

ED 024 855

AC 002 624

By- Greenberg, Barry

Review of Literature Relating to the Use of Nonprofessionals in Education (from 1942 to 1967).

New Careers Development Center, New York, N.Y. Training Laboratory.

Pub Date Nov 67

Note- 18p.

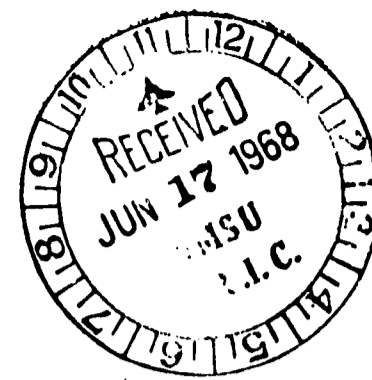
EDRS Price MF-\$0.25 HC-\$1.00

Descriptors- Educationally Disadvantaged, Indigenous Personnel, Inservice Education, *Program Evaluation, Public Schools, *Research Reviews (Publications), *Subprofessionals, *Teacher Aides

A review of literature between 1942 and 1967 on the use of nonprofessionals in elementary and secondary education indicates that authors somehow involved with teacher aide projects tend to be favorably impressed, while those lacking such involvement are critical. Difficulties in class management, supervision, and evaluation have been cited by those opposed to teacher aides. Proponents have cited advantages in meeting crises, recruiting teachers, enriching the curriculum, involving lay citizens in worthwhile activities, increasing student achievement, and creating an atmosphere conducive to wholesome personality development. In general, the use of teacher aides has become an acceptable part of the educational scene. Recent related findings also show that low income, relatively uneducated nonprofessionals can serve effectively in--and derive benefits from--meaningful teacher aide positions. The document includes 33 references. (ly)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.



REVIEW OF LITERATURE
RELATING TO THE USE OF
NONPROFESSIONALS IN EDUCATION
(From 1942 to 1967)

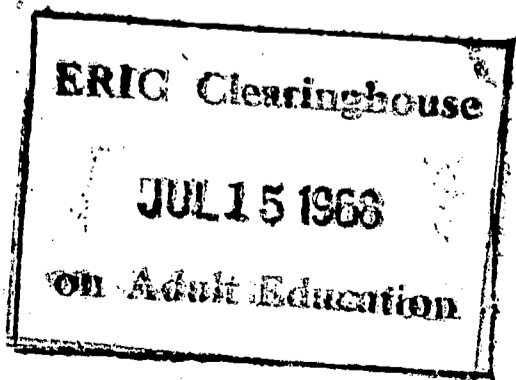
BARRY GREENBERG, for

NEW CAREERS DEVELOPMENT CENTER
New York University
Washington Square
New York, N.Y. 10003

November, 1967

ED024855

AC002624



The first post-depression report of teacher-aide utilization appeared in 1942.⁽¹⁾ So called "helpers" were hired then because qualified teachers weren't available nor were the funds with which to pay them. The author describes the employment of teacher-helpers as an emergency measure, one which should only be followed when professionals aren't available. Yet, in retrospect, the concluding paragraph of the report would seem to indicate that the utilization of nonprofessionals produces positive effects in its own right and therefore should not be thought of solely as a "stop gap" procedure. The report states:

In our experience the teacher helper soon becomes a very valuable assistant to the regular home room teacher. The helper becomes quite expert at checking seatwork, supervising the children during their work and study periods, assisting the teacher in many types of project work, taking charge of some drill work and handling small groups in sight reading.

We have found that one teacher can do a thorough job with as many as forty pupils if she has the assistance of a teacher helper for one-half day.⁽²⁾

It is significant to note that all helpers employed were limited in their education to high school graduation, none had had any college training. There are no reports of a follow up to this program. Nevertheless it stands as a beginning, and a beginning with promise.

The modern teacher-aide movement seems to begin in 1952 in Bay City, Michigan with a Ford Foundation sponsored project entitled, "A Cooperative Study for the Better Utilization of Teacher Competencies". The employment of teacher-aides was only a part of the

¹ Greenshields, M.J. "Big Timbers' Teacher-Helper Plan". The American School Board Journal, 104: 20, 1942.

² Ibid p.20.

project, but it was the portion which received the most attention and even today stands as the most reported on program regarding their utilization. While Bay City's work with teacher aides has served as a prototype for much of what was to follow, it does not directly parallel the current movement since most of the aides employed there had had some college training.

An "official, impartial" appraisal of the work at Bay City appeared in the Journal of Teacher Education, sponsored by the Journal, Central Michigan College and the Director of the project.⁽³⁾ As part of the appraisal, six educational specialists including a classroom teacher visited the classrooms involved for two days and submitted separate reports. Summing up their findings, there seemed to be general agreement that aides should not be considered replacements for teachers, ie. they were not suitable justification for extra large class size. Beyond this agreement however, no clear pattern emerges. The Fund for the Advancement of Education (The Ford outlet which sponsored the program), is accused of allowing subjective impressions to circulate as absolute fact, while on the other hand there are reports of parents, teachers and pupils being enthusiastic about the aides. The Journal concludes:

Without question - we believe - the Bay City experiment will prove its worth. We believe that it may have real value as an emergency plan to help relieve over-crowding until we get the needed teachers and classrooms. It will make valuable contributions to teaching. That these contributions may not be as gigantic or as radical or even in the areas its proponents are now claiming, is not too important. It is important that its sponsors lay on the

³ Journal of Teacher Education. "A Symposium: The Bay City, Michigan Experiment - A Cooperative Study for the Better Utilization of Teacher Competencies". Journal of Teacher Education, 7: 100-152, 1956.

line real proof of what it can do and what it cannot do. We hope to see more, not less, experimenting with it by local school districts.⁽⁴⁾

Scates⁽⁵⁾, writing several months earlier in the Journal ridiculed the program and expressed great concern lest master teachers become administrators removed from the pupils. Such a program he argued, would not only fail to alleviate the teacher shortage but would, in effect compound it by removing the best teachers from the pupils. A similar argument has been put forth recently by Wirth.⁽⁶⁾

Writing from an historical vantage point of five extra years, the most Wynn and De Remer could say of the Bay City experiment was that:

Teachers with aides spend more time on instructional activities. . . .
Teacher aides facilitated better deployment of teachers and experimentation with staffing.⁽⁷⁾

While Scates and many of the other observers of the Bay City plan were concerned about removal of the master teacher from his students as well as increasing class size as a result of the aides presence, Faust saw the innovation as a means of putting teachers in step with other professionals. He commented:

In considering possible improvements in the utilization of teaching resources, it is useful to observe that the teaching profession has so far remained outside the professional revolution of the last fifty years, the essence of which has been to increase the effective scope of the professionally competent person by relieving him of tasks not requiring his professional wisdom and skill. . . .

⁴Ibid p. 151.

⁵Scates, D. "The Prior Meaning of Increases in Teaching Staff." Journal of Teacher Education. 7: 82-88, 1956

⁶Wirth, A. "A New Hierarchy for the Teaching Profession?" Changing Education. 1: 3-5, 1967

⁷Wynn, R. and R. DeRemer. "Staff Utilization, Development, and Evaluation." Review of Educational Research, 31: 393-405, 1961.

Moreover an adequate supply of nonprofessional aides for teachers is at hand. Technological advances in the last few years give many women a good deal of time which might be spent in relieving the teacher of clerical chores, supervising responsibilities and other tasks for which professional training and experience are not required. (8)

As the above discussion implies, the verdict on teacher-aides at this point in time, depended upon ones perspective. John Deason reviewed fifty-six of the fifty-nine articles on teacher-aides appearing in the literature between 1942 and 1957. He notes:

It is perhaps significant that, almost without exception, authors who are involved in some way with a teacher-aide project are favorably impressed, while by and large, those who are critical are not connected with any experiment in this field. (9)

Deason summarizes the points made by those who are critical:

- a) Justifying larger classes by using teacher-aides constitutes a threat to the welfare of children.
- b) Not all teachers, even good ones can work with aides.
- c) Measuring results accurately is difficult.
- d) There is a danger of a return to rote learning and the possibility of a departure from facilitating broad learnings.
- e) Dividing the experiences of students into curricular activities and non-curricular activities seems questionable. (10)

The advocates of the program make these points:

- a) . . . A temporary measure in time of crises.
- b) Possibility of the plan as a teacher recruitment device.
- c) Enrichment of the curriculum through the efforts of outside talent.
- d) Creation of a wholesome atmosphere which encourages wholesome personality development.
- e) Greater involvement of lay citizens in worthwhile activities.
- f) Slightly higher achievement on the part of students in classes with aides. (11)

8 Faust, C. "Utilization of Teaching Resources in Secondary Schools" California Journal of Secondary Education. 32: 292-294, 1957

9 Deason, John. "What They Say About Teacher Aides. School Executive December, 1957.

10 Ibid. p.59

11 Ibid. p.60

Examination of the more recent literature reveals a gradual shift in attitudes toward the use of teacher aides. These works are far more replete with positive findings than was the literature of the period reviewed by Deason. Some of the studies or reports are descriptive and perhaps too impressionistic. Others are presentations of empirical analytical findings.

The first of these reports of any significance was from Trump⁽¹²⁾ who proposed a restructuring of the teacher function into six distinct categories; professional teacher, para-professional assistant, clerk, general aide, community consultant and staff specialist (Trump's para-professional assistant would most probably be a college person). Here was provision for nonprofessional employment at different levels, although movement from one level to another wasn't considered. The plan is far removed from present proposals but it appears as one of the first attempts to meaningfully integrate the nonprofessional into the overall school design. Clement⁽¹³⁾, writing in 1962, picked up a similar theme and envisioned a team approach which would utilize the services of all personnel. By emphasizing specialization and using the experiences unique to each individual, the author felt the student would receive the most valuable contribution each participant could give. This theme remains in the current movement.

Sister Mary Alice⁽¹⁴⁾ reports on the success of an aide program in a parochial school setting. She notes improved parent participation, and adds that teachers and parents now consider it an integral part of the school organization. Nesbitt

- 12 Trump, J.L. "A Look Ahead in Secondary Education." National Association of Secondary School Principals Bulletin. 42: 5-15, 1958
- 13 Clement, S. "More Time for Teaching." National Association of Secondary School Principals Bulletin. 45: 54-59, 1962
- 14 Alice, Sister Mary. "Teacher-Aides: A Resource" National Catholic Education Association Bulletin. 56: 309-311, 1959

and Johnson report on the results of a teacher-aide project in Snyder, Texas. They note:

Teachers are able to do a higher level of teaching by being relieved of such clerical tasks as mimeographing. . .

In addition to teaching better, the teachers are enabled to grow more in professional skill through enriching the content of their courses, trying out new techniques made possible by better planning, and by concentrating their entire energy on professional duties.⁽¹⁵⁾

Reports on teacher-aide projects from Scrivner and Urbaneck⁽¹⁶⁾ indicate significant improvements in arithmetic grades as a result of aide utilization; Cutler⁽¹⁷⁾ reports the results of a nationwide survey which found that most educators are highly enthusiastic about using teacher-aides, (including a finding reported by educators that children are more respectful towards all adults after having an aide in their classroom); Santer⁽¹⁸⁾ surveyed nearly eight hundred of New York's school districts to determine the status of teacher aide programs and found 51% of the districts using a total of 2,339 aides and reporting "exceedingly favorable" results; Saylor⁽¹⁹⁾, Singer⁽²⁰⁾ separately called for experimentation in the utilization of teacher-aides with Saylor taking the attitude that:

- ¹⁵ Johnson, P. & W.O. Nesbitt. "Some Conclusions Drawn From the Snyder, Texas Project." National Assoc. of Secondary School Principals Bulletin 44: 63-75, 1960.
- ¹⁶ Scrivner, A. & R. Urbaneck. "The Value of Teacher Aide Participation in The Elementary School" The Arithmetic Teacher. 10:34-37, 1963
- ¹⁷ Cutler, M. "Teacher Aides are Worth The Effort" Nation's Schools. 73: 67-69, 116, 118; 1964.
- ¹⁸ Santer, E. "The Teacher Aide-An Aid in Teaching?" New York State Education, 51: 21, 1963
- ¹⁹ Saylor, G. "What Changes in School Organization Will Produce Better Learning Opportunities for Individual Students?" National Association of Secondary School Principals Bulletin. 46:102-109, 1962
- ²⁰ Singer, I. "Survey of Staff Utilization Practices in Six States". National Association of Secondary School Principals Bulletin 46: 1- , 1962

The organizational pattern of the school will not develop outstanding teachers, it can only enable outstanding teachers to work most effectively with students in a learning situation. (21)

For Saylor, the way the organization can achieve this end is by employing teacher-aides; Henderson (22), and Branick (23), also report positive results from the introduction of teacher aides.

As the foregoing indicates, aides seem to have become an acceptable part of the educational setting. Anderson summed up this shift in attitudes:

Only a decade ago, when pilot projects in the use of teacher-aides and other nonprofessional assistants first began to appear in the literature, the predominant reaction of the profession was negative, even hostile. In 1964, it is rare to find discussions of utilization of school personnel in which nonprofessionals are not considered a welcome addition. However, despite what appeared to be a widespread endorsement of supplementing and reinforcing the professional staff, there is not yet much evidence that school systems are committing substantial sums to this purpose. (24)

The last portion of this statement is no longer completely accurate as selected school systems around the country begin to consider (and in some cases appropriate) "hard" funds for this purpose.

Schmitthausler (25), in his doctoral dissertation demonstrated that the addition of nonprofessionals helps increase the productivity of the classroom. The teachers he interviewed

- 21 Saylor, G. "What Changes in School Organization Will Produce Better Learning Opportunities for Individual Students?" National Assoc. of Secondary School Principals Bulletin, 43: 102-109, 1952
- 22 Henderson, Pat, "Quality Education Through the use of Instructional Aides" Arizona Teacher, 54: , 1967
- 23 Branick, J. "How to Train & Use Teacher Aides." Psi Delta Kappa 43: 61, 1966
- 24 Anderson, E.W. "Organizational Characteristics of Education - Staff Utilization and Development" Review of Educational Research, 34: 455-466, 1964
- 25 Schmitthausler, C. Analysis of Programs Using Nonprofessional Teacher Helpers in Public Elementary School Classrooms. Unpublished doctoral dissertation, University of California, Berkeley, 1966.

were unable to pinpoint specific improvements, they just felt they were able to accomplish more with an assistant. The author also found that teachers stated a preference for lower pupil-teacher ratios rather than the nonprofessional. Davis⁽²⁶⁾, using the teacher aide as the independent variable in an experimental-control design, and marks, days absent, per cent requesting more advanced course the following term, and test scores as dependent variables, found that the more able students (identified by scores on the California Tests of Mental Maturity), benefitted the most from having teacher-aides in their classroom. They achieved higher test scores, more sign-ups for the next course, fewer days absent and higher marks than did the matched control group. The less able students appeared to benefit most in the control group situation (The class without the teacher-aide). Davis states that the difference in gains may be due to the ability to adapt oneself to a new situation. He notes:

It may be that complexity lends confusion, lack of stability and lack of predictability to slower students and adds challenge, interest and variety to brighter students.⁽²⁷⁾

The final report to be considered in the present context is one by Stafford⁽²⁸⁾. By watching and recording practically every activity of teachers without aides and those with aides, he found:

26 Davis, D. "The Fenville Teacher Aide Experiment!" Journal of Teacher Education 13: 139-190, 1962

27 Ibid.

28 Stafford, C. "Teacher Time Utilization With Teacher Aides" Journal of Educational Research. 56: 82- , 1962

- a) Teachers with aides spend more time on professional activities;
- b) Teachers with aides spend less time on nonprofessional activities;
- c) Teachers with aides spend less time with individual pupils than do teachers without aides.

The author adds that the combined individual attention given the child by the teacher and the aide exceeds the attention given the child by the teacher in an unaided room. In other words, the aide is now sharing in this activity.

Stafford notes:

If the kind of attention the teacher alone provides in an aided situation is qualitatively different, it may not be important to maintain the same time per child. (29)

Two studies which do not attempt to measure the contribution of the teacher aide but rather to reinforce the notion that individuals other than certified teachers can contribute to the learning teaching process are reported below:

The first of these studies depicts the value of a non-professional teacher, (not merely aide). It was conducted and evaluated by Greenleigh Assoc., in cooperation with the Office of Economic Opportunity, the Office of Education and the Welfare Administration.

The project was designed to test the efficiency of 4 reading systems on functionally illiterate adults (those whose reading level was below 5th grade).

²⁹ Stafford, C. "Teacher Time Utilization With Teacher Aides" Journal of Educational Research, 56: 82- , 1962

The adults were taught with these systems by either:

- a) A college graduate
- b) A certified teacher
- c) A high school graduate

The results indicated that the high school graduates were able to attain certain unique results. The Greenleigh report states:

"On the basis of Iowa again scores alone, teachers who had no more than a high school education were more effective. Therefore, in planning for adult basic education, persons who are high school graduates should be considered an important resource and should be recruited. The fact that the majority of high school graduates, unlike the college graduates and certified teachers, were Negro and the majority of students were also Negro may have contributed to the better success in terms of gain scores of the high school graduate." (30)

The report further states:

"They (the high school graduates) showed a capacity to learn, had an interest in the academic and social advancement of the undereducated adult, showed ability to relate to adults and indicated an interest in continuing in the field of adult education." (31)

Nobilization For Youth sponsored a program in which students with learning difficulties were tutored by high school students who themselves had reading problems. Again the results seem to demonstrate that the traditional certified teacher needn't be the sole contributor to the teaching-learning process. What this new instructional resource lacked in formal methodological training seemed to be more than compensated for by "other" factors

30 Field Test and Evaluation of Selected Adult Basic Education Systems - Conducted by Greenleigh Associates, Inc. New York, Chicago, S.F. 133 pps.

31 Ibid.

which operate when the "helper" is sociologically and chronologically 'close' to the person being helped. And, by far the most interesting finding of the study was that the tutor achieved more in terms of reading gain than did the student he was working with. Time magazine reports:

" . . . A sampling of the 2,000 tutored youngsters advanced an average of six months in reading ability during one full month period; their untutored classmates improved by only 3½ months. But 100 tutors who were tested - many of them below eighth grade standards in reading skills - picked up an average of 3½ years in reading ability."⁽³²⁾

RECENT RELATED FINDINGS

Goldstein⁽³³⁾, reports on the employment of indigenous, low income nonprofessionals in a Head Start program in Indiana. The non-professionals were hired to perform a variety of tasks including assistance in the instructional process. The author found that the nonprofessionals were able to interpret to the teacher certain aspects of the children's behavior. Having lived the life the children were leading, the nonprofessional understood the child's reactions in a way the teacher never could. Goldstein describes how teachers who thought they had failed were given new hopes for success by the information the nonprofessional was able to supply them. Some pertinent findings are:

³² Time Magazine - Oct. 21, 1966

³³ Goldstein, D. "Teacher Aides: The Indianapolis Plan may Lend Itself to Your School." The Instructor. :31, 122, 124; 1966

a) Nonprofessionals encouraged shy and otherwise disinterested parents to visit the school and speak to their child's teacher - The nonprofessional in other words became the much sought after "bridge" between the middle class teacher and the lower class parent., and

b) Teachers were freed to work creatively with individual children.

The author concluded on an optimistic note:

"No one expects the aides to have the competence of a professional teacher. But the background which aides bring to their job, their knowledge of the community and its people, the warm personal relationships with the parents, a new dedication and determination to succeed, and the ability to serve as a communication bridge for the middle-class teacher are strengths that must be acknowledged. (34)

Bank Street College of Education (35) studied fifteen programs for the nonprofessional, from Maine to California. They used a variety of techniques including a pre-post administration of a role perception instrument, process observations and interviews with key people. Some of their salient findings follow:

The introduction of other adults to assist the teacher in the classroom provides an opportunity for more one-to-one relationships with the learners, both for the teacher and for the auxiliary (nonprofessional)
. . . .

A wider range of activities, more freedom of movement, and more small groupings are feasible in an aided classroom than is possible for one person often operating under difficult teaching conditions.

34 Goldstein, D. "Teacher Aides: The Indianapolis Plan may Lend Itself to Your School. The Instructor. 31, 122, 124; 1966

35 Klopff, Gordon, and Garda W. Bowman. New Careers and Roles in the American School. (Bank St. College of Education-In Press) 1967

The auxiliary who has lived in a disadvantaged environment often communicates to the child in a way that is neither threatening nor strange. He may be able to help the pupil adjust to the unfamiliar world of school without defensiveness and trauma. He may also be able to interpret some aspects of the child's behavior to the middle class professional.

The low-income auxiliary, having faced up to and overcome some of the difficulties and frustrations the child now faces, may motivate him to further effort. The auxiliary's very presence in the school says to the child: 'It can be done; it is worth trying to do; you, too, can succeed here.' When the auxiliary is a young Negro man, this message comes through strongly to Negro boys. (36)

In another Bank Street study (37), indigenous low income nonprofessionals, some without a high school diploma, were trained to instruct individual students in reading. The results, while not definitive in the cognitive realm, indicated effective changes similar to the ones reported above. The report states:

Social and emotional aspects of child behavior and functioning appear to have been affected positively by the introduction of reading assistants. . .

The self-images of the ethnically varied children seem to have improved by seeing a person of their own background and experience (the reading assistant) functioning in an educational position of some responsibility. (38)

The Teacher Aide Program (TAP) conducted by the Washington School of Psychiatry for the District of Columbia (39) further demonstrated that individuals at the poverty level with less than a high school education and with proper training can make a contribution within the classroom. They found, as did

36 Ibid.

37 Bank Street College of Education. "Reading Assistants in the Two-Bridges Area." mimeo 73 pgs. 1967

38 Ibid

39 Washington School of Psychiatry. TAP: The Teacher Aide Program Washington D.C. 1967

Bank Street College, that the presence of the nonprofessional can effectuate changes in a child's self-concept as well as changes in his attitude toward school. The Washington authorities were particularly enthusiastic about the contributions of the male nonprofessional. And, as was the case with the Bank Street findings, they found no correlation between previous educational experiences and the nonprofessionals' success on the job.

Finally, there is the report of Daniel Yankelovich, Inc. (40) which is probably the most comprehensive of all the evaluatory studies of the nonprofessional. Nine cities were involved and interviews were held with more than 300 nonprofessionals and 200 professionals. While Yankelovich identified several major obstacles, they were impressed with what had been accomplished. They found nonprofessionals enthusiastic and working hard at what the nonprofessionals identified as being "more than just a job". They found hard-core poor to be as effective as so-called "creamed" poor. They found the majority of professionals working hard to make the program a success.

On the negative side they concluded that some professionals were not willing to delegate meaningful roles to the nonprofessional. There were too few men in the program and in some cases there was inadequate training and supervision. Other criticisms were the reluctance of the professional to fire the nonprofessional, and on some occasions they discovered rigidity on the part of some

40

Yankelovich, Daniel Inc. A Study of the Nonprofessional in the CAP. Prepared for the Office of Economic Opportunity. 1966

nonprofessionals. Despite these factors, they add:

The research revealed the kind of motivation, esprit de corps, and dedication that makes programs work well. (41)

The study team's summary follows:

Our interpretation of the study findings lead to the broad conclusion that the concept is fundamentally sound and that it promises to become a potent method for breaking the poverty cycle for those directly involved in the nonprofessional programs. It offers the participants more than just a job. Like education, it contains powerful intangible benefits.

Many of the nonprofessionals interviewed in this study have previously received other services aimed at reducing poverty. Some of them have been on welfare; others have lived in public housing projects, etc. Analysis of the interviews reveals that their response to their jobs as nonprofessionals appears to differ in fundamental ways from their response to receiving these other services. The services ameliorated some of the worst effects of poverty, but they did not mobilize the individual's own resources and capabilities for breaking out of the poverty cycle on their own initiative.

The worst part of urban poverty appears to be a by-product of the lack of money. There is an assault on the very fundamentals of human life: on the person's hope, on his self-respect, and on his feelings of being treated with justice. To be without hope and self-respect and to have one's sense of justice ravaged is the very definition of despair. For many people hired in the CAP's, the effect on them of being paid to help others like themselves is dramatic. To feel that you are able to help others to break out of a trap that you yourself have been caught in, boosts a person's self-respect and awakens new hope.

Thus, the study seems to highlight the important finding that there are two very different effects achieved by various government programs. There is a recipient-of-service effect and a self-help effect. The recipient-of-service effect ameliorates a difficult situation, while the self-help effect does this and also bolsters the person's sense of self-worth, thereby galvanizing his own resources. (42)

41

Yankelovich, Daniel Inc. A Study of the Nonprofessional in the CAP. Prepared for the Office of Economic Opportunity. 1966

42

Ibid.

B I B L I O G R A P H Y

- Anderson, E.W. "Organizational Characteristics of Education - Staff Utilization and Development" Review of Education Research. 1964.
- Alice, Sister Mary. "Teacher-Aides: A Resource" National Catholic Education Association Bulletin. 56: 1959
- "Auxiliary School Personnel" National Commission on Teacher Education and Professional Standards. National Education Assoc., Washington, D.C. 1967. 20pp.
- Bank Street College of Education. Reading Assistants in the Two-Bridges Area. mimeo 73 pgs. 1967
- Branick, J. "How to Train and Use Teacher Aides." Phi Delta Kappa. 48: 1966.
- Clement, S. "More Time for Teaching." National Association of Secondary School Principals Bulletin. 46: 1962
- Cloward, Robt. "Studies in Tutoring for Students and Tutors"
- Davidson, H. and G. Lang. "Childrens Perception of their Teachers Feelings Toward Them Related to Self Perception, School Achievement and Behavior." Journal of Experimental Education. 29: 1960
- Davis, D. "The Fenville Teacher Aide Experiment". Journal of Teacher Education 13: 1962
- Deason, John "What They Say About Teacher Aides". School Executive, December 1957.
- Ellson, Douglas Larry Barber, T.L.Engle and Leonard Kampworth, in Reading Research Quarterly, Vol.I, No.I, 1965
- Faust, C. "Utilization of Teaching Resources in Secondary Schools" California Journal of Secondary Education 32: 1957
- Field Test and Evaluation of Selected Adult Basic Education Systems - Conducted by Greenleigh Associates, Inc. New York, Chicago, S.F. 133 pps.
- Goldstein, D. "Teacher Aides: The Indianapolis Plan May Lend Itself to Your School." The Instructor 1966
- Greenshields, M.J. "Big Timbers' Teacher-Helper Plan". The American School Board Journal. 104: 1942
- Henderson Pat. "Quality Education Through the Use of Instructional Aides" Arizona Teacher, 54: 1967

- Johnson P. and W.O. Nesbitt. "Some Conclusions Drawn From the Snyder, Texas Project." National Association of Secondary School Principals Bulletin. 44: 1960
- Journal of Teacher Education. "A Symposium: The Bay City, Michigan Experiment - A Cooperative Study for the Better Utilization of Teacher Competencies" Journal of Teacher Education, 7 : 1956
- Klopf, Gordon, and Garda W. Bowman. New Careers and Roles in the American School. (Bank St. College of Education-In Press) 1967.
- Leggatt, T.W. "The Use of Nonprofessionals in Public Education: A Study in Innovation" Doctor's Thesis. Chicago: University of Chicago, 1966. 246 pp.
- Santer E. "The Teacher Aide-An Aid in Teaching?" New York State Education, 51: 1963
- Saylor, G. "What Changes in School Organization Will Produce Better Learning Opportunities for Individual Students?" National Association of Secondary School Principals Bulletin. 46: 1962
- Scates, D. "The Prior Meaning of Increases in Teaching Staff". Journal of Teacher Education. 7: 1956
- Schmitthausler, C. Analysis of Programs Using Nonprofessional Teacher Helpers in Public Elementary School Classrooms. Unpublished doctoral dissertation, University of California, Berkeley, 1966
- Scrivner, A. and R. Urbaneck. "The Value of Teacher Aide Participation in The Elementary School" The Arithmetic Teacher 10: 1963
- Singer, I. "Survey of Staff Utilization Practices in Six States". National Assoc. of Secondary School Principals Bulletin. 46: 1962
- Stafford, C. "Teacher Time Utilization With Teacher Aides" Journal of Education Research. 56: 1962
- Time Magazine. October 21, 1966
- Trump J.L. "A Look Ahead in Secondary Education". Nat. Assoc. of Secondary School Principals Bulletin. 42: 1958
- Washington School of Psychiatry. TAP: The Teacher Aide Program. Washington, D.C. 1967
- Wirth, A. "A New Hierarchy for the Teaching Profession?" Changing Education. 1: 1967
- Synn, R. and R. DeRemer. "Staff Utilization, Development and Evaluation." Review of Educational Research. 31: 1961
- Yankelovich, Daniel Inc. A Study of the Nonprofessional in the CAP. Prepared for the Office of Economic Opportunity. 1966

ERIC Clearinghouse

OCT 15 1968

on Adult Education