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ABSTRACT

The results of a needs assessment designed to determine the needs and problems of select disadvantaged students completing vocational education programs at Fresno City College (FCC), California, are presented in this report. Part 1 provides the needs assessment and program planning model, including a flow chart, and the narrative description. Part 2 describes the field testing of the model: the concerns assessment and the student testing and FCC records data. Part 3 includes the following measurable student objectives for the Extended Opportunity Program and the Enabler Program at FCC developed from the data obtained from the needs assessment: retention, attitudes, measurements, affirmative action, program completion, personal growth/fulfillment outcomes, required skills/knowledge outcomes, and grade point average outcomes. Part 4 presents these conclusions: using the tools and logic of educational system planning, a needs assessment and planning model for community college disadvantaged student programs can be developed; and for given community college disadvantaged students, concerns can be identified using existing college documents and personal group interviews. Part 4 also includes the following recommendations: all components of the needs assessment and planning model should be thoroughly field tested; and a new model should be developed to strengthen the present one. (JH)

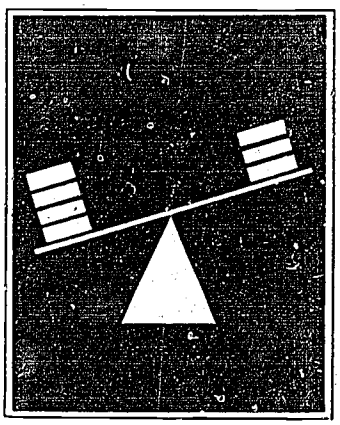
SUMMARY OF FINAL REPORT

RESEARCH AND DESIGN PROJECT FOR DISADVANTAGED STUDENT PROGRAMS

AND

NEEDS ASSESSMENT OF SELECT DISADVANTAGED STUDENTS PROGRAMS

AT FRESNO CITY COLLEGE



Need Assessment

Submitted By

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Presented to Fresno City College

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PREFACE

This report represents a joint-effort between Fresno City College personnel and the consulting team. Its purpose is to provide preliminary information which might be useful in developing and refining educational programs for Fresno City College disadvantaged students. The following study results from state-funded proposals submitted to and funded through the Community College Chancellor's Office by Richard Handley, Dean of Vocational Education.

The consulting team would like to express its appreciation to Mr. Handley for his vision, leadership, and management skills; throughout the project, his support was invaluable. Appreciation is also extended to Dr. Clyde McCully, President of Fresno City College, for his encouragement and guidance. The consulting team has rarely had such ready access to a college president while working on disadvantaged students programs. Lastly, appreciation is expressed to the Planning Task Force who worked elbow to elbow with the consulting team in making this project a reality. Without their experience and serious effort, there would have been no project.

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Introduction

The focus of these studies was to develop and partially field test a needs assessment and program planning model for select disadvantaged student programs. The conceptual model was developed by the author; many other persons at Fresno City College assisted in the implementation and partial field testing of this model. Chief among these were Richard Handley, Associate Dean of Vocational Education, and a Planning Task Force composed of FCC educators, disadvantaged students, and representative community members.

This writer was a consultant to Fresno City College in needs assessment and program development using the techniques of educational system planning; the objective of this effort was to develop plans which, if implemented, would refine and improve the quality of three programs for disadvantaged students including: 1) the Extended Opportunity Program (EOP), 2) the Enabler Program for physically and/or emotionally handicapped, and 3) the Veterans Program for those attending FCC under the G.I. Bill. What has been reported herein, then, resulted from the mutual work of a team.

The Research and Design Project was completed in 1974 while the Needs Assessment of Select Disadvantaged Students Programs was finished in September of 1975. These two projects should be seen as one effort in that the second project was a continuation of the first. Together, these two projects provided: 1) the development of a needs assessment and program planning model for FCC disadvantaged students programs, 2) the field-testing of the needs assessment components of the model, and 3) the development of student objectives for select disadvantaged student programs (which included the EOP and Enabler programs; the Veterans program was not included in this phase of the project because the needs assessment data suggested there were few significant academic or personality differences between Veteran students and Control students representative of FCC as a whole).

I. The Needs Assessment and Program Planning Model

This model consists of an identification of major functions to be accomplished in assessing student needs and developing responsive educational programs. These major functions are presented in the format of a flow-block diagram which is capable of showing relationships and interactions among the various functions. These major functions in the diagram are narratively described to provide the reader with an overview of the model. The flow-block diagram and narrative description of major functions are found below in the body of this summary (Figure 1). In addition to these components of the model, an analysis of the sub-functions to be accomplished in the completion of the major functions of the model is found in the Final Report; these sub-functions are also presented in flow-block diagram format to show interactions and relationships (completion of the required sub-functions in the order presented assures completion of the major functions reported below). The Final Report also contains the performance requirements which provide the specifications against which successful completion of each major function is determined.

Thus, the Needs Assessment and Program Planning Model consists of a "profile" of major functions to be accomplished in flow-block diagram format including a narrative description of these major functions; these are found below in the text of this summary. In addition, however, the model also consists of an analysis of the sub-functions necessary to accomplish the major functions and the performance requirements against which successful completion of each major function is determined; these are not contained in this summary but may be found in the Final Report.

The Mission Profile: Figure 1 is the Mission Profile of major functions in the Needs Assessment and Program Planning model.

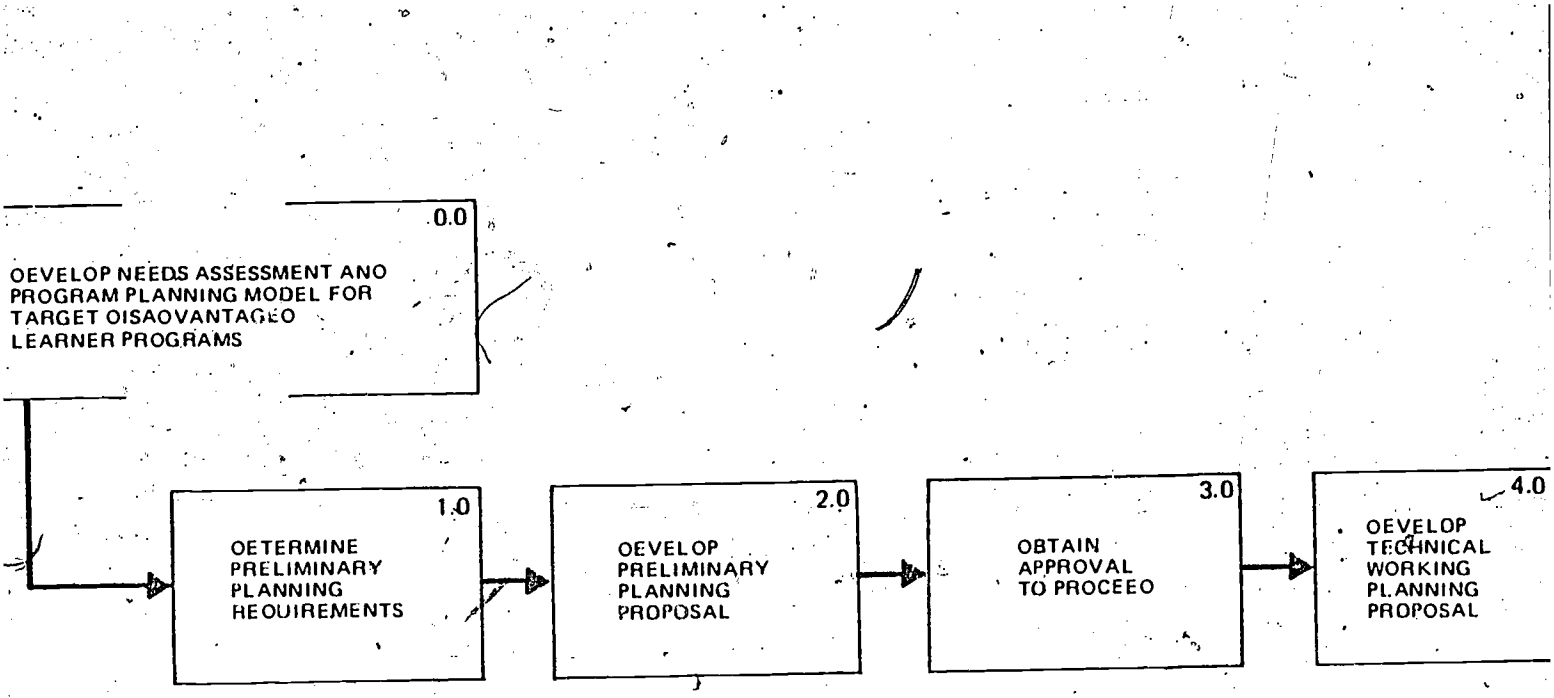
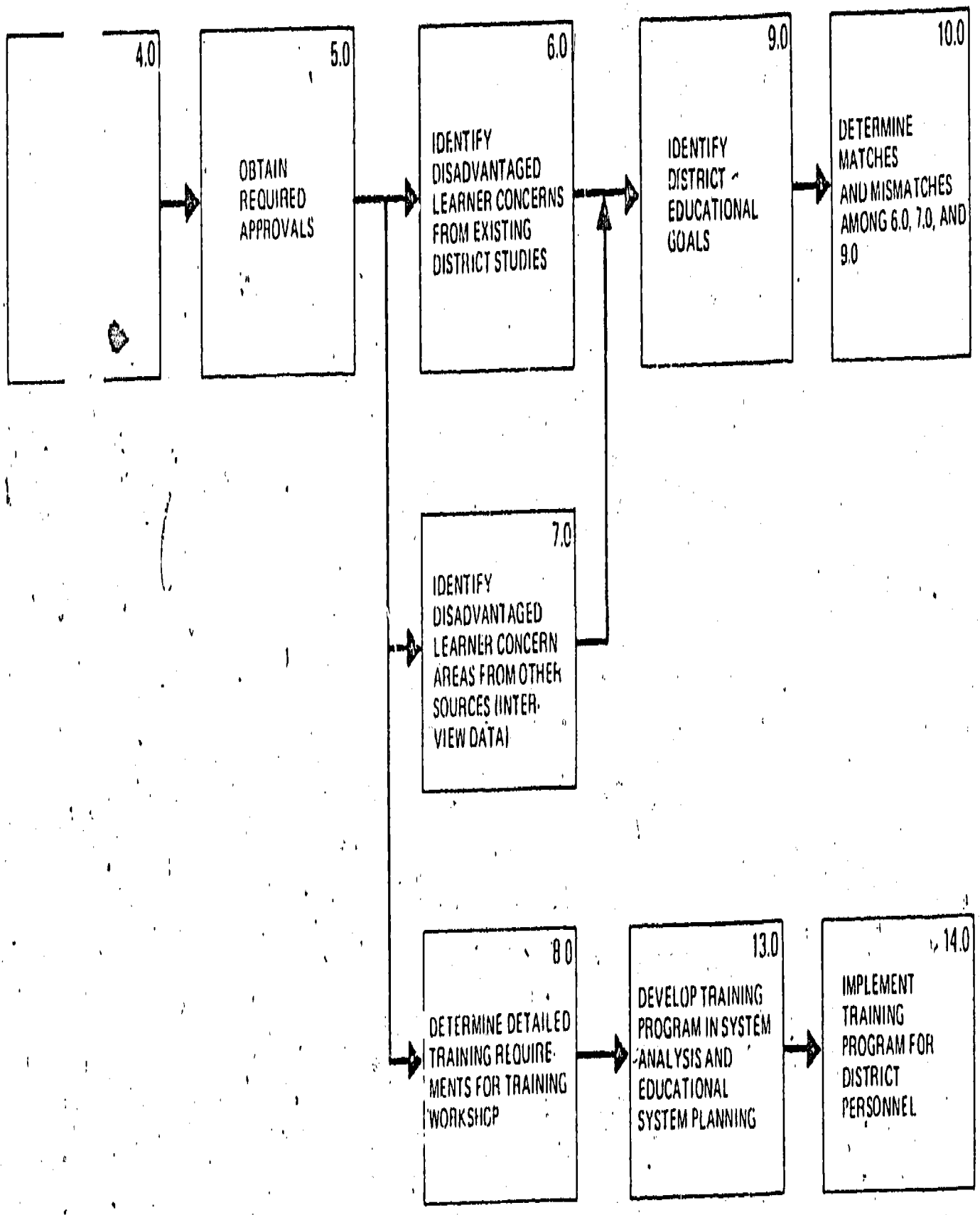


Figure 1. Mission Profile



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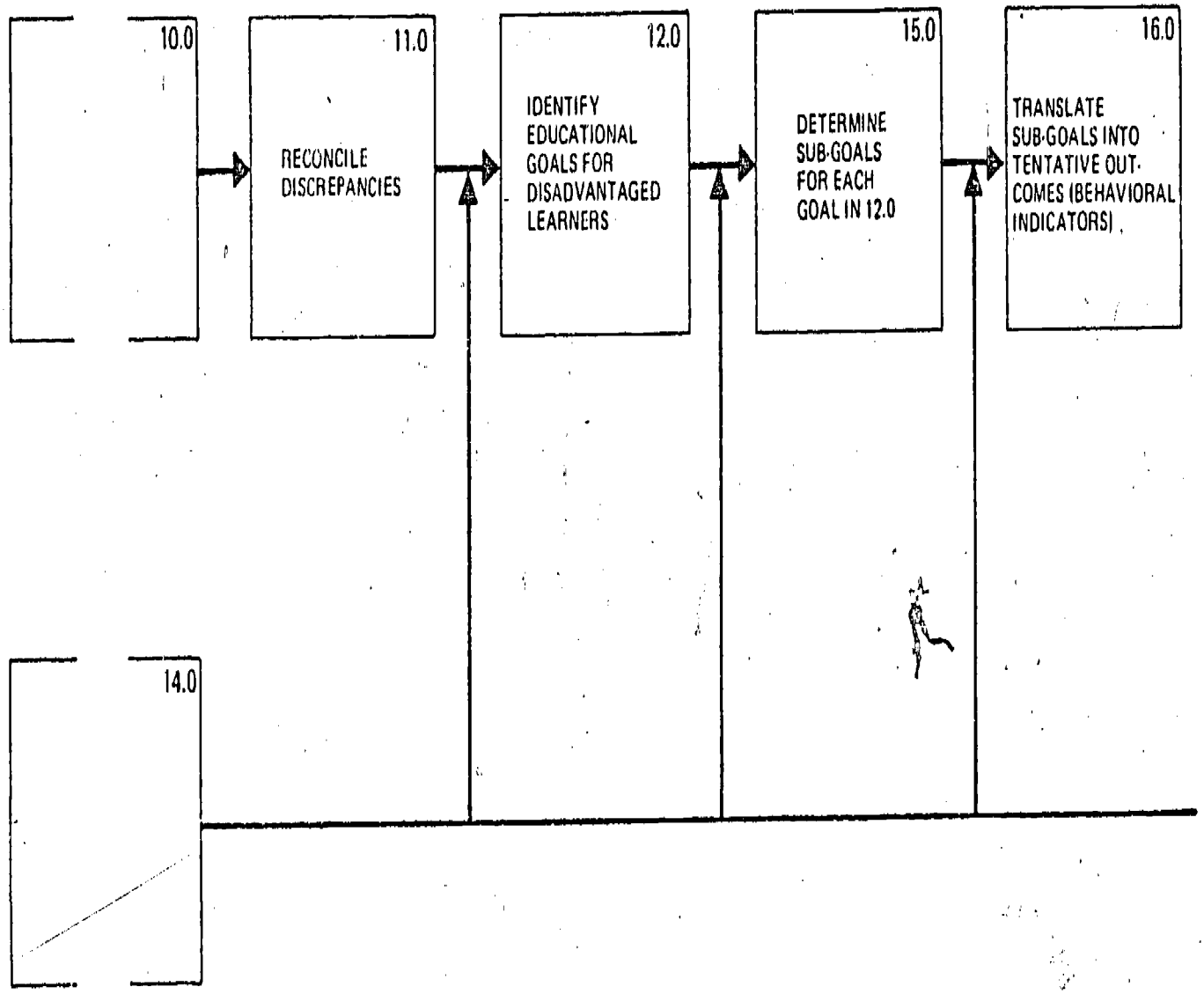

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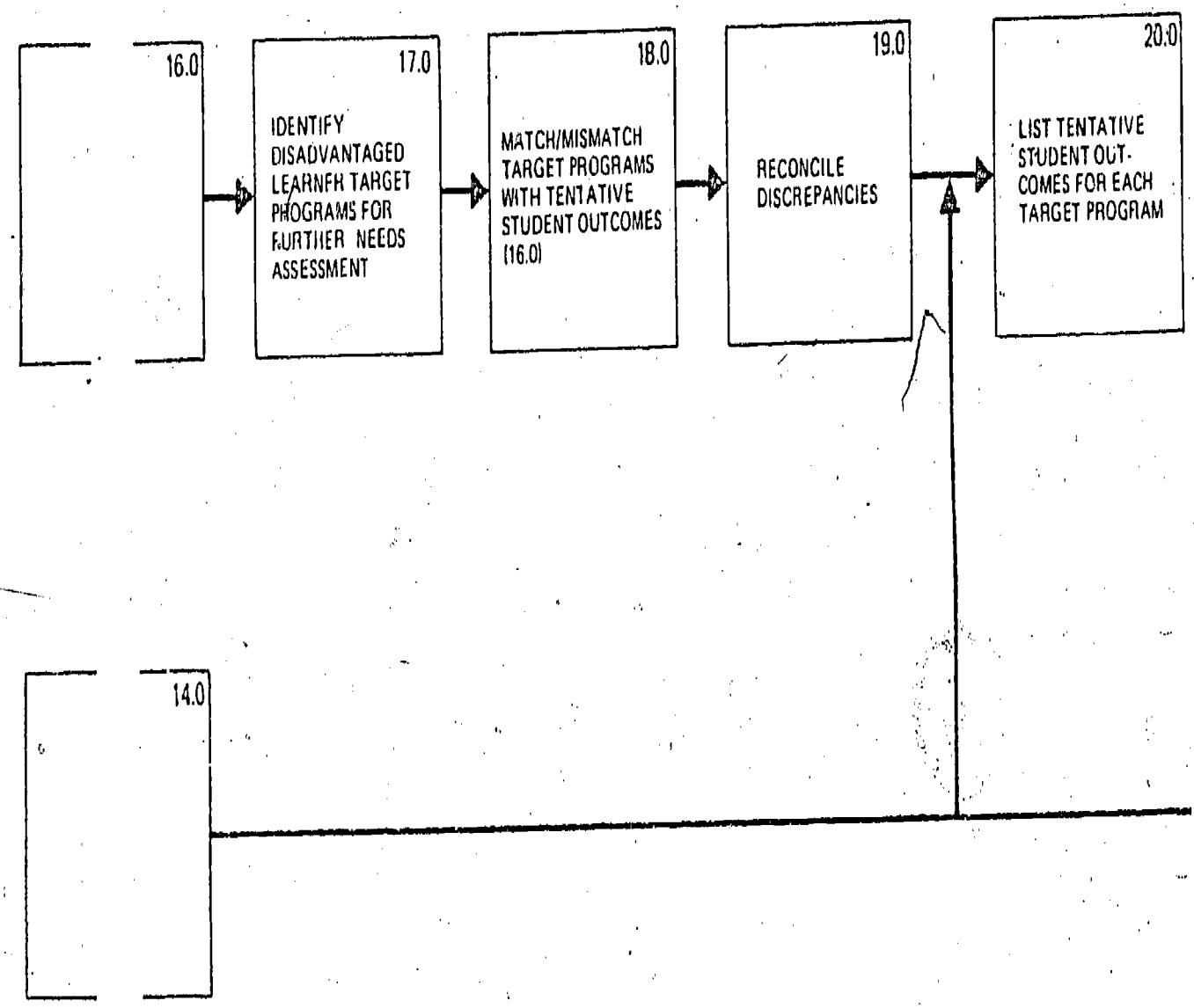

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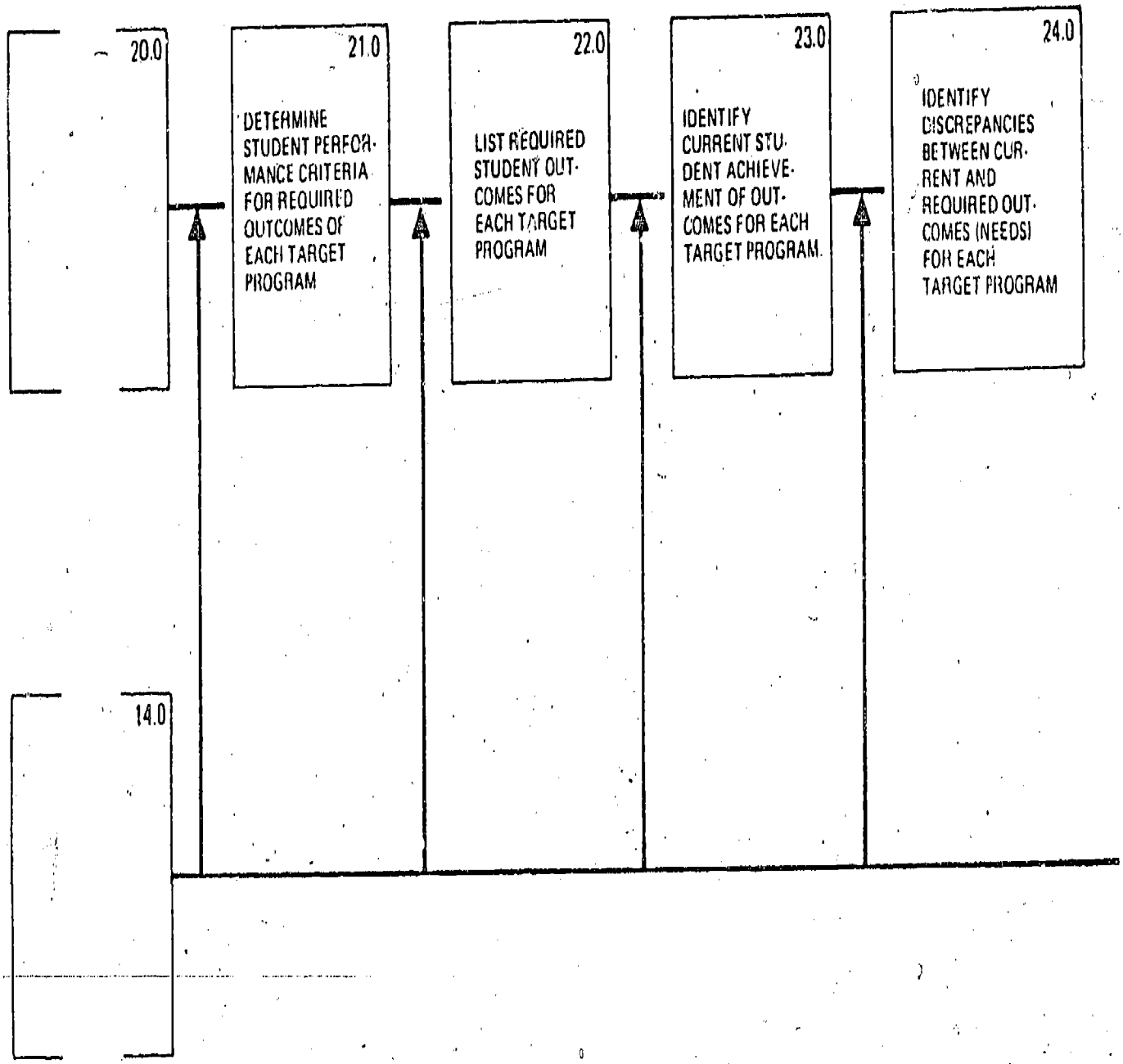

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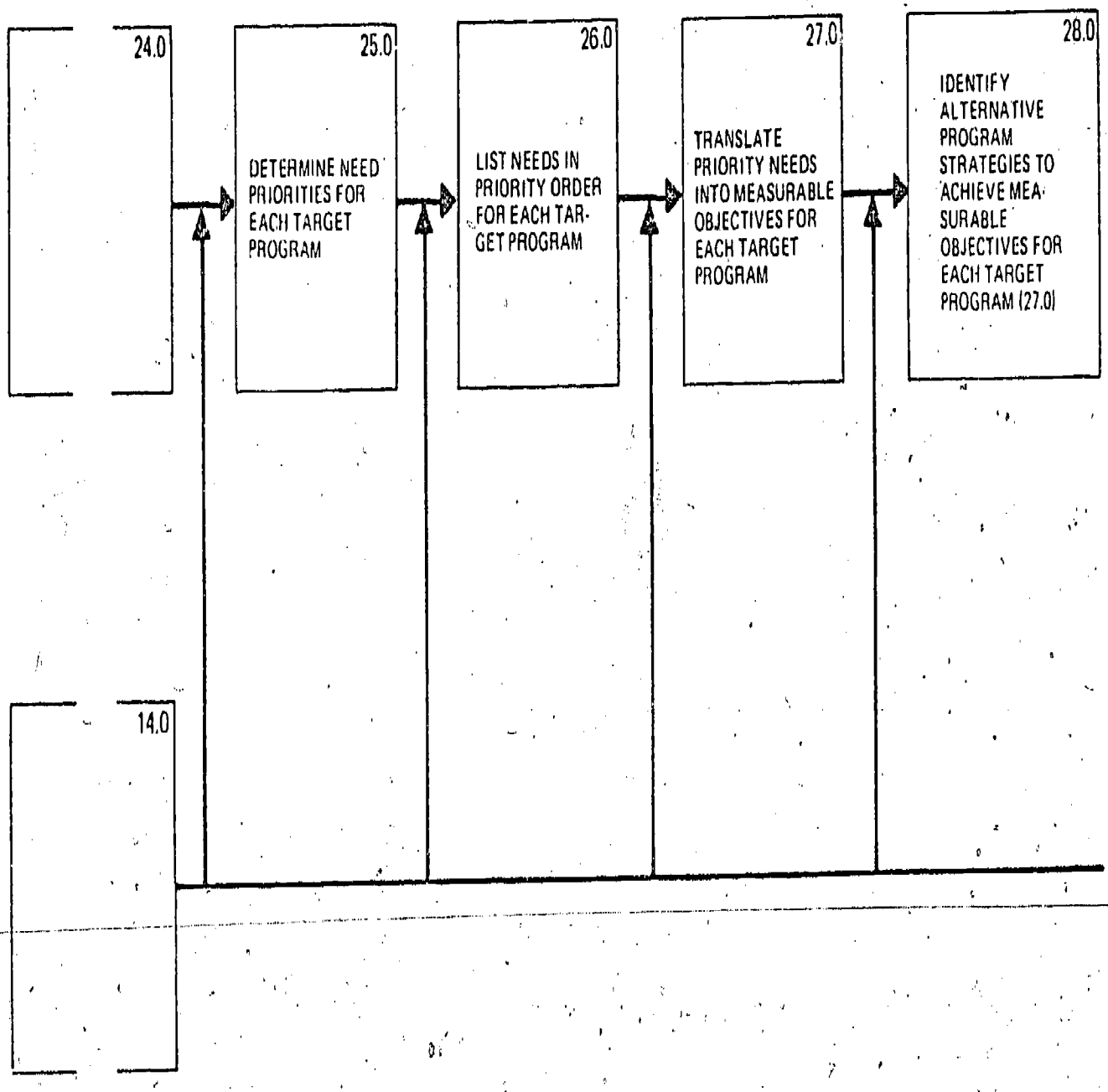

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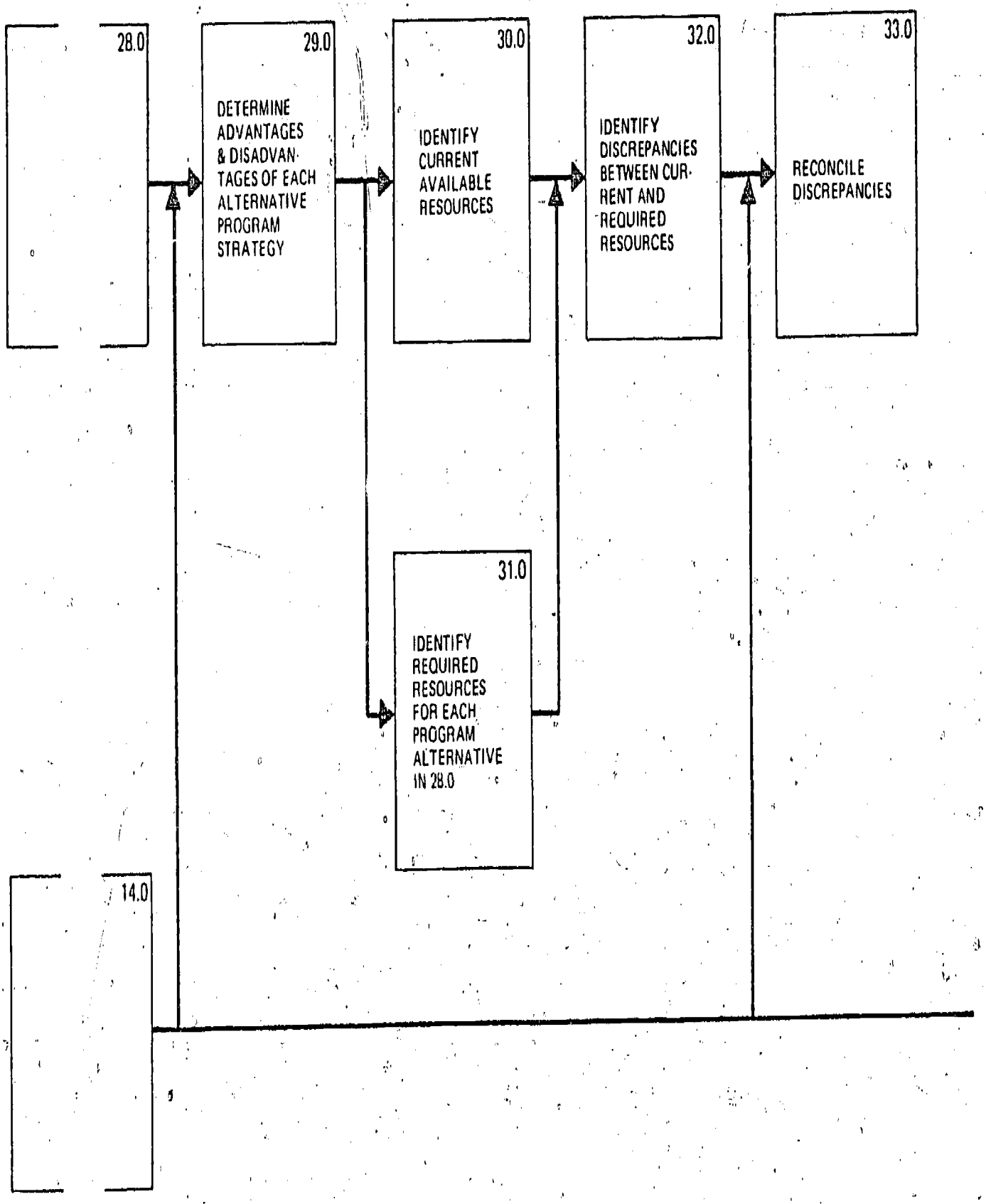

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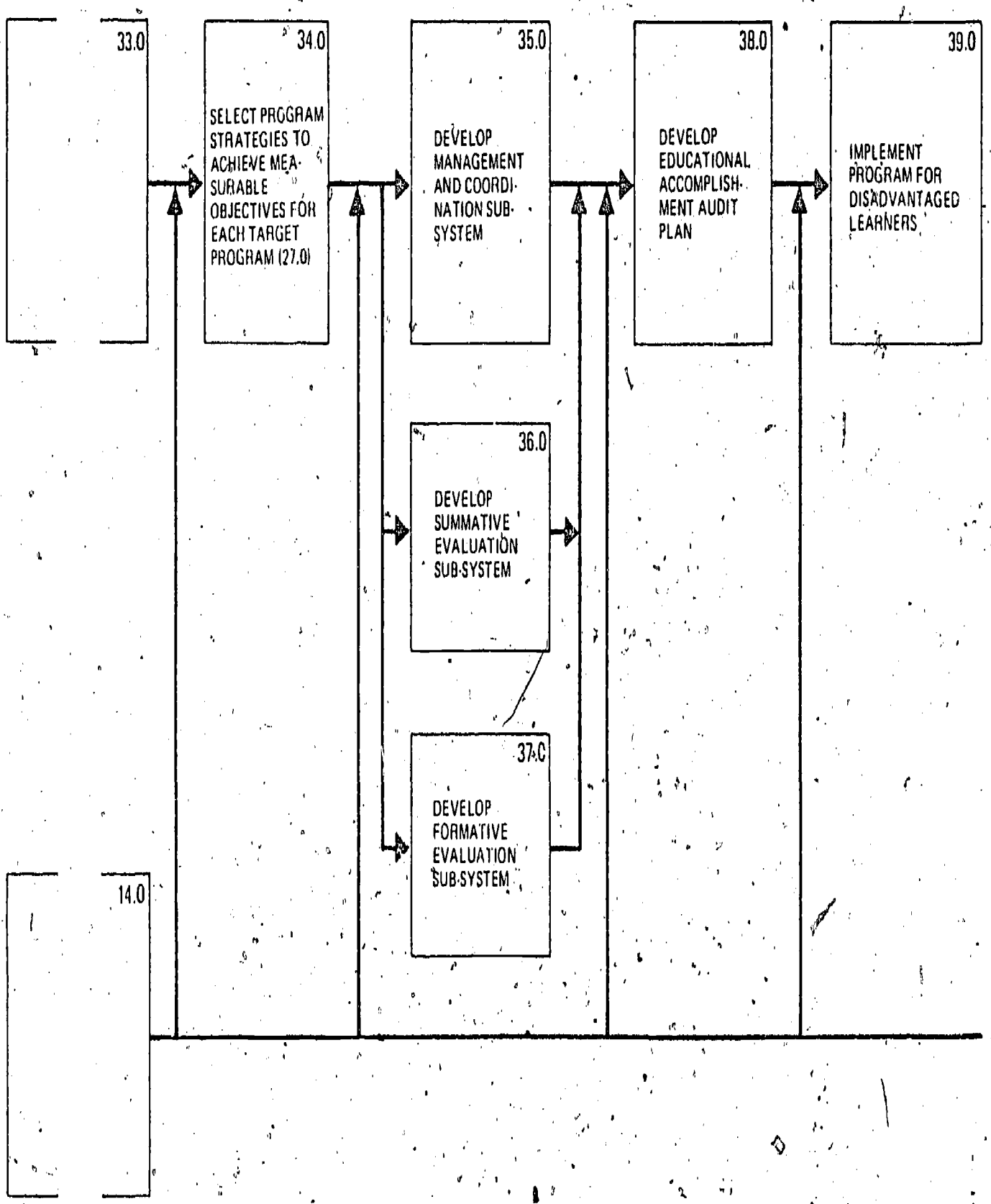

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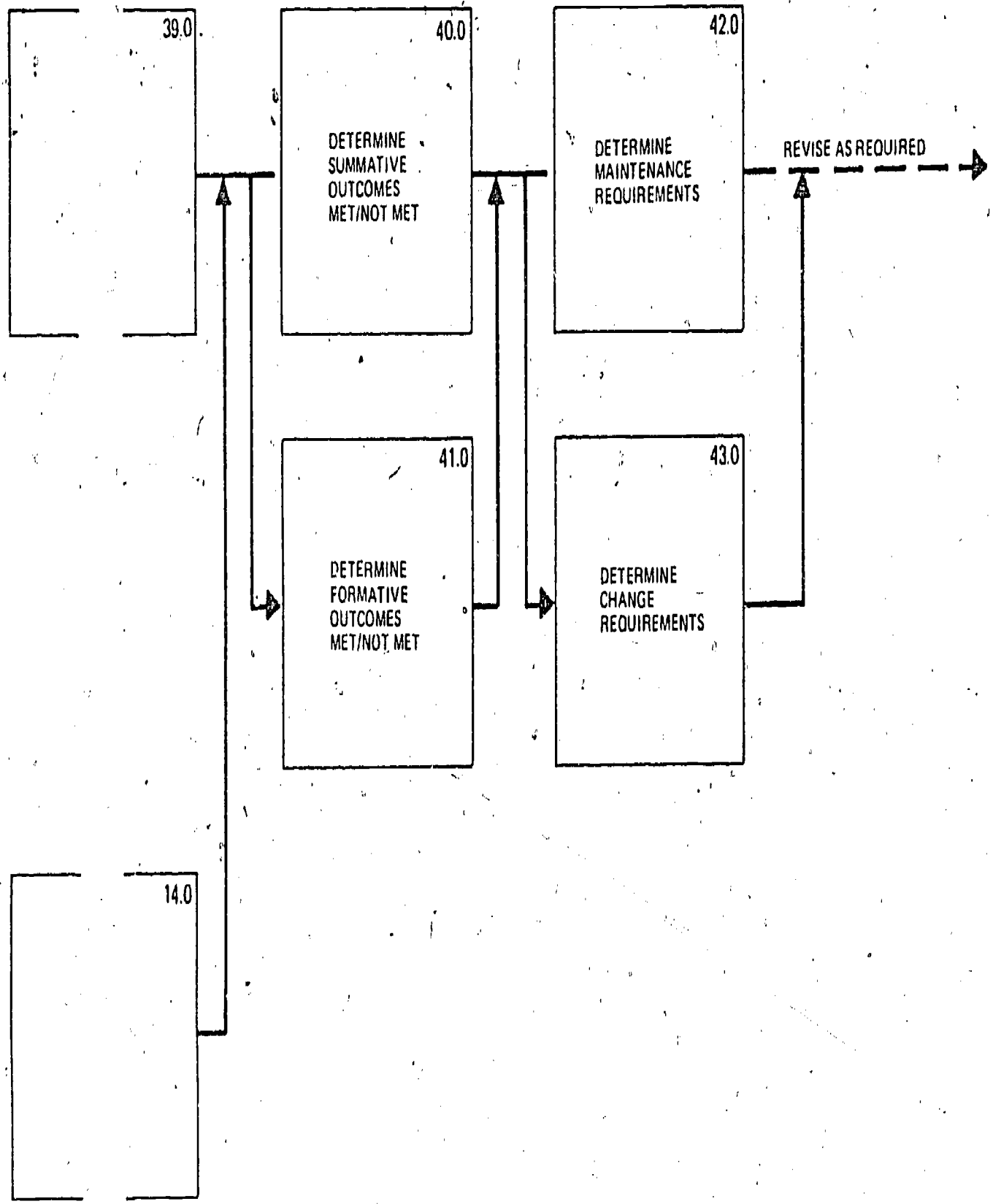

Figure 1 (continued)

The Narrative Description of the Mission Profile: The following is a narrative description of the profile of these major functions.

1.0 – 5.0: Starting Up. These five functions represent the project start-up phase beginning with the determination of preliminary planning requirements. These preliminary requirements are then translated into a preliminary planning proposal and submitted to appropriate college personnel for commitment approval. When approval is obtained, a technical working proposal is developed. The technical proposal identifies the products to be delivered, the product specifications, and the steps to be followed in the delivery of the agreed-upon products.

6.0 – 7.0: Concerns Assessment. The purpose of these two functions is to identify disadvantaged learner programs concerns at The College. This portion of the project does not represent a determination of needs; rather, it is a preliminary step which identifies major areas of concern (opinion and value data) in relation to the college educational programs and services designed for disadvantaged students. During the concerns assessment, the working team reviews previous district studies, surveys, reports, etc.; also, interviews are conducted to determine areas of concern from educators, students, and community groups. The information obtained from this portion of the project will later become important in the process of determining student needs.

8.0, 13.0, 14.0: Training Program in System Analysis and Educational System Planning for District Personnel. At the beginning of the concerns assessment, the training program for district personnel begins. The first step in developing the training program is to determine the training requirements based upon the product delivery requirements, district expectations, and entering knowledge of participating district personnel. Once the training requirements are identified, the training program is developed and implemented. At each training session the project participants are able to amend, revise, and finalize various portions of the project

which have been completed. Training session input is a vital part of the needs assessment and program planning model. It provides a common referent for the persons working in the planning and development of the programs.

9.0 – 15.0 (Except 13.0, 14.0): Developing the Program Goals for Disadvantaged Learners. These functions relate to the development of the goals and sub-goals for the disadvantaged target population. Functions 9.0 to 15.0 (except 13.0 and 14.0) are necessary in the development of objectives for disadvantaged learners. The goals and sub-goals in this portion of the project will be derived from a combination of inputs including existing district educational goals and the concerns assessment.

16.0: Determining Tentative Student Outcomes from Disadvantaged Student Goals and from the Concerns Assessment. This function is the culmination of the concerns assessment. Concerns were identified from previous district studies, reports, surveys, etc.; from interviews with educators, students, and community members; from existing district educational goals; and from the goals and sub-goals developed for disadvantaged students at The College. The information obtained from the concerns assessment represented opinions and values and are usually stated in the form of processes and solutions. The concerns data and existing goals were used to develop tentative student outcomes; the Planning Task Force and appropriate district personnel review and revise these tentative behavioral indicators. No attempt is made during this phase of the project to determine the criteria level for acceptable student performance for each outcome or behavioral indicator. The objectives developed here will not contain measurement criteria but instead will serve as a skeletal framework into which specific measurable criteria will be inserted after further study.

17.0 – 20.0: Identifying Disadvantaged Learner Programs for Further Needs Assessment and Matching These Programs with the Tentative Student Outcomes (16.0). These four functions identify the disadvantaged learner programs to be studied in the outcome discrepancy needs assessment, and bring these target programs together with the tentative

student outcomes derived from the concerns assessment. In 20.0 each target program is identified along with the student outcomes appropriate for each program.

21.0, 22.0: Determining Student Performance Criteria for the Outcomes of Each Target Program and Developing a List of Required Student Outcomes. Function 21.0 identifies measurement criteria for the outcomes of each target program from an empirical data base which can be realistically verified and justified. Given the outcome criteria from 21.0, the working team is able to finalize the tentative outcomes identified in 16.0 so that a list of required student outcomes for each target program can be approved.

23.0: Identifying Current Student Achievement of the Required Student Outcomes. Once the finalized list of required student outcomes is developed, it is possible to determine current student achievement of those outcomes. This function prepares for the determination of outcome discrepancies or needs in function 24.0.

24.0 – 26.0: Identifying Prioritized Needs for Each Target Disadvantaged Learner Program. A need is here defined as a measurable discrepancy or gap between a current and required outcome;[1] needs assessment is defined as the process of systematically identifying these outcome gaps.[2] It is now possible to determine outcome discrepancies for each target program; this is accomplished in function 24.0. Functions 25.0 and 26.0 deliver these outcome discrepancies or needs into prioritized lists.

27.0: Determining the Measurable Objectives for Each Target Program Upon Prioritized Needs. This function provides a list of measurable objectives for each target program based upon the needs assessment. These lists of measurable objectives should be useful to college personnel because they are derived from an empirical data base which has been verified.

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[1] Roger A. Kaufman, Educational System Planning, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.

[2] Ibid.

28.0 – 34.0: Disadvantaged Learner Program Development. Functions 28.0 to 34.0 relate to the development of programs designed to achieve the measurable learner objectives. These steps in the profile are ones normally accomplished using a system planning framework to problem solving. Program alternatives are essential in this process, and final program selection is based upon the realities of resource allocation. In an ideal profile, a field test of selected program strategies would be conducted to determine program effectiveness and required program changes. However, because of the given time frame and resource constraints, the program strategies field test was not included in the profile.

35.0 – 39.0: Developing the Management, Coordination, Evaluation and Audit Subsystems. The development of the management, coordination, evaluation and audit subsystems represents a joint effort between outside consultants and College personnel. As indicated in the function flow-block diagram, these plans are dependent, in part, on the objectives and programs developed for the target disadvantaged learner populations, and on the training program involving appropriate district personnel. The planning phase is finished with the completion of 35.0; however, the profile continues by including the implementation, evaluation, and revision steps. All of the steps from 1.0 to 38.0 are planning functions whereas steps 39.0 to 43.0 are doing functions.

39.0 – 43.0: Implementing the Planned Program and Determining Performance Effectiveness. The implementation, evaluation, and revision phases are the primary responsibility of The College. If desired, outside consultants could monitor this doing phase and offer any assistance which might reasonably be expected. It is recommended that the monitoring function be accomplished through an outside independent educational accomplishment auditor who would be perceived as being objective and unbiased.

II. Field-Testing of the Needs Assessment Components of the Model

The needs assessment and program planning model was initially conceived by the author. While the model was being developed, the Planning Task Force underwent a training program in educational system planning conducted by the author and a training team; this training was designed to produce an understanding for implementation of the model. After participants learned basic planning concepts, the model was presented, and based upon feedback, revised. Following the revision, Planning Task Force members were asked to approve and implement the model in each of the target programs for disadvantaged students. The field-testing of the needs assessment component of the model consisted of two phases: 1) the concerns assessment, and 2) the student testing and the existing FCC records data.

The Concerns Assessment: The writer received from the Planning Task Force members, sixteen documents containing concerns information about students in each of the three target programs. Summaries were written by the author of these documents (see Final Report). The concerns identified from these sources were written on three by five cards for later sorting. At the same time, personal interviews were held with representative groups of students, educators, and community members involved in each program. These concerns were obtained by a team of professional interviewers with extensive community college and human relations experience. Reports of the identified concerns were written by each interviewer based upon his findings. The concerns from interviews were also written on cards for sorting. The author integrated the concerns cards from both the written documents and the personal interviews (see Final Report).

Using the concerns assessment data, the writer combined this information with his professional knowledge and experience to produce a set of tentative behavioral indicators for each target program as found in the Final Report. He then compared these outcomes on a matrix with the concerns identified. The outcomes/concerns matrices were presented to six subgroups of the Planning Task Force to determine whether the attainment of given outcomes would reduce or eliminate given concerns. In addition, each individual member of the task

Table 1

Concerns/Outcomes Priority Rankings Combined with Individual Task Force Members Rankings Giving Total Rank Score and Final Outcome Priority

Outcomes	Concerns/Outcome Rankings		Individual Rankings		Total	Priority No.
1.0 Retention	1	+	1	=	2	1[a]
2.0 Attitude Requirements	3	+	4	=	7	2
3.0 Recruitment/Enrollment	5	+	3	=	8	3
3.0 Program Completion/Graduation	2	+	6	=	8	3
4.0 Growth Fulfillment	4	+	5	=	9	4
5.0 Required Skills/Knowledge	9	+	2	=	11	5
6.0 Productive Life	6	+	7	=	13	6
7.0 Understanding, Accepting Different Others	7	+	8	=	15	7
8.0 Program Transfer	8	+	9	=	17	8
9.0 Grade Point Average	10	+	10	=	20	9[b]

[a]Equals highest priority.

[b]Equals lowest priority.

force ranked the outcomes in order of personally perceived priority. The obtained data from the concerns/outcomes matrices and the individual outcome prioritizations were used to establish a final order of priority for each outcome.

The Planning Task Force accepted and adopted the author's tentative outcomes for each target program. A priority order for the outcomes was determined from the data in the concerns/outcomes matrices; the match between concerns and outcomes (reducing or eliminating concerns) ranged from a mean score of 59.25 percent to 79.18 percent of the six subgroups reporting. These percentages indicated matches between outcome attainment and concerns reduction or elimination. The second method of priority determination came from individual task force members; the obtained mean rank scores ranged from 3.05 to 8.20 with one being highest priority and ten being lowest. Combining the two above procedures produced a final prioritization for the tentative outcomes. The Final Report presented these data.

The Student Testing and FCC Records Data: The data collected in this needs assessment phase of the model consisted of student testing data (administered during the needs assessment) and data from school records (comparative enrollments, retention rates, and grade point average data). With both categories of data, comparisons were made between target disadvantaged students (EOP and Enabler students) and a control group representative of all students at Fresno City College.

For the testing program, Figure 2 diagrammatically represents the statistical comparisons made between target and control groups with the instrumentation selected. This figure shows group comparisons and instrumentation used; these include the statistical tests of significance applied to every comparison on each scale of the selected instruments. Thus, comparisons were made between Control-EOP (Disadvantaged Students) and Control-Enabler (Physically Handicapped) on every scale of the selected instrumentation. Chi-square between independent samples was the test of significance used on the Student Characteristics Data Sheet (personal background information); t-tests between uncorrelated means were used for the: 1) Junior College Placement Program (Educational Ability, English Usage, Reading and Mathematics),

	Random Selection →	COMPARISON GROUPS	
		Control–EOP	→ Control–Enabler
INSTRUMENTATION USED	Student Characteristics Data Sheet (comparisons made on each of 56 questions)	chi-square	chi-square
	Junior College Placement Program (comparisons made on each scale identified in text)	t-test	t-test
	Survey of Study Habits and Attitudes–Form C (comparisons made on each scale identified in text)	t-test	t-test
	The Adjective Check List (comparisons made on each scale identified in text)	t-test	t-test
	California Psychological Inventory (comparisons made on each scale identified in text)	t-test	t-test
	College Student Questionnaire: Part 2 (comparisons made on each scale identified in text)	t-test	t-test
	Personal Orientation Inventory (comparisons made on each scale identified in text)	t-test	t-test

Figure 2. Statistical Comparisons of Groups Tested with Instrumentation Selected

a test of academic ability; 2) Survey of Study Habits and Attitudes—Form C (Study Habits, Study Attitudes, and Study Orientation), a test of study skills; 3) The Adjective Check List (Number of Adjectives Checked, Defensiveness, Favorable Adjectives Checked, Unfavorable Adjectives Checked, self-confidence, self-control, reliability, personal adjustment, achievement, dominance, endurance, order, intraception, nurturance, affiliation, heterosexuality, exhibition, autonomy, aggression, change, succorance, abasement, deference, counseling readiness) a test of personality variables; 4) California Psychological Inventory (dominance, capacity for status, sociability, social presence, self-acceptance, sense of well-being, responsibility, socialization, self-control, tolerance, good impression, communality, achievement via conformance, achievement via independence, intellectual efficiency, psychological-mindedness, flexibility, femininity of interests), a test of personality variables; 5) College Student Questionnaire: Part 2 (Family Independence, Peer Independence, Liberalism, Social Conscience, Cultural, Sophistication, Satisfaction with Faculty, Satisfaction with Administration, Satisfaction with Major, Satisfaction with Students, Study Habits, Extracurricular Involvement), a test of personality variables; 6) Personal Orientation Inventory (Time Competent, Inner Directed, Self-Actualizing Value, Existentiality, Feeling Reactivity, Spontaneity, Self-regard, Self-acceptance, Nature of Man, Synergy, Acceptance of Aggression, Capacity for Intimate Contact), a test of personality variables.

The Bibliography provides the references for each of the above instruments. The Student Characteristics Data Sheet, developed for this project, is found in the Final Report. Detailed descriptions of all of these instruments are found in the body and addendum of the Final Report.

Findings from the Testing Program: The generalized findings from the testing data are summarized below. A detailed presentation of the obtained testing data, including statistical analyses, are found in the body and addendum of the Final Report.

Composite Summary of EOP Students. Based upon the data obtained from the seven instruments used in this study, when compared with control students, it can be said that the EOP students are statistically significantly different in that they:

1. live in smaller communities
2. have more brothers and sisters
3. have fathers with less formal education
4. have mothers with less formal education
5. attend college for different reasons
6. attended high school more recently
7. are more likely to be Black or Chicano
8. are more likely to have fathers who work at different jobs from those of controls
9. have fathers who earn less money
10. have mothers who earn less money (if they work)
11. were more likely to be a middle child in the family
12. are more likely receiving financial aid to attend college
13. are more likely receiving financial aid from the college
14. are more likely to be bi-lingual
15. have less Educational Ability
16. have lower English Usage Skills
17. are lower in Reading
18. have lower skills in mathematics
19. have poorer study habits
20. are higher in Spontaneity
21. are higher in lability
22. are higher in the Number of Unfavorable Adjectives Checked in self-description
23. are higher in Heterosexuality
24. are higher in aggression
25. are lower in Self-confidence
26. are lower in total number of adjectives checked in self-description
27. are lower in self-control
28. are lower in personal adjustment
29. are lower in Succorance

30. are lower in responsibility
31. are lower in Achievement via Independence
32. are lower in Femininity

All of the above statements have been supported by the data reported in the Final Report.

Composite Summary of Enabler students (Physically and/or Emotionally Handicapped). Based upon the data obtained from the seven instruments used in this study, when compared with control students, it can be said that the Enabler students are statistically significantly different in that they:

1. attended high school earlier
2. are older
3. were more likely to be an oldest child
4. were more likely born in the USA or Canada
5. have less Educational Ability
6. are lower in English Usage Skills
7. are higher in Satisfaction with college Administration
8. are more Defensive
9. have more Self-Control
10. are more Aggressive
11. are more Nurturant
12. are more affiliant
13. are lower in number of Unfavorable Adjectives Checked in self-description

All of the above statements have been supported by the data reported in the Final Report.

Findings of Data from FCC Records: As found in the recommendations section in the Final Report, certain suggestions were given for obtaining additional data from existing school records. After much time and effort, only three types of school records data were found to be available (the remainder of recommended data was not available with the existing record keeping system). In the following section, the author reports the available enrollment data, retention rates data, and grade point average data for the EOP, Enabler and control groups.

Enrollment Data – Tables 2, 3, and 4 present the enrollment data for the EOP, Enabler, and control groups, respectively, for the academic years 1971-72, 1972-73, and 1973-74. On these tables are found, for each group, the total enrollments for Fall and Spring of a given academic year, the percentage increase over the previous academic year, and the percentage increase over the base year of 1971-72.

Table 5 presents enrollment comparisons between the EOP, Enabler, and control students for the Fall and Spring semesters of 1971-72, 1972-73, and 1973-74.

For the EOP students, the 1971-72 enrollment was 143 students (the base year for comparisons). In 1972-73, there were 127 students. This represents a decline of 11.5 percent over the 1971-72 enrollment. The 1973-74 enrollment was 174 students, representing a 37 percent increase over the previous year and a 21 percent increase over the base year of 1971-72.

For the Enabler students, the 1971-72 enrollment was 89 students (the base year for comparisons). In 1972-73, there were 195 students. This represents an increase of 119 percent over the 1971-72 enrollment. The 1973-74 enrollment was 352 students, which represents an 80 percent enrollment increase over the previous year and a 295 percent increase over the base year of 1971-72.

For the control students, the 1971-72 total enrollment was 27,740 students (the base year for comparisons). In 1972-73, there were 28,326 students. This represents an increase of 2.11 percent over the 1971-72 enrollment. The 1973-74 enrollment was 32,214 students, which represents a 13.72 percent increase over the previous year and a 16.12 percent increase over the base year of 1971-72.

The above data would suggest that over a two-year period from the 1971-72 academic year to the 1973-74 year, both the EOP and Enabler programs compare favorably with the college population as a whole. This is especially true of the Enabler program which grew by 295 percent over that two-year period.

Table 2

Enrollment Data for the EOP Program for 1971-72, 1972-73, 1973-74

Academic Year	Total Enrollment for Fall and Spring	Increase Over Previous Year	Increase Over Base Year (Base Year is 1971-72)
1971-72 (Base Year)	143	---	---
1972-73	127	-11.5%	-11.5%
1973-74	174	37.0%	21.0%

Table 3

Enrollment Data for the Enabler Program for 1971-72, 1972-73, 1973-74

Academic Year	Total Enrollment for Fall and Spring	Increase Over Previous Year	Increase Over Base Year (Base Year is 1971-72)
1971-72 (Base Year)	89	---	---
1972-73	195	119.0%	119.0%
1973-74	352	80.0%	295.0%

Table 4

Enrollment Data for the Control Group for 1971-72, 1972-73, 1973-74

Academic Year	Total Enrollment for Fall and Spring	Increase Over Previous Year	Increase Over Base Year (Base Year is 1971-72)
1971-72 (Base Year)	27,740	---	---
1972-73	28,326	2.11%	2.11%
1973-74	32,214	13.72%	16.12%

Table 5

Enrollment Comparisons Between the EOP, Enabler, and Control Students for 1971-72, 1972-73, 1973-74

Groups	Number Enrolled 1971-72	Number Enrolled 1972-73	1972-73 Increase Over Previous Year	1972-73 Increase Over 1971-72	Number Enrolled 1973-74	1973-74 Increase Over Previous Year	1973-74 Increase Over 1971-72
EOP	143	127	-11.5%	-11.5%	174	37.0%	21.0%
Enabler	89	195	119.0%	119.0%	352	80.0%	295.0%
Control	27,740	28,326	2.11%	2.11%	32,214	13.72%	16.12%

Retention Data – Table 6 presents the Fall to Spring Retention Rates for EOP, Enabler, and control students for academic years 1971-72, 1972-73, 1973-74, and 1974-75.

Retention rates for the EOP program for Fall to Spring were 100 percent in 1971-72, 1972-73, and 1973-74; at this writing, the retention rate for 1974-75 was not available. The one-year, Fall to Spring retention rates for the EOP program are extremely high (100 percent). It should be noted that the EOP program works to encourage students to complete a full academic year, including giving financial aid as required. Table 7 presents additional data about EOP retention beyong the Fall to Spring comparison. For those students entering the EOP program in the Fall of 1971, the percentage of retention for Spring of 1972 was 100 percent. Of those same students who entered in Fall of 1971, however, only 52 percent re-enrolled in Fall of 1972 or Spring of 1972. For those students entering the EOP program in the Fall of 1972, there was again a 100-percent retention rate to the Spring semester. However, of those same Fall 1972 EOP enrollees, only 35 percent re-enrolled in Fall 1972 or Spring 1973. The data shows that while the one-year retention rate is 100 percent, the drop-out rate for the second year is quite high. This could be explained by students completing in one year their educational objectives or it could be explained by students not completing a second year for some other reason.

Retention rates for the Enabler program for Fall to Spring were as follows: 1971-72, 65 percent; 1972-73, 58 percent; 1973-74, 53 percent. No data was available, at this writing, for 1974-75. These figures show a decline in retention rates with each passing year. However, it should be recalled that the Enabler program also experienced a high period of enrollment growth from 1971-72 to 1973-74. With more students, it might be more difficult to retain students at the same rate as is possible with fewer students.

Retention rates for the control students (the entire college population) for Fall to Spring were the following: 1971-72, data not available at this writing; 1972-73, 71 percent; 1973-74, 70 percent; 1974-75, 69 percent. These data show that the Fall to Spring retention rate is fairly stable for the control students.

Table 6

Fall to Spring Retention Rates for EOP, Enabler, and Control Students for Academic Years 1971-72, 1972-73, 1973-74, 1974-75

Groups	Fall to Spring Retention Rate 1972-72	Fall to Spring Retention Rate 1972-73	Fall to Spring Retention Rate 1973-74	Fall to Spring Retention Rate 1974-75
EOP	100%	100%	100%	Data Not Available
Enabler	65%	58%	%	Data Not Available
Control	Data Not Available	71%	70%	69%

Table 7

Retention Rates for the EOP Program for Two-Year Periods from Fall 1971 to Spring 1973 and from Fall 1972 to Spring 1974

Comparison Years	Retention Rate for EOP Students
Two Years Comparisons Starting Fall 1971 to Spring 1973	
Fall 1971 to Spring 1972	100%
Fall 1971 to Fall 1972	52%
Fall 1971 to Spring 1973	52%
Two Years Comparisons Starting Fall 1972 to Spring 1974	
Fall 1972 to Spring 1973	100%
Fall 1972 to Fall 1973	35%
Fall 1972 to Spring 1974	35%

The above data suggests that the Fall to Spring retention rates for the EOP program are higher than for the control students and are lower for Enabler students.

Grade Point Average Data – Table 8 presents the grade point average comparisons between EOP, Enabler and control students from Fall 1971 through Spring 1974. As can be seen from the table, data is not available for the control group for three semesters; because of the enormity of the task of compiling these data from the existing record system, it was felt that three semesters would be adequate for this study. Table 8 shows that the mean GPA for the EOP and Enabler groups are somewhat lower than for the control group; the mean GPA for EOP was 2.15; the mean for the Enablers was 2.50; the mean for the control group was 2.81. The control group GPA was highest, with the Enabler group second, and the EOP group third. Comparing the mean differences in GPA between groups shows that the control group has a .57 higher grade point average than does the EOP group while the control group is .24 higher in GPA than Enabler students. These data suggest that the control students at the college maintain higher grades than do the students from either the EOP or Enabler programs. It should be remembered, however, that the students from the target programs are disadvantaged and thereby, the lower GPA can be understood.

Table 8

Grade Point Average Comparisons Between EOP, Enabler, and Control Students from Fall 1971 through Spring 1974

Groups	Fall 1971 GPA	Spring 1972 GPA	Fall 1972 GPA	Spring 1973 GPA	Fall 1973 GPA	Spring 1974 GPA	Mean GPA	Mean GPA Difference
EOP	2.14	2.37	2.09	2.06	2.02	2.20	2.15	
Enabler	2.45	2.74	2.42	2.42	2.43	2.53	2.50	
Control	2.71	2.74	*	*	*	2.98	2.81	
GPA Difference Between EOP and Control	.57	.37	*	*	*	.78		.57
GPA Difference Between Enabler and Control	.25	0	*	*	*	.45		.24

*Data not available.

III. Measurable Student Objectives for the EOP and Enabler Programs

The following measurable student objectives were developed from the data obtained in the needs assessment.

Measurable Objectives for EOP Students (derived from the statistically significant differences identified in the needs assessment data):

Retention Outcome: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing one or more semesters in a given vocational program, there will be no statistically significant difference in the retention rates between target disadvantaged students and control students representative of the college as a whole.

Attitudes Requirements Outcomes: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing training in a given vocational program, there will be no statistically significant differences in the following attitudes between target disadvantaged students and control students representative of the college as a whole:

1. Spontaneity as measured by the Personal Orientation Inventory.
2. Lability as measured by the Personal Orientation Inventory.
3. Aggression as measured by the Adjective Check List.
4. Succorance as measured by the Adjective Check List.

Affirmative Action Outcome: Following implementation of the policy/management plans, there will be no statistically significant differences between control students representative of the college as a whole and target disadvantaged minority and/or women students in recruitment and enrollment rates into target vocational education programs.

Program Completion Outcome: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, there will be no statistically significant difference in the program completion rates (in the target vocational education programs) between the given disadvantaged students and control students representative of the college as a whole.

Personal Growth/Fulfillment Outcomes: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing training in a given vocational program, there will be no statistically significant difference in the following personal growth/fulfillment variables between target disadvantaged students and control students representative of the college as a whole:

1. Number of Unfavorable Adjectives Checked in Self-Description as measured by the Adjective Check List.
2. Self-confidence as measured by the Adjective Check List.
3. Total number of Adjectives Checked in Self-description as measured by the Adjective Check List.
4. Self-control as measured by the Adjective Check List.
5. Personal Adjustment as measured by the Adjective Check List.

Required Skills/Knowledge Outcomes: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing training in a given vocational program, there will be no statistically significant differences in the following skills/knowledge variables between target disadvantaged students and control students representative of the college as a whole:

1. English Usage Skills as measured by the Junior College Placement Program.
2. Reading as measured by the Junior College Placement Program.
3. Mathematics as measured by the Junior College Placement Program.

4. Educational Ability as measured by the Junior College Placement Program.

(Since the needs assessment data was collected, Educational Testing Service has discontinued publication and scoring of the Junior College Placement Program; therefore, another suitable standardized test or tests will be selected to measure the above four variables.)

5. Study Habits as measured by the Survey of Study Habits and Attitudes, Form C.

Personal Productive Life Outcomes: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing training in a given vocational program, there will be no statistically significant difference in the following personal productive life variables between target disadvantaged students and control students representative of the college as a whole:

1. Responsibility as measured by the California Psychological Inventory.
2. Achievement via Independence as measured by the California Psychological Inventory.

Grade Point Average Outcome: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, there will be no statistically significant difference in the grade point averages between the given disadvantaged students participating in the target vocational programs and control students representative of the college as a whole.

Measurable Objectives for Enabler Students (derived from the statistically significant differences identified in the needs-assessment data):

Retention Outcome: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing one or more semesters in a given vocational program, there will be no statistically significant difference in the retention rates between target Enabler students and control students representative of the college as a whole.

Attitudes Requirements Outcomes: Following full-scale implementation of the policy/management plans and the instructional system for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing training in a given vocational program, there will be no statistically significant differences in the following attitudes between target Enabler students and control students representative of the college as a whole:

1. Defensive as measured by the Adjective Check List.
2. Aggressive as measured by the Adjective Check List.

Affirmative Action Outcome: Following implementation of the policy/management plans, there will be no statistically significant differences between control students representative of the college as a whole and target Enabler minority and/or women students in recruitment and enrollment rates into target vocational education programs.

Program Completion Outcome: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, there will be no statistically significant differences in the program completion rates (in the target vocational education programs) between the given Enabler students and control students representative of the college as a whole.

Personal Growth/Fulfillment Outcomes: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating Enabler students completing training in a given vocational program, there will be no statistically significant differences in the following personal growth/fulfillment variables between target Enabler students and control students representative of the college as a whole:

1. Self-control as measured by the Adjective Check List.
2. Number of Unfavorable Adjectives Checked in Self-Description as measured by the Adjective Check List.

Required Skills/Knowledge Outcomes: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, for the participating disadvantaged students completing training in a given vocational program, there will be no statistically significant differences in the following skills/knowledge variables between target Enabler students and control students representative of the college as a whole:

1. Educational Ability as measured by the Junior College Placement Program.
2. English Usage Skills as measured by the Junior College Placement Program.

(Since the needs assessment data was collected, Educational Testing Service has discontinued publication and scoring of the Junior College Placement Program; therefore, another suitable standardized test or tests will be selected to measure the above two variables.)

Grade Point Average Outcome: Following full-scale implementation of the policy/management plans and the instructional systems for the seven target vocational education programs at Fresno City College, there will be no statistically significant differences in the grade point averages between the given Enabler students participating in the target vocational programs and control students representative of the college as a whole.

IV. Conclusions and Recommendations

Using the Needs Assessment and Program Planning Model developed, the results from the needs assessment, and the measurable objectives derived from the needs assessment for the EOP and Enabler programs, the author offered the following Conclusions and Recommendations.

CONCLUSIONS

1. Using the tools and logic of educational system planning, a needs assessment and planning model for community college disadvantaged students programs can be developed and used by those responsible for, or participating in, such programs.

2. Local college students, educators and community members can be successfully trained in the techniques of educational system planning.

3. For a given community college disadvantaged students program, concerns can be identified using existing college documents and personal group interviews. Individually identified concerns can be categorized into concern areas and presented in written report form and be accepted as valid by those persons involved in a given program.

4. A written report of concern areas can be used as a data base to establish tentative outcomes for a given program; the outcomes so developed, will be accepted as valid by a responsible planning group composed of students, educators, and representative community members.

5. Tentative outcomes for a given disadvantaged students program can be objectively prioritized with the priority so assigned being accepted by the involved educational partners.

6. An empirical data base can be established to determine performance criteria for tentative outcomes. Such a data base permits a system planner to realistically establish expected levels of performance for given outcomes.

7. EOP students at Fresno City College are significantly different from the typical college student. They are deficient in basic skills required to succeed in most college studies. Because of these deficiencies and unique personal characteristics differences,

programs must be developed to provide specialized training in basic learning skills; with intensive assistance these students might successfully complete college level studies. Perhaps massive allocations of resources per individual students will be required to produce significant positive changes in these disadvantaged students.

8. Enabler students at Fresno City College are deficient in English usage skills and they have less educational ability than most students. These deficiencies could be the result of physical and/or emotional handicaps and may thereby be difficult to overcome. Further data is required to draw more specific conclusions. However, the data available from this study suggests that special assistance in certain areas should be provided these students.

9. Based upon the data in this study, the author questions whether Veteran students at the field test College are really disadvantaged. Their study and learning skills are comparable to those of typical students. While they do differ in personal characteristics, the significance of these differences for college success is questionable. Further study is necessary to determine if Veterans are truly disadvantaged.

RECOMMENDATIONS

Based upon the findings from this study, the following recommendations are offered:

1. All components of the needs assessment and planning model should be thoroughly field tested. An important variable in determining its effectiveness would include the demonstrated attainment of all outcomes in each of the target disadvantaged students programs. Beyond this, final determination would include the positive changes made in the lives of target program students; as a result of their educational experience, they should be better able to survive and contribute to themselves and society.

2. A new model should be developed to strengthen the present one. In a new model, the author would use as a data base to determine student outcomes, an objective value analysis which identifies the values and value deprivations of the involved educational partners. The author has begun development of such a model, but it is still incomplete and

untested. His hope is to produce a more objective data base for outcome determination. In a new model, the author would also identify student characteristics before developing tentative student outcomes, not afterwards as in the present model; these data could be helpful in outcome determination. Finally, in a new model, the author would determine outcome discrepancies (or needs) for each of the three partners in educational planning; in the present model, needs are identified for students only; a revised model would determine educator and community needs, in addition to perceived concerns as done in the current model.

3. Criteria for the Objectives – Using the data reported both in the body of the report and in the addendum, the Planning Task Force should select those data to be used in establishing the criteria for the objectives developed as part of this study for each target program. This writer recommends that the criteria for the objectives of each target program be written in the form of "reducing or eliminating" the statistically significant differences between each target program and the control group; i.e., for the EOP students, one of the criteria for the attitudes requirements objective might be, "Within X semesters, eliminate the .01 significant difference between EOP and control students on the Responsibility scale of the California Psychological Inventory." The data herein presented should be sufficient to provide the Planning Task Force with an empirical base from which to establish the criteria for the objectives of each target program.

4. Enrollment Statistics – Enrollment statistics should be gathered and compiled for each target program and the college as a whole on semester and yearly figures by ethnic groups. These data should be tabled so as to reflect number and percent increases over previous semesters and years. The data could further reflect a breakdown between full- and part-time students.

5. Transfer Statistics – Transfer statistics should be obtained for each target program and the college as a whole indicating the numbers and percentages by ethnic groups of students transferring to four-year colleges and universities and other educational institutions.

These data should include those being graduated with an A.A. degree and those transferring with less than an Associate of Arts degree.

6. Retention Rate Statistics for FCC Students – Retention rates should be determined for each target program and the college as a whole both on a yearly basis and for continuing students studying for two years or longer (part-time students will take longer to complete a two-year program). Retention rates should be kept by programs, including certificate and A.A. students, and by ethnic groups.

7. Retention Rate Statistics for FCC Graduates Studying at Four-Year Colleges and Universities and Other Institutions – Where possible, retention rates should be determined for FCC graduates at other institutions; preferably, this would involve comparisons between FCC students from target programs for the disadvantaged and control students compared with the mean retention rate for each transfer institution. These data should also reflect ethnic group membership.

8. Program Completion Statistics for FCC Students – Program completion data should be available for each target program and the college as a whole indicating by ethnic group the numbers and percentages of students who complete either an A.A. degree or a certificate program. These data should be determined for each program at the college.

9. Program Completion Statistics for FCC Graduates Studying at Four-Year Colleges and Universities and Other Institutions – Where possible, program completion data should be determined for FCC graduates at other institutions; these would include comparisons between FCC students from target programs and FCC control students with the mean program completion rate for all students at each transfer institution. Numbers and percentages could be obtained of those students completing baccalaureate and graduate degrees. Comparisons between ethnic groups and full- and part-time students would also be helpful.

10. Grade Point Average Statistics for FCC Students – Grade point averages data should be obtained for students in each target program and for the college as a whole by individual programs at the college. These data should be tabled by semester, end-of-year, and

end-of-program. Further, grade point averages should be shown of students from various ethnic groups, new and continuing students, and full- and part-time students. These data could be matched with the program completion statistics so that grade point averages could be shown of students completing and not completing given programs.

11. Mr. Richard Handley, Dean of Vocational Education at FCC, has developed a tracking system to be used in the tutorial program which provides much useful data. Mr. Handley's system should be implemented for all programs at the college.

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APPENDIX A[1]

Table of Contents, List of Tables, List of Figures as Found in the Final Report

[1] This appendix is included in the summary report so that the reader may see all of the sections of the Final Report available from Mr. Handley or in the FCC Library.

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