.4 of the criteria:

The Title I program includes appropriate activities or services in which parents will be involved.

Authority: 20 USC 241c (a)(1)

The proposed activities or services for parents to be provided at the school or neighborhood level should show promise of bringing about a high degree of participation and cooperation in support of the specific compensatory educational activities being provided for their children.

cc: State Title I Coordinators, ESEA

APPENDIX D

HEW AND OEO ADULT BASIC EDUCATION PROGRAMS: HISTORY AND PROGRAM CHARACTERISTICS

With the passage of the Economic Opportunity Act in August of 1964, a comprehensive national effort to educate illiterate adults was initiated. The authorized programs took two forms: those funded under Title II-A, Section 205 and those funded under Title II-B. The former were established as part of the Community Action Program, used CAP local initiative funds, and were usually a functional component of a many-faceted anti-poverty program. Title II-B was administered by the Office of Education, which made grants to state educational agencies for the administration and operation of Adult Basic Education programs.

The objective of this adult education effort is to increase the self-sufficiency of the enrollee. Title II-A programs focus on aiding the low-income person. This is not explicit in the language of Title II-B. The hypothesis is that increasing the literacy of program enrollees creates the precondition for job advancement or getting out of poverty.

The Adult Education Act of 1966 (Title III of the amendments to the Elementary and Secondary Education Act of 1965) transferred the Title II-B program to HEW-OE jurisdiction. During FY 1966, however, OEO funds were used for Adult Basic Education programs under the Adult Education Act of 1966, even though general control over the functional area had been relinquished to HEW. In addition, OEO continued to fund and administer Adult Basic Education activities with CAP local funds. Currently, OEO is sponsoring three types of Adult Basic Education programs: English as a second language, eighth-grade equivalency, and high-school equivalency.

State departments of education, in conjunction with local educational agencies, play a major role in the HEW ABE programs. Federal grants-in-aid under this program are allocated on the basis of the number of adults aged 18 and over in each state who have completed not more than five grades of school or have not achieved an equivalent level of education. Adult Basic Education programs in each state are administered by local educational agencies. Each state ABE program is based on a state plan, developed in accordance with federal regulations governing the Adult Education Act and approved by the U. S. Commissioner of Education. Despite adherence to national guidelines, there is significant variation in program and fiscal determinations among state and local agencies.

TARGET GROUP

The ABE target population is based on the number of adults aged 18 years of age and over who have completed not more than five grades of school or have not achieved an equivalent level of education, a funding formula prescribed in Title II-B legislation. According to statistical interpolations of 1960 census data on national educational attainment, approximately 11.4 million persons aged 18 years and over have completed less than six years of schooling. The 1960 census data showed 23.9 million adults 18 years of age and over who had completed less than eight years of school, 10.9 million of whom were in the poverty category as established by OEO. While state allocations are based on the number of persons with less than a sixth-grade level of education, the ultimate goal of the ABE program is to provide an elementary-level education to all adults who are functioning below an eighth-grade level of competence.

It is useful for the selection of a target population to define functionally illiterate by academic achievement level. However, it should be clear from the outset that this term is relative. The amount of literacy skills a person needs to function in a society is largely determined by the complexity of his environment. The concern is that the individual adult can get along in his environs; the use of an academic grade level is only a representation of the individual's capability to do so.

There is no income criterion for entrance into either ABE program. However, Title II-A, which authorized the OEO ABE, pointed out general guidelines for funding. "In determining whether to extend assistance . . . the Director shall consider among other relevant factors the incidence of poverty within the community; programs shall be focused upon the needs of low-income individuals and families. . . ." Title II-B legislation contained no such language. However, the Interim Guide for the Development of a State Plan for the Administration of Adult Basic Education under Title II-B of the Economic Opportunity Act of 1964 uses the following language: "The primary purpose of the state plan is to develop a comprehensive state approach to the provision of adult basic education to the greatest number of poverty-stricken adults with the lowest educational attainment."

FINANCIAL LEVELS

Program and budgetary data for ABE are complicated by the fact that the amendments to the Elementary and Secondary Education Act of 1965, which were passed in November 1966, transferred Title II-B programs from OEO to HEW. This means that the ABE program existed within the OEO funding structure for approximately two years after the program administering its funds through the states had moved to the Office of Education. In FY 1967, OEO received special funds for projects in adult basic education for low-income individuals over eighteen years of age. These special demonstration projects would

- involve the use of innovative methods, systems, materials, or programs that may have national significance or be of special value in promoting effective programs;
- involve activities in adult basic education that, when coupled with other federal, federally-assisted, state, or local programs, have unusual promise in promoting a comprehensive or coordinated approach to the problems of low-income individuals with basic educational deficiencies; or
- show promise of enabling persons receiving welfare payments or other forms of public assistance to obtain employment that would permit discontinuing such assistance.

Table D-1

ADULT BASIC EDUCATION PROGRAM AND BUDGETARY DATA

Program Data	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969
Persons Enrolled					
OEO	3,000	43,000	120,000	44,000	N/A
HEW (OE)	37,991	377,660	392,299	455,437	-
Appropriations (in millions)					
OEO	N/A	N/A ^a	N/A*	N/A*	-
HEW (OE)	19.0	21.0 ^a	30.0*	38.6*	45.0*
Federal Funds Obligated (in millions of dollars)					
OEO	0.4	6.5 ^b	18.0 ^c	5.9	N/A
HEW (OE)	4.2*	35.8 ^b	30.0 ^{d*}	38.6 ^{e*}	45.0 ^{f*}

- a. Funds appropriated to the Office of Economic Opportunity and transferred to the Office of Education by the Adult Education Act of 1966.
- b. Includes unobligated balance from the appropriation for FY 1965 (\$14.8 million) carried over as authorized in Title II-b.
- c. Includes \$6.2 million for special projects in adult basic education and the remaining funds, \$11.84 million are for special categories of service no longer classified as adult education.
- d. Includes \$2.9 million for special projects and teacher training under Section 309 of the Adult Education Act of 1966 and \$0.8 million for program administration.
- e. Includes \$8.1 million for special projects and teacher training.
- f. Includes \$9.0 million for special projects and teacher training.

*These figures and notations differ from those found in RMC's Report UR-060 because they have been revised based on the most current agency data and comments.

Source: HEW-OE Adult Basic Education Program Staff, March 1969.

A provision is made for the continuation of experimental ABE activities (similar to these mentioned above, which were only funded for fiscal year 1967) through Section 309 of the Adult Education Act of 1966, which provides that not less than 10 or more than 20 percent of appropriated funds be used for special experimental demonstration projects and teacher training programs. These grants are used primarily for program experimentation and innovation and are administered directly by the Office of Education. Table D-1 presents program and financial data on both the OEO and HEW Adult Basic Education programs from 1965 to the present.

LEGISLATIVE AND INSTITUTIONAL HISTORY

The concept of a federally-supported system of adult education is rooted in two governmental services: the military services' high-school equivalency program and the Immigration and Naturalization Services for non-English-speaking immigrants. In his 1962 message on education, President Kennedy expanded the idea of adult education by including a specific proposal for a comprehensive national program to erase illiteracy. Although it did not act upon this proposal, Congress amended the Manpower Development and Training Act in 1963 to provide education to MDTA participants. Responsibility for administering this section was delegated to the Office of Education, HEW. The economic opportunity legislation, submitted by President Johnson to Congress, did not contain a provision for adult education. Congress drafted and inserted Title II-A and Title II-B in the Economic Opportunity Act, which created two types of ABE programs--one within the CAP structure and one providing grants to states for adult basic education. The goals of both ABE programs are similar: to raise the educational level of the functionally illiterate. The main difference in the legislative wording is that OEO ABE emphasizes the low-income person. The following is a statement of Title II-B goals that is generally applicable to both programs:

to initiate programs of instruction for individuals who have attained age eighteen and whose inability to read and write the English language constitutes a substantial impairment of their ability to get or retain employment commensurate with their real ability, so as to help eliminate such inability and raise the level of education of such individuals with a view to making them less likely to become dependent on others, improving their ability to benefit from occupational training and otherwise increasing their opportunities for more productive and profitable employment, and making them better able to meet their adult responsibilities.¹

1. Economic Opportunity Act of 1964, Public Law 88-452, S. 2642, August 20, 1964.

SUPPLEMENTS

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SUPPLEMENT 1 TO RMC REPORT UR-051

OEO COMMENTS

SOURCE OF COMMENTS:

Office of Economic Opportunity
Bertrand M. Harding
Acting Director
Letter, 28 February 1968

To: Mr. Henry Eschwege, Associate Director
Civil Division, GAO

Note: Where possible comments from this source have been incorporated in the report itself. This supplement has been prepared to reply to those that could not be so incorporated.

EXTRACT OF COMMENTS AND AUTHOR'S REPLY

COMMENT: We feel that the attempt to compare Head Start and Title I programs is not appropriate. The different objectives of the two programs, their dissimilar target populations, and the different structures within which they operate make comparisons of the two programs questionable.

REPLY:

It is acknowledged that preschool Title I and Head Start are dissimilar along a number of dimensions. However, what is more important, at the national level both programs concentrate on substantially the same target populations--the economically disadvantaged child. Further, in our estimation, the economically disadvantaged target population and the educationally disadvantaged child are sufficiently similar to warrant the comparison.

Given that fact, the valid objective of this analysis was to assess the extent to which the Title I preschool programs are similar in operation to Head Start programs. Neither program is criticized for the extent to which it differs from the other. Rather, the full extent of these differences should

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be examined in light of their impact on the respective program's cost and effectiveness which should improve preschool resource allocation decisions.

Further, we have been careful to recognize the fact that Head Start provides a number of services not necessarily provided by Title I preschool and to cite this fact in comparing cost figures for the two programs.

SUPPLEMENT 2 TO RMC REPORT UR-051

HEW COMMENTS

SOURCE OF COMMENTS:

Department of Health, Education, and Welfare
James F. Kelly
Assistant Secretary, Comptroller
Letter, 3 March 1969

To: Mr. Henry Eschwege, Associate Director
Civil Division, GAO

Note: Where possible comments from this source have been incorporated in the report itself. This supplement has been prepared to reply to those that could not be so incorporated.

EXTRACT OF COMMENTS AND AUTHOR'S REPLY

COMMENT: We agree that a more thorough analysis of the Title I pre-school program participant characteristics is warranted. However, we believe that (1) strict adherence to the selection of eligible attendance areas, (2) the policy for concentration of services, and (3) the criteria for a comprehensive assessment of needs of preschool children in predominately low-income areas, should result in greater numbers of children from low-income families participating in pre-school programs than the statistics reported indicate. We realize that the latter point is based on the fact that the Title I criteria referred to was not issued until March 18, 1968, and the policy guide on concentration of services was not issued until November 20, 1968. Therefore, because of timing, the study does not show the impact that should occur as a result of those issuances.

REPLY:

It is correct that it was premature to expect our data to reflect the impact of these policy changes. However, the desired impact should not be assumed to have occurred without the collection and analysis of the most recent data.

The issuance of criteria is not synonymous with the accomplishment of the objective but is only the beginning. Therefore, the assertion that these new criteria have had the desired impact remains to be tested.