A demonstration program instituted the New Careers model into the Bethel school system in Eugene, Oreg., with three objectives: to create an entry system for economically disadvantaged youth into teacher preparation academic course work; to acquire academic credit for the teacher aide's on-the-job training within the university teacher education structure; to negotiate toward a mobility system for the teacher aide within the permanent structure of the school system. Inservice seminars were conducted by University of Oregon personnel for volunteer teachers who desired to have teacher aides. Aides, selected from the Upward Bound program at the University, received preservice training through the department of teacher education at the University and were enrolled in two education courses there. Release time teachers were hired as consultants to work with the cooperating teachers, and graduate research assistantships were granted to provide for quality control research. The program evaluation indicated that major weaknesses stemmed from managerial problems which do not affect the general feasibility of the New Careers model but that the model should be further developed with a careful delineation of the training and curriculum for both teachers and teacher aides. (Included is the evaluative analysis of the program design and processes, of the observable impact of the program on the school system, and of the implications for future teacher training programs.) (JS)
The Bethel Program was a demonstration project supported by the NDEA National Institute for Advanced Study in Teaching Disadvantaged Youth, in the Bethel school system in Eugene, Oregon, from September, 1966, to June, 1967. The program proposed to investigate the feasibility of the New Careers model as a means of providing solutions to major educational dilemmas, particularly in the area of teacher education.

Of concern to this program were the problems in teacher training on the preservice level, the current and projected manpower needs in school personnel, and changing teacher practices in the classroom which create problems of educating both the disadvantaged and the advantaged child. Pearl has proposed that deficiencies in teacher training contribute to the teacher's inadequate functioning in the educational process. He has enumerated these deficiencies: the lack of any connection between the implications of theory and teaching practices; the fragmentation of the training efforts of content courses in the liberal arts and sciences from the methods courses in the school of education; the years of preservice training without the opportunity to verify the choice of teaching as the desired career; the remoteness of teacher training from actual classroom functions; and the irrelevance and impracticality of the training relative to the difficulties encountered in actual teaching situations.

Considering the problem in terms of current educational manpower needs, it may be projected that there will be approximately one-fifth more persons of school age in 1975 than in 1965. It may also be assumed that the pupil-teacher ratio is now 25 to 1. It is therefore impossible to generate a quality educational program wherein the pupil-teacher ratio is reduced to ten or fifteen pupils to every person in a teacher role unless a strategy is instituted to utilize persons other than certified teachers in the classroom.

Holding strategies such as the automated classroom, an increased use of visual aids, the development of discriminating instruments and similar measures, can be numbered as the major alternatives to the problem of overcrowded classrooms. The answer to whether or not the machine will supplant manpower is pure conjecture, however, since sufficient data are not available to negate or buttress any position. Moreover, there is no research evidence which suggests that, in large part, visual aids greatly maximize the learning process. And the grouping studies, although currently showing an inconsistence of results, do suggest that groupings hurt the poor.

The Bethel program assumes that one aspect of the problem of providing quality education for disadvantaged youth is the retraining of the practicing teacher. Currently, teachers function ineffectively in the school setting because—

1. They do not understand the life styles of the disadvantaged;
2. They are victimized by their own prejudices and expectations;
3. They lack specific skills to work with hard-to-reach youth;
4. They are insufficiently motivated to participate in long-range comprehensive planning;
5. They lack the skills and the understanding to develop a spirit of cohesion and support from colleagues;
6. They lack appropriate research evaluation competencies for evaluation of program intervention strategies.

Within the classroom, teachers are acutely ineffective because they support and sustain modes of operation of the school system which further disengage the disadvantaged student from the educational process. These modes of operation have been delineated elsewhere as (a) arbitrary and discriminating systems of rules; (b) segregative practices; e.g., special learning ability groups, vocational education programs, special education programs, and remedial programs; (c) meaningless and dull classroom material; (d) an educational process irrelevant to the disadvantaged youth's present and future life; (e) school life which affords minimal psychological gratification; and (f) the few opportunities for disadvantaged youth to make a contribution—a lack which effects a sense of powerlessness in such youth.
To deal with the range of such complex problems, the Bethel program instituted the New Careers model in the school system along with a training philosophy and training model consistent with the overall objective of this program: to reconstruct the relationship of the classroom teacher to the student, to the curriculum, and to the goals of education; then, to incorporate these findings into the molding of a teacher training program both on preservice and in-service levels. Inherent in the New Careers model is a basic structure of educational training and systematic management of personnel duties which deals with some of these aspects of educational dilemmas.

The use of teacher aides is not new to the school system. In a selected bibliography published by The Year of the Non-Conference, 25 selected references to various teacher aide programs are listed. However, these programs, of the traditional type, are not seen as career opportunities. There are no means for the teacher aide to attain college credit for the on-the-job training or experience. There is no built-in mobility system for the teacher aide within the school system, either in terms of job skills or income status.

On the other hand, the development of a training and linkage system to higher education institutions is basic to the notion of a New Careers model. The available research evidence suggests that the use of the non-professional in school settings—as well as in other areas of human service—can be a source of manpower. However, the literature is limited in terms of meaningful feasibility demonstration projects which address themselves to certain logistic problems: role definition and development; training on the preservice and in-service levels; and institutionalization of the New Careers model into the educational systems.

Consequently the objectives of this aspect of the Bethel program were—

1. To create an entry system for economically disadvantaged youth into teacher preparation academic course work;
2. To acquire academic credit for the teacher aide's on-the-job training within the university teacher education structure;
3. To negotiate toward a mobility system for the teacher aide within the permanent structure of the school system on a basis either of job skills or of income status.

To summarize: the basic training objectives of this program were (a) to determine and to fill the gaps in knowledge of the target populations (teachers and teacher aides); (b) to modify attitudes and behavior inconsistent with the program philosophy; and (c) to develop competencies in teaching. In any effort to institute the New Careers model in educational settings it is essential that the core of the program be a training philosophy; the particular training model employed in this program is described in the following section of this report.

II
Program Description

The Setting

The Bethel School District was viewed as a small scale school system which allowed the investigation of the feasibility of the training program in all of the representative grade schools in the educational system. At the time of the study, the school district had five elementary schools, two junior high schools, and one senior high school, with a total school enrollment above 3,000. There were 171 contracted teachers; most of the additional teaching staff was composed of intern teachers in the teacher education program at the University of Oregon, Eugene. Responsibilities for the Bethel program were shared by the school district and by the department of remedial education of the University. Arthur Pearl, professor of education at the University of Oregon, directed the Bethel program.

The Program: Interrelated Units

1. The In-Service Seminars

In-service seminars were instituted in the Clear Lake Elementary School, the Shasta Junior High School, and the Willamette Senior High School in the Bethel school district. Teacher enrollment in the seminars was completely voluntary; however, only teachers who attended the in-service seminars were permitted to have teacher aides.

Specifically, seminar goals were—

1. To minimize the remoteness of teacher education and classroom practices by having university personnel run such a seminar at the school, dealing specifically with the issues of that school; additionally, to develop seminar topics through the use of teacher observations,
The teacher aides worked 15 hours weekly; the wages ranged from $1.25 per hour to $1.75 per hour.

Each seminar was based on the small group process model using a problem-solution approach as basic instructional method. This approach emphasizes observation, identification of the problem, definition of relevant processes, and evaluation of intervention strategies. The most innovative feature in the seminar was the utilization of program monitoring devices—observational data, interview data, and videotape equipment—in order to present the teaching staff with simulated problem-solving situations of actual classroom processes for analysis.

The seminars in each school varied in terms of the importance accorded, in discussion, of the aforementioned goals. Such discussion, in turn, stemmed from the problems presented in the seminar by the teacher, as well as from the substance of the videotapes and other monitoring data presented. However, the basic curriculum content of the seminars was the alienation of youth from the school system by the school system. The discussions were largely concerned with the disengaging processes which alienate youth from the learning situation, the effect of grouping practices, general descriptions of youth in low income settings, and the relation of such descriptions to the school and to the teacher. Emphasis was given to particular intervention programs which could be used in the classroom and in the school generally, in order to bring the reluctant learner into the learning process.

2. The Teacher Aides

The teacher aides were selected from the Upward Bound program at the University of Oregon. Among their number were Mexican-American youth, Negro youth from the Portland area and the Astoria Job Corps, and Caucasian youth from the Oregon area. All were between the ages of 17 and 21; all either had graduated from high school or had satisfied the requirements of the Graduate High School Equivalency Diploma for the state of Oregon. Since most of the students were enrolled in university courses, they were allowed to work as teacher aides or research aides as a part of the university's work-study program. Students who were in Phase I of Upward Bound (taking no university courses but preparing for them) were paid from the program's operating budget, since they did not qualify for the university's work-study program. The teacher aide worked 15 hours weekly; the wages ranged from $1.25 per hour to $1.75 per hour.

Preservice training for the teacher aide was provided in conjunction with the department of teacher education in the School of Education at the University of Oregon. Teacher aides were enrolled in the Block I series (Human Development and Learning, and an introductory class to Basic Classroom Procedures), normally taken in the student's sophomore and junior years of preparation in teacher education. In the spring of the year, a seminar dealing with specific problems of the teacher aide's day-to-day responsibilities was held at the district school.

3. The Release Time Teachers

Three additional teachers were hired as program consultants and release time teachers. Their responsibilities were (a) to release teachers from their classrooms in order to observe other classes; and (b) to observe teachers in order to help them evaluate their own teaching. Note that these staff members were responsible only for helping the teacher improve the instruction in his class without giving orders or imposing penalties—a function different from that of an administrator who evaluates for hiring or firing purposes.

4. Quality Control Research

In order to have a monitoring system for continuous evaluation and feedback on teacher and teacher aide performance in the classroom situation, quality control research was instituted. The following components were built into this unit of the Bethel program:

- Two graduate research assistantships provided personnel to monitor the three teacher seminars and to compile data relevant to the program's goals and philosophy. Such data anticipated the development of innovative program components for the succeeding programs.
- One graduate student interviewed teachers to assess the attitudinal changes of teachers during the program.
- Fifteen research aides from the Upward Bound program at the University of Oregon interviewed teacher aides, teachers, and a selected number of students. These research aides were under the supervision of a doctoral candidate who trained them in research skills and guided the direction of their research investigation.
- The program used a video recorder, two video cameras, and a special effects generator; this equipment allowed teachers to tape their classroom situations. Three choices were open to the teacher after he had been taped: He might view the tape privately; he might view the tape with his class so that they could discuss the classroom processes; or he might bring the tape into the seminar as subject matter.

In addition to this last-mentioned use of monitoring
data, the program utilized it in the following ways:
1. Videotaped data of the teacher aide were used as training curriculum in the teacher seminar and in the continuous documentation and evaluation of the teacher aide's training experience.
2. Videotaped data and observational data were used to provide continuous evaluation and feedback on teacher performance by the seminar teachers.
3. Interview data were used to feed back information from the pupil to the teacher.

4. The gathering of both interview and observational data was a part of the practicum experience of the research aides.
5. Monitoring of classroom activities by experienced teachers (the release time teachers) who are included in this program as clinical teachers provided a consultation and information service to colleagues in the classrooms. The information obtained from these observers was fed into the seminar and provided material for discussion and evaluation.

III Program Evaluation

As a feasibility investigation, the evaluation model had to be concerned both with the impact of the program and with the effectiveness of the program design in satisfying basic program goals. Too, the analysis of the efficacy of a program in terms of its heuristic value is essential to any evaluation model. This section will present an analysis of (a) the program design and processes; (b) the observable impact of the program on the school system; and (c) the implication of the program model for future teacher training programs.

In retrospect, and in terms of program analysis, it becomes possible to enumerate some sources of the intervention process which contributed to both major strengths and weaknesses in each component of the program design. One of the major strengths of the in-service training component was the recognition that the traditional academic course model for learning was unsuitable. Instead of the traditional model, this training model, while presenting theory, allowed for the explication of theoretical principles by simulated problem-solving while quality control was attempted through video taping in the classroom.

Still, this model did not allow for immediate feedback to the teacher on the quality of his performance, nor for feedback on appropriate corrective measures for the teacher to take. Consequently, the most noticeable deficiency in this component was the lack of practicum instructors. Ideally, the release time teachers should have performed this function. But as resource personnel they were inadequate in terms of desired staff competence, inadequate in staff number, and were themselves used administratively in an inadequate manner. Had the release time teachers fulfilled the program's needs, their use would have minimized those handicaps incurred when the videotaping equipment broke down.

The inclusion of practicum instructors would have provided three major strengths to this component: opportunities for the teacher to demonstrate the techniques presented in the seminar under supervision; tightened controls on the learning process for the trainer and trainee; and more support felt by teachers, because the model would have facilitated the successful implementation of new techniques. This latter point seems very significant, for the teachers felt particularly threatened, especially in the first portion of the seminar. That this was not true of both seminars might be laid to the fact that one group leader was very direct in his attacks while the other group leader was a good deal more indirect. The leader's style in the former group appeared more successful in causing members of the group to analyze their behavior.

The training goals of this component were much too general. They indicated only the staff's need for knowledge of the dynamics of classroom behavior and of the interaction of the social environment and the individual. Noticeably lacking were a careful consideration of and subsequent handling of the daily problems that staff faced in the training of teacher aides. This is not to say that teachers had no supervision in the training of their aides, but a crucial finding was that teachers did not know how to work out a sequence of operations on a curricular basis so that they could teach it to the teacher aides. Moreover, the trainers of these teachers, in turn, appeared to have objectives and goals hard to reduce to specific, translatable terms—terms translatable to the teacher who was working with the teacher aide. Again, the fact that this component was without practicum instructors was considered a major drawback to the effective training of teacher aides.

Even though most of the training was but moderately adequate and in a few cases very poor, the training model developed by the biology teacher on the junior high level is a model for future program design. By employing his teacher aide in classroom instruction and demonstration, the biology teacher was able to
work with students when they had particular needs. This instructor was able to structure a job for the teacher aide that seems to have met every possible objective. He trained the aide in the “basics” of the science lab, e.g., care of utensils, storing flasks, during the first few weeks in their allotted time for training. He then began to teach the aide to demonstrate the first few weeks in their allotted time for training.

As measured by objective test score and subjective evaluation, the biology class was successful. This teacher aide had a 100 percent attendance objective. He trained the aide in the “basics” of the teacher aide that seems to have met every objective evaluation, the biology class was successful.

Examples of other teacher aide duties observed during the course of the year (but which were not consistent and therefore not sustaining) were: the assessment of reading and comprehension skills using the inventory techniques; the use of flash cards in reading and arithmetic with elementary school students; the teaching of art as a major responsibility of the teacher aide with help only in program planning; the use of the aide as a resource person in the library for students doing library research, and as a counseling assistant to follow up absentee students.

A general inadequacy in the teacher aide component was the lack of a projected training curriculum for the teacher aides. Such lack put staff very much at a disadvantage in aiding the teachers to develop a substantive training program. More students dropping out of the program in the first quarter of the year (because they did not find the work interesting) appeared to be related to the lack of the program staff’s having lead time to define job descriptions which had meaningful tasks built into them but which allowed progressive development in competency. Instead, teachers had to develop the job descriptions and supervise the aide with the help of program staff. Although this appears, upon analysis, not to be a major inadequacy of this component, the fact that there was but minimal subsequent control over the nature of the job description generated serious deficiencies in the quality of training and experience each aide received.

The pace of the training of the teacher aide was largely dependent on the willingness of the teacher to supervise the teacher aide in new tasks, on the subject matter and grade of the student body, and on the initiative shown by the teacher aide in asking the teacher questions. During this year, teacher training of the aide was spectacular in a few instances, moderately good in most instances, and a dismal failure in other instances.

Related to this finding are a number of program difficulties. Even though we attempted to maximize the probability of success by assigning teacher aides only to teachers who had volunteered to train a teacher aide, we found that the screening of teachers and teacher preparation for this task was inadequate. Teachers accepted teacher aides without true appreciation of the responsibility; some were without teaching skills to impart to the aide. The observations of teacher aides in the classroom substantiate that where teachers developed specific tasks for the teacher aides to perform, the teacher aide always benefited most. The interview data suggest that teachers who perceived their aides as being a help to them in the classroom utilized such aides to a fuller extent than others did. The performance of more meaningful tasks in a classroom by a teacher aide did not appear to be related to the perception of such an aide by a randomly selected student body. In general, the students perceived the teacher aides as having helped them because they “could talk to them better about their lessons.” All of the students wanted a teacher aide in the coming school year.

The screening system in this program was largely based on the interest expressed by the teacher aides and, to a minimal extent, on considerations of the teacher aide’s background such as ability to speak Spanish, talent in art, and the like. There appears to be no evidence which warrants an attempt to make systematic screening of the teacher aide a program goal, except possibly, for research purposes. Most difficulties which the teacher aides experienced in the program could be traced to the problems in program operations.

Another source of program limitation was the negative effect generally inherent in any program designed only for economically disadvantaged youth. In its organizational structure, the program was distorted to meet the strictures of the funding sources and to draw from the Upward Bound population only to provide resources and experience for this group. It is difficult to prevent the participants from becoming saddled with a “spoiled image.” Subject to more bureaucratic annoyance than most with loan applications and stipend interceptions and the stigma attached to a charity status, these students often found that other students resented their presence. The college-based training, requiring a wide range of commitment from the teacher aide, while itself suffering from serious deficiencies, also hampered program commitment. The allegiance of
the aides to a dual role as university student and part-time teacher aide caused restrictions unforeseen at early points of program development.

As participants in the Upward Bound program, the aides were assigned to groups whose function primarily was to develop an esprit de corps which in turn, would build into the groups latitudes of acceptable and non-acceptable behavior. These groups did not come close to meeting their stated goals. Identities and loyalties remained outside the group—determined most often by ethnic affiliation, sex, and personal friendship. Actually, such groups served only to siphon more time and psychological commitment from the teacher aide. The necessity for some type of supportive group involvement for these youth in a new situation is not questioned; however, it does appear that for the teacher aide a group set up to deal with day-to-day problems of their work responsibilities would have been far more beneficial to the quality of their training.

Such a need—this kind of seminar group—is more clearly realized when one sees that the university classes and on-the-job training experiences were to some extent still fragmented. It was in recognition of this that in the spring of the year, the program staff instituted a teacher aide in-service seminar designed to cope with day-to-day problems of the teacher aides. However, the more difficult problems in training were to supply gaps in knowledge; to place this knowledge in a theoretical context congruent with the teacher aides and university classes; possibly to modify attitudes in the teacher aides; and to develop skills for a particular situation. At best (because of the lateness of the year), this seminar was able to function mostly as an orientation program—where the school district’s staff policies and other related management problems were discussed—with but some attention to theory.

It is clear that economically disadvantaged youth can maintain jobs as teacher aides in a school system which has no formal structure designed for their roles in a New Careers model, even though this kind of program without the structure increases the potential for chaos. The reasons for which teacher aides left the program were due, for the most part, to conflict with classes, illness, or a desire to pursue some other work. Over the nine months of the program only five teacher aides were fired because of poor attendance.

Any analysis of the inadequacies of the quality control research component must take into account that the staff was overextended. This was true of all staff involved in the program with the exception of the release time teachers. In this component, problems hinged on the logistics of instituting a formal rather than an informal feedback system; the former would have minimized the extent to which the administrative staff needed to deal with crisis management. Nevertheless, with the informal system the program staff was greatly aware of the successes and failures of the program and were thus able to make decisions based on some empirical evidence. Here again, the staff’s inability to set up the formal feedback system rested mostly upon lack of time. Quite justly, the staff did not see time in their already overextended schedules to decide on the nature of the monitoring data necessary for programmatic decision-making; to develop an appropriate instrument for the collection of this data; to so set up a system that it could be transferred from the hands of fifteen observers to an administrative staff.

Within this component, however, the training model used to train the research aides was successful. The research aides had one two-hour-and-fifty-minute class a week on research methodology. The first portion of the class was devoted to a lecture on observational techniques and general research skills. During the second half of the class, the students were divided into three groups—data collection, data processing, and report writing—to work on their day-to-day research problems. In this component, problems hinged on the research coordinator’s establishing control over the research aides’ time commitment during work hours.

In the life span of the program, there was very little use of the videotape equipment as training curriculum. Besides the problems of keeping the equipment workable, in the spring of the year a new technician had to be hired. Some teachers were reluctant to have themselves taped. Just the general logistics of getting the equipment from one school to another posed some problems. In addition to some use made by individual teachers for their personal observations, the videotaping equipment was used to secure an account of the teacher aides’ classroom experiences.

Another source of observational data as a part of the continuous feedback system which proved weak was the release time teachers. At least three changes should have been made in this component for it to function effectively in the overall program: A person should have been assigned the task of assuring the quality of the feedback information, or alternatively, this function should have been spelled out in the initial job descriptions for all staff members; monitoring schedules should have been generated which pinpointed events for observation and subsequent feedback; and a dissemination system should have been designed and

<table>
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<td>9</td>
</tr>
<tr>
<td>Mar. 27, 1967-June 9, 1967</td>
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implemented which allowed for staff review of the week’s observations (or month’s observations).

As can be seen, the inadequacies in the program design can be described as managerial problems. They are hardly the programmatic weaknesses which might leave room for question regarding the feasibility of employing the New Careers model in educational settings to deal with major educational dilemmas. At best these weaknesses should point to areas which need further development: a training model for the teacher aide and for the teacher, with a careful delineation of the training curricula for both.

Despite the weaknesses in the intervention process, a number of observable changes occurred in the Bethel schools with in-service seminars:

1. About 80 junior high students volunteered to tutor elementary school students. The junior high students worked with elementary school children having problems both with arithmetic and with reading.
2. The high school experimented with greater student involvement in school management, with development of rules, and administration of a student court—the justice drawn randomly from the student population.
3. The high school experimented with team learning in mathematics with spectacular results, as reported by the teacher.
4. Teachers attempted to develop precise contracts with students in order to replace an adversary relation with a cooperative relation.
5. Teachers withdrew from their “watch dog” roles as students took on the responsibility of monitoring their halls in both the elementary and junior high schools.
6. Teachers began to deal with the tasks of creating non-authoritarian classrooms and integrating deviant members into their classroom.
7. A few members of the staff at both schools (teachers) began to form some esprit de corps in order to resolve some issues related to the problems of teacher competencies.

The New Careers model is complex. It calls for major structural changes in higher education and in the school systems themselves. Coordination must exist between higher educational structures and legislature. Legislature must create appropriate statutes that allow for necessary hiring and make available necessary funds, while educational institutions must systematically make structural changes. Educational progress for the teacher aide must be in support of the teacher preparation training for the teacher aide. Thus teacher competence will advance through junior colleges and special entry levels into teacher education on the university levels.

In the strictest sense, this program was unable to establish a permanent role in the educational system and in the higher educational institution. However, the reason for no program involving teacher aides in the Bethel school system this year was lack of funds to sustain the teacher aides; both school administration and school staff expressed desire to have teacher aides this year. In addition, this program certainly moved the program staff closer to the state educational body, while increasing the latter’s understanding of the nature of the New Careers model and the necessity for incorporating various aspects of it into the educational system.

The problem for education will be and is a problem of disseminating information to the teacher in the classroom. On the national level, this problem is being handled by developing federally sponsored programs of training and retraining such as the National Teacher Corps and other Title I Elementary and Secondary Education Act projects. Still, this cannot be the sole strategy as a quality control measure for the education of disadvantaged youth on a national level. Unless the teacher returns to the university (increasing the shortage of teachers in the school), and unless the school has periodic workshops, there are few ways for innovative interventions to be brought to the classroom teacher.

Additionally, the Bethel program had value in its range of implications in the current use of Title I ESEA. In particular, this very program design was used as the basic model for better use of resources for certain Title I training programs, the NDEA Title XI Summer Institute and the Four State Project: Oregon Component.

References