With the growth of technology and our increased population, many functions previously performed by professionals are now being delegated to paraprofessionals. This Research Review discusses four paraprofessional training programs offered by junior colleges: teacher aide, library technician, social work assistant, and allied health and medical assistant. All programs discussed provide on-the-job training as well as a formal education. (Author/CA)
In today’s society, both our technology and our population are growing rapidly. As a result, the responsibilities assigned to the members of the professional community, including doctors, nurses, teachers, librarians, and social workers have outgrown the number of them available to handle the situation. Many functions previously performed by these professionals are being delegated to technicians and assistants under their direction. In many cases, these technicians and assistants (or paraprofessionals) can be prepared to perform their functions effectively with less than four years of college; often an Associate degree or an even shorter-term program is sufficient. Thus the preparation of many classifications of paraprofessional falls within the scope of the junior college.

This issue of the Junior College Research Review deals with four paraprofessional training programs offered by junior colleges: teacher aide, library technician, social work assistant, and allied-health and medical assistant. Documents cited in this Review were selected from materials received and processed by the ERIC Clearinghouse for Junior Colleges. All documents listed in the bibliography have been announced in Research in Education and may be obtained from EDRS, as explained on page 4.

PARAPROFESSIONAL TRAINING PROGRAMS IN JUNIOR COLLEGES

Teacher Aides

Large-scale use of auxiliary or paraprofessional personnel to assist in performing school functions is a relatively recent development. Such employment was recorded in Bay City, Michigan, as early as 1953 on an experimental basis, but little further interest was shown in this kind of program until the 1960’s, with the availability of federal support. Today, at least fourteen government-sponsored projects provide funding for the training and employment of such personnel, through legislation like the Economic Opportunity Act of 1964, the Elementary and Secondary Education Act of 1965, and the Education Professions Development Act of 1967.

Three conditions influenced this increase in interest: (1) a school-age population increasing at a rate greater than the corresponding supply of teachers; (2) the growing complexity of the instructional role in education; and (3) the need to expand and improve school-community communications (ED 032 876). The teacher auxiliary or aide was seen as one response to these conditions.

Benefits from their use became increasingly apparent: (1) “utilization of low-income workers as auxiliary personnel in school settings may, with appropriate role development, training, and institutionalization, have positive outcomes for pupil learning, home-school relationships, teacher competence, the development of auxiliaries as workers and persons, and the system in its totality” (ED 023 400); and (2) use of auxiliaries from the local community can greatly improve and facilitate school-community relationships (ED 027 877).

Auxiliary personnel can perform a variety of needed classroom functions, especially for nursery, elementary, and secondary institutions. Routine activities such as taking attendance, distributing tests and materials, operating audio-visual equipment, and recording grades are some examples (ED 024 356). More recently, the employment of bi-lingual classroom aides where English is spoken as a second language has proven highly successful, especially in improved teacher-pupil relationships and student interest in subject matter. Tutorial assistance to small groups or individuals, as well as individual counseling, may be more effectively handled in this manner (ED 031 224).

Regardless of the prescribed duties, having the paraprofessional accomplish routine activities lets the teacher concentrate on giving individual attention to his students, and on experimenting and innovating with new content and techniques. Other promising areas for the use of auxiliary personnel include the science laboratory, library, industrial arts facility, and study hall (ED 031 212).

Paraprofessional trainees can be drawn from many sources. As possible candidates, one program at Garland Junior College (Boston) considers the high school dropout, the housewife with children in school, those on welfare, and the elderly (ED 024 356). Another program, at Pasadena City College (California), focuses specifically on “indigenous non-professionals in antipoverty agencies,” hoping to provide them with “career-ladder employment as bi-lingual and other teacher aides and assistants in inner-city and ghetto schools” (ED 027 877). Programs at the University of California (Los Angeles) and California State College at Long Beach send currently enrolled students to local school districts for assignment as assistants (ED 016 452).

Looking at these personnel sources, it is obvious that a variety of formal education backgrounds must be expected. Because of this, most training program prerequisites emphasize other than academic qualifications. Sensitivity to children’s needs, individual flexibility and interest, social adaptability, and a sense of responsibility are typical requirements (ED 024 356). Existing training programs combine both formal and on-the-job training (ED 032 873). Some even make provision for earning an A.A. degree. The Garland Junior College program, for example, holds two to eight weeks of pre-service training dealing with child development, curricular materials, remedial reading, school-community relations, and first aid. This is followed by a year-long in-service program during which the aide is actually involved in classroom activity (ED 024 356).
One pressing need of the trainee is the chance for career progression. The ones who seek and merit upward mobility need access to training that permits career development. Training people for entry-level jobs that lead nowhere would mean rapid failure for the program. Several approaches to this problem, using current educational structures, have been suggested. For example, Roberts, in his commentary on the teacher-aide curriculum at Rio Hondo Junior College (California), suggests that the classification “teacher aide” be given to those without a high school diploma or equivalency certificate. Advancement in terms of responsibility and salary leading ultimately to one’s qualification as a fully certified teacher could proceed as follows (ED 018 452):

<table>
<thead>
<tr>
<th>TITLE</th>
<th>EDUCATIONAL REQUIREMENTS</th>
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<tbody>
<tr>
<td>Teacher Aide</td>
<td></td>
</tr>
<tr>
<td>Teacher Assistant</td>
<td>High School diploma or</td>
</tr>
<tr>
<td></td>
<td>equivalency certificate</td>
</tr>
<tr>
<td>Teacher Associate</td>
<td>A.A. degree</td>
</tr>
<tr>
<td>Teacher Intern</td>
<td>B.A./B.S. degree</td>
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<tr>
<td>Teacher</td>
<td>Certification</td>
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Investigating the nationwide roles and uses of paraprofessionals in schools, Laurel N. and Daniel Tanner’s 1969 study of the 50 state education departments disclosed that, while teacher aides were employed in virtually all states, no agreement existed about the extent to which duties reserved formerly for teachers could now be assumed by the auxiliaries (ED 027 896). Another 1969 study reported that only eleven states had laws regarding the duties of teacher aides, while twelve had policy statements and guidelines regarding their duties (ED 032 876). Currently, there appears to be an absence of direction or general trends in existing policies, regulations, and legislation.

The following description of a recently terminated program at one community junior college shows possible pitfalls in developing and sustaining a training program: "The program has not succeeded for several reasons. Schools were interested in the idea of teacher aides, but had made no specific decisions about the work an aide would perform. As a result, the committee recommended a program that overtrained its graduates. Academic and education courses were required, but little occupational training. A course intended as vocational education was built into a transfer curriculum. School systems in this area who were using aids were operating under federal grants that could vanish. None had provided for this type of employee in their regular budgets. It is also probably true that the program was underadvertised to high school students and to the public and therefore failed to attract students. Only five enrolled... it may be that the effort was premature (ED 038 136)."

Clearly, the benefits of the training and employment of auxiliary aides in schools appear both feasible and promising. It should be equally clear that the junior college can play a large role in supporting these programs.

**Social Service Aides**

The demand for trained auxiliaries and paraprofessionals in the public and social service fields is increasing. Contra Costa College (California) has initiated a program designed to prepare aides for work in such diverse areas as law enforcement, mental health, community relations, probation, and the business activities of the junior college itself. Entrance into this program depends on a particular individual’s potential as demonstrated during a personal interview, rather than on his or her particular level of education. The program also emphasizes on-the-job training in conjunction with required course work (ED 032 Pasaden a City College (California) conducts a program for assistants in social work and urban community development. A critical aspect of this program is its recognition of the financial inability of many potential students to pursue regular academic courses. As an alternative, it provides program credit for on-going work in community agencies and every attempt is made to insure that the employee/student's initial courses are job-related.

**Library Aides**

The "knowledge explosion" that pervades our society today is resulting in masses of materials — books, journals, periodicals, etc. — far beyond any ever before produced. One document (ED 028 764) states that thousands of additional librarians are needed to provide the necessary services for existing and potential users of the nation’s libraries. In recent years, there has been an increasing emphasis on training for a middle level of library personnel, generally known as the Library Technician. A variety of junior college associate degree programs have been developed for the academic preparation of these technicians.

An annotated bibliography of sixty references to articles and papers (ED 028 764) should interest administrators and librarians concerned with recruitment and training to meet the manpower needs of the library profession. It gives special emphasis to library technical training in the junior college and cites seven documents particularly concerned with the library technician in the health sciences.

A library technology program was initiated at Harrisburg Area Community College in fall 1970 (ED 038 136). Five years ago, libraries in the area surrounding the college were unwilling to employ technicians. Lately, however, with the pronounced shortage of library personnel apparent at all levels, the attitude of these libraries has changed. The college felt the curriculum, based on 42 hours of general education courses and 18 hours of technical library courses, would attract not only high school graduates, but also nonprofessionals already employed in local libraries and mature persons with college background who would like to receive specific technical training as well.

In 1968, the California Association of School Librarians undertook a study based on the 1968-69 catalogs of all California public junior colleges (ED 020 730). The catalogs were checked for library courses and recommended programs for either the professional or the technician. The study provides course titles and descriptions for each of the forty colleges that offer such programs. The following are among the general findings of the investigation:

1. The designation for the departments at the various colleges showed a greater apparent diversity than the offerings really provided
2. While a wide variety of content and organization was evident, the most common courses were library fundamentals, public service, technical processes, and reference work
3. A combination lecture-laboratory was the most common teaching method; work experience credit was granted by only six colleges, although several others indicated plans to add this at a later time
4. In programs leading to an A.A. degree, the library course was closely tied to the secretarial program, providing a dual job opportunity for the graduates.

On the basis of these and other findings, recommendations were made that may be useful in avoiding potential hazard areas.

1. The difference between the professional and tech-
nicians should show clearly in the curriculum and method of instruction—the technician program should not be a watered-down version of a professional program. Too often the lecture method is used instead of giving the students an opportunity to learn by doing.

2. The staff should be given adequate time to teach. The tendency has been to "absorb" these duties as part of the regular schedule, to the neglect of both teaching and regular library duties.

3. Community ties cannot be stressed too much—a local advisory committee should be established to explore employment potentials, suggest emphases applicable to the area, and act as a sounding board for continuous evaluation and assistance in obtaining instructors.

Health and Medical Training Aides

The Health Careers Guidebook, 1966, of the U.S. Department of Labor listed over 200 occupational fields ranging from anesthesiology to X-ray technology. There were 2.8 million people in health occupations in 1966; this figure will probably increase to 3.8 million by 1975 (ED 019 081). These statements show the need for a large number of individuals trained in a wide variety of skills, many of which do not require a baccalaureate degree. The junior college is helping to fill these manpower needs. The American Association of Junior Colleges, in 1968, developed a list of 42 programs they considered appropriate for junior college offering (ED 019 081).

Few documents in the junior college collection discuss specific program offerings at junior colleges. One document, however, reports programs as they were discussed at two workshops sponsored by the American Association of Junior Colleges (ED 032 067). Colleges planning or developing occupational programs in allied health or medical training fields may wish to keep in mind the following issues from among those discussed at the workshops:

1. The problem of getting the practitioner to use technicians as much as possible. Apprenticeship training is prevalent among doctors, who still equate length of training with quality of education, and are therefore skeptical of the community college.

2. The prohibitive expense of these programs, especially when facilities are on campus. Through the extended campus facility approach, where the facilities of the practitioners are used in a work-study arrangement, the programs become more practical.

3. The desirability of developing core programs wherever possible. In colleges with twelve or fifteen related programs, common subject elements need to be coordinated, with spin-offs into various specialties.

4. The advantage of regional or state coordination in planning the location of programs. It can help avoid or minimize problems of duplication, high cost, and obsolescence.

5. The benefit of coordination between the two- and four-year institutions. Transferability, however, should not be the major concern of these programs; they should relate effectively to the occupation.

6. An increasing tendency toward specialization within health programs. It should be pre-determined that real career opportunities are available. Over-specialization can result in training students for jobs that will soon be out-dated. The cost of these specialized programs may be high because of the small number of students enrolled.

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Several bibliographies have recently been added to the ERIC system by the Clearinghouses for Library and Information Systems, Teacher Education, and Vocational and Technical Education. The titles and ERIC numbers for them are:

(1) Library Technology Materials: A Bibliography (ED 036 392)
(2) Paraprofessionals and Teacher Aides: An Annotated Bibliography (ED 036 482)
(3) Teacher Aides: Bibliographies in Education, No. 7 (ED 037 409)
(4) Poor People at Work: An Annotated Bibliography on Semi-professionals (ED 038 510)
(5) Paraprofessionals, Subprofessionals, and Nonprofessionals: A Selected, Annotated Bibliography (ED 038 514)
(6) Utilization of Paraprofessionals in Education and the Helping Professions: A Review of the Literature (ED 040 159)

ED 016 452
A Teacher Aide Curriculum at Rio Hondo Junior College—Its Implementation, Effectiveness, and Evaluation as Related to Its Use Within the Los Nietos School District (Seminar Paper), by Edward R. Roberts, 1967. 38 p. MF-$0.25; HC-$2.00.

ED 019 081
Report on Paramedical Curricula at Los Angeles City

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College, by Paul L. Whalen. Los Angeles City College, California, 1968. 21 p. MF-$0.25; MC-$1.15.

ED 020 730