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LIBRARY TECHNOLOGY IN CALIFORNIA JUNIOR COLLEGES, PAPERS PRESENTED AT A CONFERENCE ON THE TRAINING OF LIBRARY TECHNICAL ASSISTANTS (UNIVERSITY OF SAN FRANCISCO, JANUARY 18-19,1968). Communication Service Corp., Washington, D.C.

Spons Agency-California State Dept. of Education, Sacramento. Bureau of Junior Coll. Vocational-Technical Education; San Francisco Univ., Calif.

Pub Date 68

Note- 76p.

Available from Communication Service Corporation, 1629 K St. N.W., Washington, D.C. 20006 (\$2.00).

EDRS Price MF-\$0.50 HC Not Available from EDRS.

Descriptors-CONFERENCE REPORTS, EDUCATIONAL PROGRAMS, *JUNIOR COLLEGES, LABOR MARKET, LIBRARIES, LIBRARY ASSOCIATIONS, *LIBRARY EDUCATION *LIBRARY TECHNICIANS, PROGRAM DEVELOPMENT, RECRUITMENT, SUBPROFESSIONALS

Identifiers-California

This conference was held to provide a forum for wide-range discussions of library technical assistant training. Junior college educators and library personnel from school, college and special libraries presented papers on these topics--(1) the junior college perspective on library technology, including the education of library technical assistants and programs in California, (2) areas of service for the library technical assistant in public, special and school libraries, (3) the administration and development of library technology programs, with discussions of program funding, the labor market, recruitment and placement, (4) the relation of library technical assistant training programs to professional associations, and (5) the future of library technology programs, with five kinds of information workers suggested-teacher assistants. library technicians, museum technicians, media technicians, and data processing technicians. (JB)

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Library Technology in California Junior Colleges

Papers Presented at a Conference on the Training of Library Technical Assistants

Sponsored by the California State Department of Education, Bureau of Junior College Vocational - Technical Education and the University of San Francisco Library Science Program at the University of San Francisco - January 18 & 19, 1968.

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

The two-day conference on the training of library technical assistants in community colleges, where the following collected papers were presented, was co-sponsored by the California State Department of Education, Bureau of Junior College Vocational-Technical Education, and the University of San Francisco Library Science Program. It was held at the University of San Francisco on January 18 and 19, 1968. The conference sessions were designed to provide a forum for wide-ranging discussions of library technical assistant training, including the role of the technical assistant, a review of current curricula, development of curriculum models for emerging and existing programs, exploration of funding sources, and the sharing of information about successful operating methods.

Junior College educators and library personnel from school, public, college, and special libraries participated in a full program of general sessions and smaller group discussions. This conflux of efforts by librarians and educators to consider various aspects of technical assistant training reflects growing awareness, in both groups, of the need for trained personnel at the paraprofessional level in the increasingly complex world of the modern library. For the librarian, this mid-level training provides competent personnel to assist an often over-worked profession as it. strains to adapt itself to an ongoing "information explosion". At the same time it offers a welcome route to jobs with greater responsibility for those who seek library service employment above the clerical level. For the community college administrator, developing curricula in library technology represents a challenge to keep pace with a new and dynamic technology while creating for students new opportunities that are relevant to the future in which they will live and work.

While heated discussions of technical assistant training have been held at numerous library conferences in the recent past, the absence of "debate", as such, was noticeable at the San Francisco meetings. By and large it was a working conference of individuals with experience in some aspect of technical assistant programs where professionals met with each other to "talk shop". This should not be surprising in a state where community colleges have more collective experience with library technology programs than any other state, by far. The sessions permitted much open discussion from the floor which, unfortunately, could not be recorded in this volume. However, the "practical" cone of the meetings is reflected to a considerable extent in the following pages. For the successful arrangements and skillful management of the sessions much appreciation is due Sister Mary Alma, Head of the Library Science Program at the host institution, the University of San Francisco.

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I, LIBRARY TECHNOLOGY--THE JUNIOR COLLEGE PERSPECTIVE

THE LIBRARY TECHNICAL ASSISTANT: A PROFESSIONAL OPPORTUNITY

DR. LOUIS SHORES, Dean Emeritus
Library School, Florida State University

THE EDUCATION OF LIBRARY TECHNICAL ASSISTANTS

DR. RAYNARD C. SWANK, Dean School of Librarianship University of California Earkeley, California

SLIDE PRESENTATION LIBRARY TECHNICIAN PROGRAMS IN CALIFORNIA

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THE LIBRARY TECHNICAL ASSISTANT: A Professional Opportunity

By LOUIS SHORES, Dean Emeritus Library School, Florida State University

Professional Librarianship confronts a challenge of new dimensional proportions. Semi-professional Techniciens are now being employed by an increasing number of libraries of all types - academic, public, school, and special. Local and state civil service sporadic efforts to make a place for the Technician somewhere between the clerical and the professional, have now been given Federal blessing by the new GS-1411 series. Despite some professional reluctance, Library Technician education programs have mushroomed in that most exciting American higher education phenomenon - the Junior College. Our profession must soon make a momentous decision.

The alternatives has already begun to form battle lines in our professional literature. Those among us who oppose the Technician in Library Practice, and his Library Education in the Junior College, do so, partially, at least, because of an understandable fear that unknowing lay employers may welcome the economy of employing semiprofessionals rather than professionals. There is some tasis for this fear in Comparative Librarianship. Colleagues in Japan indicated to me on a recent visit there that some professional positions in Tokyo libraries had already been filled by Junior College educated semiprofessionals.

But another part of the opponents fear is that the distinction between Technician and Professional duties and responsibilities becomes dangerously overlapping. Furthermore, specifications and "examples of typical duties" indicated by some civil service, and even by GS-1411 descriptions for Technician, appropriate tasks that are dear to the professional

hearts of librarians. True, many of these jobs have been responsible for tarnishing our image. They may even have interfered with our recruitment drives. But they have long symbolized, at least for most laymen, the meaning of the vocation, librarian.

Opposition to the Technician practicing in libraries is both because he lowers standards by attempting functions that are professional, or even semiprofessional; and raises costs by doing jobs clericals can do as well or better. Condemnation of Technician education is from several standpoints. One is that the library can do the training better. Another is that these duties call for more than high school education. A third is based on an underestimation of the Junior College.

Although I respect the position of my colleagues, many of whom have been close associates, and personal friends, these many years, I must dissent. I believe the Technician is needed in all types of libraries. He is essential to relieve the man-power crisis. His presence can enhance library service by performing duties now curtailed by personnel shortages. But above all, the Technician, along with increased clerical personnel and intelligent automation, can relieve the Professional from tasks for which society has long overpaid him; and at long last, permit him to assume the role which is the librarian's destiny.

To begin, let us agree what we mean by the occupational level Library Technician. Adequate definitions occur in the GS-1411 series. For example,

**. positions involving nonprofessional or technical work in libraries which are administered in accordance with the practice and techniques of professional librarianship. Such work primarily requires a practical knowledge of library functions and services; and ability to apply standard library tools, methods, and procedures to the service needs of the practical library. (page 2)

The preliminary draft of a statement developed by a joint Ad Hoc Committee of the Library Administration Division and the Library Education Division ... proposes some basic definitions and classification specifications, including statements of typical duties... While noting that the revision of the GS-1411 standards proposes to redesignate the series as Library Aid/Technician, the Committee offers this definition amplification for Library Technical Assistants:

Performance of such work primarily requires skills peculiar to library work, such as knowledge of circulation systems, ability to perform simple cataloging and classification, to use book lists, dictionaries, encyclopedias and other elementary reference aids, to apply clearly established methods, skills, and procedures to the service needs of a library under the supervision of a librarian. (page 4)

From these two basic documents we can, perhaps, assume the fundamental definition of a Library Technician, or Library Aid/Technician, or Library Technical Assistant (the three terms now used) as:

A semiprofessional library worker, whose duties require knowledge and skills based on a minimum of two college years general education that includes library instruction above the student use and clerical work levels.

It is a definition that will probably not satisfy the meticulous and sensitive. But it is the last one in a series of about a dozen redrafts by the writer's own meticulous and sensitive urges.

The argument that the Technician in practice is crossing the professional line emphasizes the need for classification specifications, as the Ad Hoc Committee has begun to do, and the identification of typical tasks as the GS-1411 series indicates for grades 1-7. Nor can the contention that clericals can do some of these tasks better stand up in the face of even more clear differentiations such as those indicated by both the GS-1411 series and the Ad Hoc Committee Report. As the latter states:

A recognized middle group of employees between the professional and clerical levels would help to solve some of the library manpower problems. The gap between clerical and professional staff is often too wide. This leads to reluctance to reassign segments of professional responsibilities. A middle level staff competently trained could further relieve professional staff from

performing routines, techniques, and procedures not requiring full professional knowledge. (page 3)

What constitutes competent training for this level is another basis for opposition. Some contend that no more than high school education plus on-the-job training and/or an apprentice program such as some libraries, particularly public, have provided in the past. Perhaps it will take "research" to convince, but pending the kind of investigations desired, it is advocated here, on the professional literature of both education and librarianship, that this middle level to be effective requires the general education which is now the accepted curriculum of the first two college years. One recent example of this literature is the article "Junior Colleges and New Careers" by Sheldon S. Stein rg and Eunice O. Shatz (Junior College Journal, Feb. 1968).

Although this general education is offered in the first two years of senior colleges and universities, and it is hoped many of these will also offer, as does the University of Toledo, for example, Library Technician curricula. The Junior College is in an advantageous position to assume a major responsibility for Library Technician education. By 1970, more than half of all college freshman and sophomores in the U.S. will be enrolled in Junior Colleges. As Steinberg-Shatz write:

It is not an exaggeration to state that Junior Colleges can provide the major key to 'legitimizing' New Careers. [This is so because] Junior Colleges are more flexible in curriculum, experimentation and innovation in the educational process

Finally, the blame for the ambitious, and frequently overlapping offerings in many of the present Junior College Technician curricula, must be placed partially, at least, on a reluctant profession and a resistant Library Education. One Executive Board of the A.L.A. Library Education Division, not so long ago, went on record as opposing the Junior College Technician Program. The New York State Report, which read in its early pages as though it were about to approve ended by disapproving. Inevitably, such neglect of a challenge and opportunity in the race of mounting manpower shortages and the higher education trend toward innovation and experimentation forced Junior Colleges to go it on their own, unguided and undertrained. Fortunately, this professional posture has now been corrected. Beginning with the Martinson Report, a noticeable support for the Junior College-educated Technician has been growing. The U.S. Civil Service Commission's GS-1411 series and the A.L.A. Ad Hoc Committee's Report can be counted as milestones. At least three states are planning on a state-wide level. California, a leader from the beginning, is synthesizing its long effort with this workshop. In April, Minnesota will give attention to the problem at its Junior College Faculty Association Meeting.

Texas State Library has contracted with John Martinson's Communication Service Corporation for the development of syllabi for the courses to be offered in the Library Technician curriculum in the Junior Colleges of Texas. Known as the Tex-Tec project, the work is still in its early stages. Consequently, what follows are only the preliminary projections by the director of the project. Admittedly, several of the assumptions are ponderable, if not debatable. But as one who has long advocated the Junior College Library Technician program, dissented with the L.E.D. Executive Board's position, and advised with Junior Colleges on their libraries, as well as on their Technician education programs, the Tex-Tec director shares his present thinking.

High on his list of objectives is articulation, not only with the Junior College curriculum, but with education for librarianship. This objective will probably face little objection from Junior College curriculum developers. But when it comes to Education for Librarianship, the confrontation is almost "you are damned if you do or don't." On the one hand, it is objected that Junior College courses telescope both the Bachelor's undergraduate and the Master's graduate library science courses; and on the other hand, Library Educators can be heard to declare "Of course you will never articulate these courses."

As the old man of education for librarianship who has headed two A.L.A. accredited schools for a total of 34 years, I can tell you I have been through this before - in connection with articulating non A.L.A. accredited undergraduate library science programs. In 1941, when we held the first program ever on articulat m, at Peabody, the A.A.L.S., of which I have been a member since 1933, had a posture much like that of many in practice and education today toward the Technician program. Today, A.L.A. through N.C.A.T.E., has provided a series of articulation conferences throughout the nation. I see no reason why this cannot be accomplished with the Junior College Technician program. At least, I should like to try, as I did for senior college programs back in 1941.

As a preliminary offering, here is how I see these two articulations.

JUNIOR COLLEGE CURRICULUM ARTICULATION

The first two college years divide their 64 semester hours, approximately, 40 hours for general education, 24 hours for electives. I propose to take half of these 24 elective hours for Library Technician Education. Such a program will come under either the so-called "College Parallel" or "Terminal" objectives of the Junior College. And I strongly favor the either/or because I do not educationally believe in "Dead End" curricula.

Exhibit A. Proposed Junior College Curriculum

Area	Semester Hours	or	Quarter Hours
I General Education II Library Technician	39		59
Education III Elective	12 <u>13</u>		18 <u>19</u>
Total	64		96

The General Education area should satisfy even the academic purist. It conforms to the liberal arts college pattern now universally accepted, and insures senior college foundation.

Exhibit B. General Education Area

Division	Semester Hours	Quarter Hours
A. Communication (English,		
Writing, Speech)	6	9
B. Humanities (Lit., Philos.,		
Art, etc.)	9	14
C. Social Sciences (Hist.,		2 ,
Econ., Pol. Sci., etc.)	12	18
D. Natural Sciences (Math,		10
Physics, Chem., Biol.,		
etc.)	· <u>12</u>	18
Total		
10081	39	59

The Elective area should permit the choice of a modern foreign language, or the strengthening of a General Education division, or the introduction of personal development courses.

Which brings us to the 12 semester hours of Library Technician Education. The six courses are suggested as convenient units for organizing the instruction that will encompass the content suggested by the job specifications in the GS-1411 series, in the Ad Hoc Committee Report, in other documents, and in sample Junior College Programs. It is hoped, also, that this course of study will minimize infringement on professional library education, and yet permit articulation.

Exhibit C. Proposed Library Technician Education Courses

Course Title	Semester Hours	Quarter Hours
1. Library Use	•	
2. Introduction to Library		. 3
Technology	2	~
3. Library Technical Processes	I 2	
4. Library Technical Processes	II 2	ے ع
). Library Media	2	3
6. Library Business Methods	_2	4
Total	12	18

Course 1 - Library Use, should go beyond the library use we have taught college freshmen in the past, whether in a separate required or elective one-semester hour course, or in a combination of opening week tour and English units, or in other formats. The "beyond" accents the independent study approach which is now dominating higher education inmovation. If, to quote Winslow Hatch, one measure of quality higher education is "the degree to which students can learn independently," then the student must be armed with the resources and resource-fulness he has never adequately been taught before. What is needed is a new library sophistication, communicated by teacher to students in dramatic dimension. And if "the half of knowledge is knowing where to find it," then Course 1 must be a requirement for all Freshmen, whether or not they later choose to prepare to become Library Technicians.

Course 2 - Introduction to Library Technology, is a pre"Foundations" course, which introduces to library organization, behind-the-scene operations, personnel, business methods, technical processes, public services, library history, career opportunities. It also recruits for professional librarianship, and it can do this better if there is an open door articulation plan, as later proposed.

Course 3 - Library Technical Processes I, instructs in the tasks of classification, cataloging, preparations, etc., upon which the A.L.A. Ad Hoc Committee and the GS-1411 series agree.

Data processing, reprography elements should be added. A skills laboratory is proposed, one in which the student can perfect his skills through practice, at his individual rate of speed, and through observation and work-study.

Course 4 - <u>Library Technical Processes II</u>, instructs in the tasks of circulation, reference and other patron relations upon which both the Ad Hoc Committee and GS-1411 specify for Library Technicians. Skills laboratory and work-study.

Course 5 - Library Media, instructs in poster making, bulletin board and exhibit lettering, display, handling; in dry mounting; transparency making; mimeographing, multigraphing; sketching, drawing, art work for library publications; glass slide making; micro filming; photography, etc. Skills laboratory and work-study.

Course 6 - <u>Library Business Methods</u>, includes typing, speed writing (as the simplest taught of the shorthands), filing, library terminology, including some foreign language equivalents, correspondence and report forms, cards, key punch operation, records, sample bookkeeping are some of the course components. Skills laboratory and work-study.

These course descriptions only hint at the syllabi content. There is vulnerability at many points. No one knows better than the <u>Tex-Tec</u> team at how many points colleagues will stand ready to belabor. Yet, venture we must for the good of libraries and librarianship.

LIBRARY EDUCATION ARTICULATION

Most venturesome of all is the attempt to articulate Library Technician Education with Education for Librarianship. But it must be done, not alone to prevent uneconomical duplication, but in the interest of recruiting the next generation. Just as it is hoped Library Practice will profit by a middle group who can relieve the professional librarian of a high percentage of semiprofessional duties, so, also, professional Library Education should benefit by being relieved of clerical and semiprofessional instruction that has always raised eyebrows in senior college and graduate school circles.

A problem that has always confronted A.L.A. accredited library schools is the range of practical library experience found among its entering students. As a result, most library schools have had to incorporate clerical and semiprofessional content into beginning courses.

What is suggested is that the content of the Library Technician Education program be eliminated from both the N.C.A.T.E. Bachelor and the A.L.A. Master programs. It is further suggested that a non-academic credit, directed, independent, workstudy, skills laboratory be activated, under the instructional leadership of the Library School librarian, or another faculty member. Through pre- and post-testing, each student's competence would be established. At the individual student's pace these skills, still taught as part of academic credit courses, would be mastered individually and independently, under guidance.

The Junior College Library Technician graduate, of whom there should be an increasing number in the years ahead, would, of course, be exempt. So might, also, the student who is library experienced, of whom library schools have many.

Conclusion

Librarianship and Library Education have been my life. Five decades in the first and four decades in the second are not lightly abandoned. I have thought deep and long about the Library Technician movement. I have added advantages and subtracted disadvantages. After a decade of endeavor in the Junior College phenomenon I am more convinced than ever that this middle group of workers will enhance our library service. I am excited because for the first time the professional librarian has an opportunity to become a professional, to assume the high role in our society for which we are destined.

To paraphrase the words of Franklin D. Roosevelt: We have nothing to fear but professional fear itself.

References

- 1. U.S. Civil Service Commission. <u>Library Technician Series</u> <u>CS-1411</u>. June, 1966.
- 2. A.L.A. Report of Joint & Hoc Ammittee of Library Administration Division and Library Education Division on Sub-Professional or Technician Class of Library Employees. 1967.
- 3. Martinson, John. Vocational Training for Livrary Technicians. 1965.
- 4. Texas State Library. Tex-Tec Proposal. 1967.
- 5. California State Department of Education. Library Technician. 1947.
- 6. Canada. Library Association. Training Library Technicians. 1947.
- 7. Shores, Louis. "Junior College Library Technician Education." California Libraries. 1967.
- 8. Letter. 1965. "Dissent Letter." Library Education News

THE EDUCATION OF LIBRARY TECHNICAL ASSISTANTS

DR. RAYNARD C. SWANK, Dean School of Librarianship University of California Berkeley, California



DR. RAYNARD C. SWANK - University of California

My assignment on this panel is to define the function of library technical assistant programs as seen by a graduate library school dean. I expect I was chosen partly because I have been serving on the advisory committee to the recently established program at San Francisco City College. I am also a member of the new advisory committee to the American Library Association, Office of Library Education, which will undertake in the next year or so to develop a position on the several levels and types of schooling for work in libraries and information centers. In some of my remarks today, I will draw, with Lester Asheim's permission, upon the preliminary discussions that he has had with the new committee. In no sense, however, should I be interpreted as representing the views of either the Office of Library Education or the advisory committee.

In defining the functions of library technical assistant programs, I need to spell out briefly the several levels of library work, of which library technical assistance is one. But first, you may have noted that I have begun using the term "library technical assistant" instead of "library Technician." This is consistent with Mr. Asheim's present thinking, and I urge that we follow the efforts of his office to arrive at an acceptable standard terminology. While the title "library technician" is widely used, the objection is that it connotes mechanical, technological, or scientific skills, which are not really what we mean. The alternative title, "library technical assistant," has been recommended by the Joint Ad Hoc Committee of the American Library Association Library Administration Division and Library Education Division on the Subprofessional or Technician Class of Library Employees.

My conception of the several levels of library work is fairly conventional, so I can be brief. I would recognize four levels. First, the clerical; second, the subprofessional or technical assistant; third, the professional; and fourth, the professional-specialist. This again is in line with Mr. Asheim's present thinking, the only unusual element being the recognition of the fourth, or professional-specialist level.

In my own thoughts I have always defined the clerical level as having to do with office skills and routines that are not unique to library work. Training is required in such skills as typing, filing, and the operation of office machines, all of which are transferable to office work in other as acies and organizations.

Library technical assistance goes seyond the clerical in that skills unique to library work are required. I mean such skills as card catalog filing, bibliographical searching, simple cataloging, order work, the posting of several receipts, and circula-

tion, mending, and binding procedures. These are the everyday journeyman jobs that, quantitatively, comprise the bulk of library work, and they are absolutely essential.

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The work of the professional - that is, the librarian, and let us never again commit the tautology "professional librarian" - calls for judgment based on a knowledge of books and information, on the one hand, and the needs and behavior of readers on the other hand. To bring readers and books together, he must master the intellectual organization or recorded knowledge through catalogs, bibliographies, and indexes, and he must accept responsibility for the goals, the functions, and the efficient operation of the institutions that provide library and information services.

The professional-specialist is usually a librarian with experience or education in such fields as collection building, the design of cataloging and indexing systems, or systems analysis and mechanization. But let us recognize that not all professional-specialists are librarians. In many libraries, high-level professionals are hired primarily because of their subject knowledge, their linguistic abilities, or their managerial competence. Let us also recognize that professional-specialists, whether librarians or not, need not be working in libraries at all. They may be consultants on the design of library and information systems; or they may be teachers and researchers in library schools. As librarian-ship reaches maturity, the number of professionals required in non-operational, or non-practicing positions - that is not actually in library service - is rapidly increasing.

This is the context then within which I define library technical assistance. I dwelt as long as I did on the professional levels in order to be sure that we understand what technical assistance is not and what it should be, and what librarianship should be and often is not. I will now turn to the schooling appropriate to each level of library work.

At the clerical level, the usual business school or commercial courses still seem appropriate. Again, the required skills, such as typing, are common to all kinds of office situations.

At the technical assistant, or subprofessional level, the junior colleges are taking over, as I think they should. The training needed is essentially vocational, with such additional general education as may be possible. Below this level such training might conceivably be offered through vocational courses in high schools, but at too great an expense, I suspect, of general educational background. Above the junior college, such programs might be offered as undergraduate majors in four-year colleges.

I am still ambivalent about undergraduate majors and minors in librarianship, except as they may serve a special purpose for teacher-librarians in the schools. Because of the rising level of academic achievement in both high schools and colleges, it can be argued that the general elucational background of prospective librarians is better now at the end of junior college than it used to be at the end of senior college. The one-year content of the basic professional program could, therefore, be offered without prejudice to professional standards, at the undergraduate level. On the other hand, it may be argued that the educational requirements of the profession are rising perhaps even more rapidly than academic achievement. On the basis of the definitions I used above, I tend toward the belief that the education of librarians needs to be elevated at the graduate level, not lowered to the undergraduate level, and that undergraduate majors should be viewed along with junior college programs as essentially subprofessional.

The differences between the junior college programs and the undergraduate majors, and between the undergraduate majors and the present master's programs, are simply too small to be significant bases for the categorization of library personnel. A more significant categorization might be achieved if library assistant training were offered by the junior colleges, or alternatively as undergraduate majors by the four-year colleges, and if professional education were advanced at the graduate fevel to something comparable to legal and medical education.

While profes ional education is the primary business of the graduate library schools, the question has been raised, and the faculty at Berkeley has discussed, the possibility of the graduate library schools accepting responsibility also for a technical assistant program. Our faculty at Berkeley gives its solid sup~ port to technical assistant programs, but it does not believe that graduate library schools should offer them. To the extent that undergraduate classes should, and might in the future, be offered by the School of Librarianship at Berkeley, and they are likely to be non-professional and non-vocational. They should be courses that contribute to undergraduate education in general, such content of librarianship as may have general intellectual significance and is useful and transferable to other disciplines. Berkeley is worried about the isolation and the self-centeredness of the professions, and wants to know exactly what intellectual contributions the professions can make, whether in law, or medicine, or librarianship, to the general enrichment of the university curriculum. The question is not only what we, as one profession, need from the rest of the University, but also what we have to offer in return. To me, this is a far more basic and challenging issue, with respect to undergraduate courses in library subjects, than

any possible use of undergraduate courses for professional or vocational purposes.

Since time is short, let me pass over quickly the content of technical assistant programs. This will be dealt with later in this conference. Let me make two comments. First, this content must not be just a watered-down version of the professional library school curriculum. Beyond the necessary general background about the nature and goals of a library, its organization and its operations, the technical assistant curriculum should be dealing mostly with matters that are barely touched upon, if at all, in the professional curriculum. Examples are charging systems, order procedures, and serial records. Second, I would bet my last dollar that if we compared our present-day technical assistant programs with the curriculum of Melvil Dewey's first library school at Columbia in 1882, we would discover a remarkable similarity. This would be a revealing measure of the advancement of the profession since the establishment of the first school, and by indirection, a persuasive argument for the reestablishment of curricula for the practical purpose of getting the everyday work of the library done, which is where we started nearly a hundred years ago.

One final observation, and this is about the articulation of technical assistant programs with those of other levels of schooling for library work. The four levels of library work that I described earlier represent to me at least three separate career ladders: The clerical, the technical assistant, and the professional. They are not parts of a single continuum up the rungs of one ladder. The clerical assistant, after business school, should be encouraged to go on to technical assistant school, and the technical assistant should be encouraged to go on to professional school. But little that was learned before can be credited in satisfaction of the later requirements. The highest clerical skills are not required of technical assistants, and the highest skills of technical assistants are not required of professionals. If there were, in fact only one ladder, professionals would be required to begin as clericals. A certain amount of back-tracking and makeup work seems inevitable as one switches from one ladder to another. For the technical assistant who wishes to become a professional, this means that, for having spent time on content that is not taught in professional schools, even though unique to work in libraries, and for having spent less time on his general education, an additional year or so of schooling will be necessary. I see no way out of this, and I think it is as it should be. While Berkeley. for example, might offer undergraduate courses in library subjects for general educational purposes, it is not likely to accept technical assistant courses for either general educational or professional purposes.

I hope you see in these comments my expectation of a major, further, re-apportionment of library work between technical assistants and librarians. I expect that, quantitatively, a very much larger proportion of library work, the everyday journeyman work that is now often performed by professionals, will in the future be performed by technical assistants. The ceiling, and the career possibilities, for technical assistants should rise a great deal higher than is now commonly perceived, and the floor for librarians should rise accordingly. The function of the technical assistant should be to carry on the great bulk of the routine work of the library and, through his invaluable support, to enable the professional, perhaps for the first time in any orderly formal sense, to attend properly to his own business the study of books and readers, the intellectual organization of recorded knowledge, and the design and management of libraries and other information agencies.

SLIDE PRESENTATION LIBRARY TECHNICIAN PROGRAMS IN CALIFORNIA

BY
MRS. MARY E. DENURE, Consultant
Public Service Occupations
State Department of Education
Sacramento, California



MRS. MARY E. DENURE - California State Department of Education

At present, we have 22 Library Technician programs in our junior colleges. This slide indicates the name of the county, the name of the college and the number of units offered by each. These are programs of six units (Ventura and Merced) to twenty-three units (Foothill). The recommended number of vaits is fifteen to eighteen including those earned in the Work Experience Education course.

If we look at the location of the colleges in relation to the State picture, we see the concentration of the larger programs is in the South. However, in pure numbers of colleges offering the programs, we have ten in the North and twelve in the South with the average number of units slightly over twelve.

The program consists of five courses that we consider specific technical training courses or a "core" program. These should be taken in sequence: (1) Orientation and History; (2) Technical Processes; (3) Library Services; (4) Nonbook Media; and (5) the Work Education Experience course.

The related courses would be: Communications, Human Relations, Advanced Literature and Data Processing, with additional optional courses in Audio-Visual, Graphics, Children's Literature and Foreign Language.

The student, to become a Library Technical Assistant, would need the "core" program, related courses and general education courses, a total of at least 60 units and an Associate of Arts degree.

The asterisked courses make up the "core" curriculum. The Work Experience course should enable the student to have on-the-job experiences in at least 2 and preferably 3 library situations: The public, the school and the special library.

A questionnaire survey by the California Library Association Administration Committee indicated that as technicians become trained and recognized, and more experience and education is required by employers, the duties will become standardized and specific.

This is a partial list of duties assigned by 60 percent of the 38 libraries in California that answered the questionnaire that they were now using the Technician classification: Explaining to borrowers library rules for checking out and returning materials; giving patrons direction on location of library departments; explaining to patrons the resources and services of the library; finding specific books on the shelf for patrons; searching for simple trade bibliographical data; helping patrons use the

card catalog; answering simple reference questions using quick reference tools; supervising the work of clerical staff; charging out library materials to patrons and clearing returned materials; checking catalogs and shelf lists for holdings; planning displays.

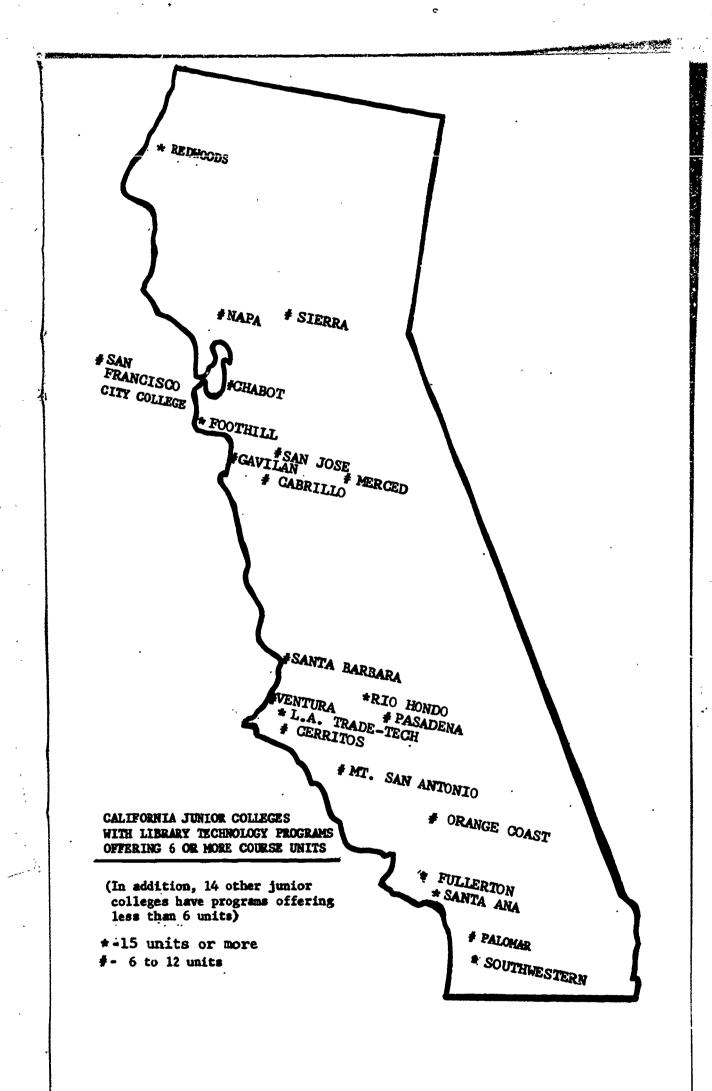
The Bureau of Audio-Visual and School Library Education, State Department of Education, developed this chart to indicate the growth of school libraries in California from 1964 to 1966. In that span of two years, elementary school libraries have increased by 1,084 or 60 percent; the greatest increase in school libraries. The total increase from 1964 to 1966 in all school libraries was 1,205 to give us an over-all total of school libraries of 4,299.

The total number of libraries in California as listed in News Notes of California Libraries was in excess of 5,224 and this did not include some coterminous library situations as exist in San Francisco County/City; Santa Barbara County; the Lampoc Public Library and the Santa Maria Public Library.

Considering the number of libraries combined with the individual and general functions of each library, we see again an indication of the need for trained technical personnel.

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II. AREAS OF SERVICE FOR THE LIBRARY TECHNICAL ASSISTANT

WHAT IS THE FUNCTION OF THE LIBRARY TECHNICAL ASSISTANT IN RELATION TO PUBLIC LIBRARIES?

JAMES R. ROBB, Personnel Officer County of Los Angeles Public Library

WHAT IS THE FUNCTION OF THE LIBRARY TECHNICAL ASSISTANT IN RELATION TO THE SPECIAL LIBRARIES?

MRS. MARGARET D. URIDGE, Head of General Reference Services University of California Berkeley, California

WHAT IS THE FUNCTION OF THE LIBRARY TECHNICAL ASSISTANT IN RELATION TO SCHOOL LIBRARIES?

MRS. ELSIE D. HOLLAND, Consultant School Library Education State Department of Education Sacramento, California



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JAMES R. ROBB - County of Los Angeles Public Library

I have heard much discussion concerning the proper name for those employees who have not reached full professional status, such as subprofessional, semiprofessional, nonprofessional, or paraprofessional. In view of the importance of these people in the Los Angeles County Public Library System, I think I am most anxious to keep them from being classified as antiprofessional. The specific name utilized in the Los Angeles County Library is Library Assistant, which we think is consistent with the use really made of these people—that is in almost every case, there is a skilled assistant for each professional staff member. In this sense they are "semiprofessional" since they relieve the overburdened professional staff of many duties which require some specialized knowledge. They may also be considered as "preprofessionals" since many of them, through additional training, go on to attain professional status.

Because of the history of our library system we have been forced to adopt a pragmatic approach to utilization of Library Assistants. Just a few short years ago the County Library was rural in nature, and had many small community libraries scattered throughout a vast geographical area. In those days, the Library Assistant was a key person in the system simply by doing the one thing that is paramount—that is—providing some library service to the public, where otherwise there would be no service at all.

Of course, those of you who are familiar with Southern California know that much change has occurred and that we are now a highly complex urban library system. The ratio of professional staff to nonprofessional staff is now much higher. Nevertheless, there is still a vital need in our system for these subprofessionals, in view of the continuing shortage of professional staff and the continuing necessity of providing library service in those geographical areas and facilities where the utilization of professional staff is not feasible.

Parenthetically, one of the fears I often hear expressed by librarians is that they have not been able to achieve a professional "image" or they are not considered as members of a "profession." This expression—maybe because I am a nonlibrarian—seems to be somewhat irrelevant. It should be assumed that you are not creating a profession, it is already there. You should not ask "What can I do to be recognized as a professiona You should ask "What job is there to be done?" The public for the library service. If the demand for library service is the library service is the

Getting away from philosophizing, which is a field in which I feel somewhat uncomfortable, to return to the experience of County Library, I might just say a word about the nature and use of Li-

brary Assistants. We have some 171 budgeted professional positions and 154 budgeted Library Assistants. It is obvious from the figures that the Library Assistant is truly a support class with almost one assistant per each professional staff member.

In many cases, in our very small outlets with less than 75,000 annual circulation, the library operation is supervised by a Library Assistant. This is also true of our bookmobiles and in many of our instutional libraries. It is also true in some of our larger libraries suffering from recruitment difficulties or geographical disadvantages.

Because we are a system, it is possible to maintain quality library service despite the shortage of professional staff through our "back-up" service provided by our regional staff and our staff specialists at System Headquarters. Further insurance comes from careful selection of Library Assistants, working with the Civil Service Commission in establishing recruitment and examination standards and preliminary work in the schools that have Library Assistant programs providing advisory assistance to improve curricula.

I refer again to our concept of preprofessional since even in the beginning we like to pick people who are obviously on their way to gathering the additional training necessary to achieve professional status. Area of assignment and work schedules are, as a matter of policy, arranged so that attendance in library school is feasible. Guidance and support from our professional staff is encouraged.

Over 20% of our current professional staff have had experience as nonprofessionals, several of them having served as Library Assistants. As a matter of interest, I made a quick survey of our current Library Assistants to determine some general characteristics and found that over 75% of them had previous experience in our Library, 75% had at least one year of college, 50% two years, and over 25% had four years of undergraduate work. The trend has been toward selection of Library Assistants who have completed work in schools such as L.A. Trade Tech., of the Los Angeles School District, or Rio Hondo Junior College.

Our Civil Service Commission allows either experience or this kind of training as eligibility. We would undoubtedly have more if they were more successful in passing Civil Service examinations. In this respect, it is highly beneficial to have members of the Civil Service Commission staff sit as members of the Library Assistant Advisory Committees. In this way, they can gain understanding and knowledge of the curriculum which hopefully can be reflected in the examination. In my capacity as a member of these committees, I have advocated a balanced academic background which would include liberal arts as well as technical

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training. Once basic techniques have been learned in school the employer can offer on-the-job training. This is even more important since it is difficult to specialize at this point in school, and our Library Assistants may work in any areas, such as technical services, book evaluation and field service, which are impossible to cover thoroughly in school.

I could go on at length describing the specific duties performed by library assistants in these areas of service, which enable the professional staff to work in areas of reader advisory service, book evaluation and complex reference. I will not attempt to spell them out in more detail here since they are probably quite obvious to those of you who are librarians, and I have outlined some of them in my letter to John Martinson, which he was kind enough to incorporate in his report. For the future, it will be important, in view of the increasing complexities of work in libraries, to modify the content and increase the amount of education at the professional and semiprofessional levels, including perhaps a second master's degree for librarians since we are moving into technical fields such as automated information retrieval. Since librarians are increasing their skills and moving into these new areas, an even greater gap will be created which we feel must be filled by the Library Assistant. AND SERVICE OF THE SERVICE

Our own plans, budget and Civil Service permitting, call for an additional level of Senior Library Assistant, requiring a fouryear undergraduate curriculum, increased use of Library Trainee positions, and full tuition reimbursement to facilitate movement upward into professional levels. WHAT IS THE FUNCTION OF THE LIBRARY TECHNICAL ASSISTANT IN RELATION TO THE SPECIAL LIBRARIES?

MRS. MARGARET D. URIDGE, Head of General Reference Services University of California Berkeley, California



MRS. MARGARET D. URIDGE - University of California

As past chairman of the Education Committee, San Francisco Chapter of the Special Libraries Association, I am here today to speak from the point of view of special libraries.

The Special Libraries Association, San Francisco Chapter, has been interested for many years in the instruction of non-professional personnel in libraries, while also concerned with the continuing education of the professional librarian. In the latter area the Chapter has sponsored workshops, institutes and courses up-dating the practicing librarian's knowledge in many phases of librarianship, from the acquisition of special materials through new tools in reference work. In fact, we are co-sponsoring this April and May a three-Saturday Institute on the Anglo-American Cataloging Rules, at which Seymour Lubetzky will be our main speaker.

Our concern with the instruction of non-professional personnel is based on a realization of the terrific duplication of the same type of instruction that has to be made in every special library to new clerical or library assistants and includes basic information such as "what is the Library of Congress and what are L.C. cards?" Robert Meyer, who will speak to you Friday afternoon, was the person who suggested a means of coping with this problem. At that time, he was chairman of the Chapter's Education Committee and he continued for several years afterwards as a member. He suggested that the Committee put on a workshop to which the special libraries could send their lit ary assistants and at which the "why" of a library and "what" libraries do could be explained. Many months of hard work and refining of the original concept followed. The four Chapter members selected to speak at the twoday workshop hashed over and reworked their ideas. Ideas for coverage, emphasis and principles had to be started. The touchstone used on the development of all talks was: This is to explain the Why and the What of libraries and their work, not the "Hows."

It was difficult to adhere to this touchstone. One or another of us would slip into "how we do it" or "how it is done." But we severly criticized each other's work on that basis. The reason behind this strict adherence was that special libraries have many different ways of doing specific procedures and routines and we could not go into them all; there is no "best" way that fits all types of libraries. So we came out with what we aimed for - an introduction to the library, what it is and what it does. In the invitation sent to librarians we stated the objectives as: "A workshop that will give your assistants the fundamentals of library operations and a clearer understanding of their role in these operations."

The Canadian Library Association's Committee on Training Library Technicians, in a June 19, 1967 report presented to the

Association at their June, 1967 conference, speaks of libraries as "a kind of institution with specialized procedures and methods." That is what our workshop recognized. Also, that basically all libraries have goals of service to their clientele and that all employees, professional and non-professional should know, accept, and further these goals to the best of their abilities.

The workshop was an innovation in many respects. It was aimed at the library assistant, not the professional librarian; it asked that the libraries pay the expenses as well as give the time to those library assistants to attend; and it designated the library assistant as a definite group in the library organization - not just those who are not in the prime group - the professional librarian. The response was almost overwhelming. Not only has it been "over-subscribed" each time it was given, but we have been asked to produce it annually instead of our present biennial timetable. Furthermore, the lectures from the September, 1964 workshop entitled The Library: An Introduction for Library Assistants, edited by William Petru of the Chapter, was published by the National Special Libraries Association in January, 1967, and is now out of print. A reprint has been ordered. A review of the publication (Library Journal, May 15, 1967, P. 1909) stated, 'Despite its brevity, this booklet should be welcomed as a harbinger of something that is badly needed and is bound to come if formal training of technical library workers is to grow."

This workshop program has, however, a different slant than the technician programs developing in the community colleges. Our workshop was for the people already working in libraries as library assistants, while we see the library technician programs as preparing individuals to obtain work in libraries. There is one basic difference, and that is in familiarity and motivation. In the three workshops so far produced, we have had a wide range of experience represented in the attendees - from those just a week or so on the job to those who have been employed in the one library for ten years or more. It was impossible to "slant" our talks to cover both ranges equally. So, we aimed at the middle range - those who had been working in libraries several months. The criticism we received was for not giving more "how" in our talks. But even so, in talking with the employers who sent the people and with the attendees themselves several weeks afterwards, the overall reaction was that it was well worth the time and money spent; they would just like "more." In fact, we were asked to put on a series of "advanced information" workshops.

One of the more experienced library assistants related to me that the greatest value she received from attending the workshop was the overall picture it gave her of libraries in general and the multi-phased work of any particular library. Also, it was an opportunity to meet others in the same non-professional

classification as she. It gave her new insight, and an increased awareness of the goals and jobs of her own library. She undoubtedly got a great deal more out of the workshop than did one of the girls who had been in her first library job only two weeks, because she had more "pegs" to hang the information on and more experience to correlate. This was the great advantage of our workshop: Limiting itself to those assistants already employed in libraries. They already have a frame of reference.

One of the criticisms I have heard from a special librarian who has hired a product of a local library technician course is that the students from these courses do not appear to get an over-all picture of the library and its purposes. To rectify this, the employer is planning to send this library assistant to our next workshop scheduled for September, 1968.

This brings me to the all-important point of curriculum and coverage. Courses have been mushrooming up all over the country and in Canada, and they are inevitably uneven in their emphasis, coverage and depth. Some are really minature professional courses. This, I think, is a great mistake. There is a tremendous need for standards - nationwide and especially within a state like California. Librarians should be able to know that a graduate of Chabot Library Technician program had the same basics and coverage as a graduate from San Jose City College Library Technician program.

However, equally important, as the Canadian report also emphasizes, is the fact that the courses are designed for the work the library technicians are, or will be expected to do. And, that it is clearly emphasized and defined that this is not professional library work, but is equally important; and that it should always be done under the overall supervision of professional librarians. I do not believe in trying to "protect" our profession. If we do not have professional responsibilities or approaches, then we cannot protect ourselves by ignoring the needs of the library technician training. But it should be made crystal clear to those taking these courses and to those hiring the products of these courses, that they are not professional courses, they are not producing "professional librarians" or even "librarians" but library assistants; library technicians; or library technical assistants, with emphasis on the assistant.

I am a "mustang" myself. That is I started working in libraries before I had any professional training. In those days library schools were not as prevalent. I gained a lot of valuable experience and was classed as a professional librarian for some ten years in three different libraries (including Yale University Library) before I took a leave of absence and went to library school. I know, possibly better than most, how library schools

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develop a more truly professional knowledge and outlook in their graduates. And I see that difference now in the people I have had working for me. They are extremely intelligent, knowledge-able and sharp; but somehow, if they are not library school graduates, they lack an overall perspective, appreciation of certain areas of importance, knowledge of the library world and its manifold complexities. We have all had experience with library school graduates who prefer to stick to the exact detail work of their own jobs and do not want to look further or acknowledge that there is a "further" - but these are more and more rare.

Is there a need for these library technician programs? Decidedly! One example comes to mind. Just a few weeks ago, a woman phoned me and stated that my name had been given to her by a friend who said that possibly I could help her. She wanted to do library work, but had never been able to go to college. Now that her children were in high school, she had the time. I suggested that she enroll in the closest junior college library technician program and see if she could get a job in the college library while working for her A.A. degree. She was so grateful and encouraged. Two years ago, I would have had to be very negative. With her maturity and interest in books and people but no special typing or clerical skills, I could have offered her nothing.

The library technician programs are teaching the "how;" the skills, the language and the techniques. The success of these programs depends upon how well they screen out the unemployable; what standards they adhere to; and the acceptance of the library profession to place their graduates in higher classifications in recognition of their added and specialized training.

WHAT IS THE FUNCTION OF THE LIBRARY TECHNICAL ASSISTANT IN RELATION TO SCHOOL LIBRARIES

MRS. ELSIE D. HOLLAND, Consultant School Library Education State Department of Education Sacramento, California

A school library is a well-balanced, properly organized, and easily accessible collection of books, films, filmstrips, transparencies, recordings, charts, maps, periodicals, tapes, newspapers, slides; indeed, all media of communication to enrich every area of the curriculum and to satisfy the personal interests and needs of students and faculty.

The program of the school library is oriented to meet the educational goals and objectives of the school. Certain characteristics of a school library make it different: (1) It is curriculum oriented; (2) It provides a variety of nonbook materials; (3) It must consider and meet the needs of each pupil and teacher in the school.

To carry on a school library program the routine work should be handled by clerical and technically trained people thus releasing the librarian to do library work with pupil and teachers. The need of these people in the school library has provided an added impetus to many of our junior colleges to start a library technician program. With the growth and spread of school libraries and the dearth of certificated school librarians the need for trained technicians is increasing.

The exact role of the library technician will vary with size, level and curriculum of the school but the need is becoming more and more evident as more and more school libraries are developing.



III. ADMINISTRATION AND DEVELOPMENT OF LIBRARY TECHNOLOGY PROGRAMS

SOURCES OF FUNDING IN RELATION TO THE LIBRARY TECHNICIAN PROGRAM

DR. EVERETT D. EDINGTON, Coordinator Research Coordinating Unit State Department of Education Sacramento, California

LABOR MARKET ASPECTS OF LIBRARY OCCUPATIONS

KENNETH L. MAXWELL, Senior Research Analyst State Department of Employment Sacramento, California

RECRUITMENT AND PLACEMENT IN THE LIBRARY TECHNICIAN PROGRAM

MRS. KATHERINE G. PEDIEY, Instructor City College of San Francisco San Francisco, California DR. EVERETT D. EDINCTON - California State Department of Education

The Vocational Education Act, 1963, is the greatest possibility of funding for your instructional programs. If you don't
have a Director of Vocational Education, go to the Regional Office
of Vocational Education: The Central Region is located in Sacramento; Coastal Region in Oakland; and Southern Region in Los
Angeles. Spend an hour or two finding out more about Vocational
Education programs and possibilities.

Work experience is an important aspect of the program. As far as I'm concerned, people work in industry and it is part of the learning process. The best learning is when they receive pay for what they do. In the very beginning of programs like this, you would be better off and your program would be much better off if you can insist that your work experience programs be paid work experience programs. Especially if the students are doing a service for your industry they should get paid for what they are doing. Soon your employers will also see the advantage of this type of program.

There are a number of areas or sources of research available. I'm so interested in what you're doing I can hardly contain myself; believe me, here is a new curriculum and a new area that's just getting started. You have thousands of decisions to make, but you are not so biased that you can't see the proper type of information upon which to base these decisions. I am talking about student selection, grading, placement, etc. We're offering the services of our Unit to help you get research funds; to get answers to these problems. Every on-going program, especially new programs, should designate three to five percent of their operational costs for evaluating-type research. You don't start your evaluation when the program is over; you should start it in the initial planning stages. So far, I have never known a VEA project or portions of a VEA project turned down that had money earmarked for evaluation-type research in a project.

There is also a possibility of small grant loans from the United States Office of Education. These are up to \$10,000 for research activities. These are administered out of the Regional Office, which means your project just has to go to the Oakland office. The turn-around time on these is approximately two months; that was until the money got frozen this last June and some people waited about eight or nine months. Normally two months after you submit an application for a small grant research project, you will be able to know whether it is to be funded or not.

The process is not the same with the larger projects; they go directly to Washington. They take six or eight months, which is what you would expect of this type of a program. I have with me available reprints of small research projects - about a

dozen of them - for you who might be interested later on. You can apply for small amounts of money and many times, if this is coupled with an instruction program, the amount is sizable. This is 100 percent money as far as the research phases of it are concerned. Now, please don't try to say, 'Well, I need some money for starting a program for library technicians. How can I make my program research in order to get 100 percent money for research?" This is not the purpose of it. The purpose of the research money of this type is to go along with an instructional program so you will be able to get answers to questions to help you make decisions later. So let's not just try to draw out of our past experience and talk about selecting students, curriculum, and building a program. Let's design and build some adequate research-type projects so that within three or four years from now, we will have some answers to help us to have better programs of instruction.

In Section 4-C of the Vocational Education Act of 1963, there are monies for research. We are encouraging people with research projects of less than \$10,000 to apply for small grants, and those that have larger research projects should go to Section 4-C. In the small grant program, 90 percent of the good projects are funded. However, only about 20 percent of the projects turned in are funded. Most of them are not thought through properly and the person has not received the help of someone to help him design the proposal and this is an important aspect of it. Our Research Unit will help as much as possible. There are three of us to cover the State. We offer design and consulting help and will help you to obtain funds for research-type projects; but again, they have to be research projects. This is difficult for some people to understand: "Why can't I make mine a program of research so we can go for 100 percent money?" We are wasting your time and the reader's time if you work on this type of program.

One other thing I wanted to mention was the dissimilation phases of our Research Unit. We are tied in with ERIC, the Education Research Information Service Center, which has 17 or 18 satellite centers throughout the U.S. They collect, catalog and microfilm information and data. The junior college unit is at UCLA; the vocational-technical unit is at Ohio State University, and there are others throughout the nation. We are receiving films from the ERIC that are related to vocational and technical education. The curriculum center is receiving all films that ERIC provides. All of us have had the experience of writing for a publication and hearing that this is out of print, and that is the end of it. Once something is on film in ERIC, it is there forever. You can purchase everything if you have the number and name, and the area provides 500 different documents a month. We are putting many on film now for 8½ cents a sheet, and each sheet has 70 pages on it. If you just buy selected ones, it is 25 cents a sheet. They revised the price on us about two weeks ago so I found a

duplicator which duplicates the microfilm and I'm going over to Dr. Church's office, the State Department of Education, Curriculum Laboratory, and pick those that are more related to the areas that we need and we can duplicate them for a dime.

We are now setting up a library service of research related information for vocational education. We have, I'd say, about 3,000 documents which we've collected over the period of a year. About 800 of these are hard copy and the remainder are film. This is helpful for anyone working in research design who needs budget information. Also, these documents are helpful to a graduate student needing to review the literature. But it's more important for people in the field to find out what has been accomplished in those different areas.

I would urge you to do everything you can to have in your training program something concerning microfiche and microfilms - this is the ERIC Center concept. Because of the cost and what is available, I think this going to mushroom. I think every school in the State should have at least a reader, if not a reader-printer, in their school and this is starting to happen. Most county offices now do have a reader. Some of the larger school districts are automatically applying for or obtaining all of the ERIC materials, approximately 500 a month. I hope the library people get on to it and start using it, while it is available. ERIC already has over 10,000 volumes of information and it is growing steadily. There are principally professional materials in the area of education; however, we also get material from the Department of Defense. We have about 500 documents from them related to vocational-technical education.

One last comment I would like to make on funding - especially for VEA: Don't just call your program "Vocational" in order to get funds. The same suggestion applies to "Research." Don't call it "Research" in order to get 100 percent research funds. Let's make the programs what they are supposed to be, and it will save your time and the people that are doing the funding. And again, I think the VEA is the most likely source of instructional funds and when there are definite possibilities of research funds, our unit would like to help you.

LABOR MARKET ASPECTS OF LIBRARY OCCUPATIONS

BY

KENNETH L. MAXWELL, Senior Research Analyst State Espartment of Employment Sacramento, California



KENNETH L. MAXWELL - California State Department of Employment

According to a well known manpower expert, (1) the United States is the only country in the world that devotes more effort to the production of services than to the production of goods.

This circumstance is a fairly recent development. The nation's workers producing services only began to outnumber goods-producers in the early 1950's. By 1965, however, the goods producing mining, construction, manufacturing, and agriculture industries employed only 40% of the national work force. (2) In contrast, the service producing transportation and utilities, trade, finance and insurance, service, and government industries accounted for roughly 60% of the national work force at that date. In 1975 the proportion is expected to be in the order of 36-64.

Of the service producing group, the service industry proper is expected to experience the fastest rate of growth, gaining more than four employees by 1975 for every ten in the industry in 1965. Services provided by the industry include lodging, laundering, funeral arrangements, advertising, duplicating, research, auto repair, appliance repair, movies, bowling facilities, medical treatment, legal advice, nonpublic education, art exhibits, organizational activity, record keeping and housekeeping.

Running a close second to the service industry in growth is government. By 1975 more than one out of every six workers nationally will be in the employ of government. The fastest growing sector of government is the state-local component where employment is expected to increase by almost 50% in the 1965-75 decade paced by housing and community development with a gain of 92%. However, the latter represents a relatively small sector of state and local government. Higher education, the runner-up percentage wise, is expected to gain 650,000 employees between 1965 and 1975, or an increase of 89% Elementary and secondary education nationally has prospects of adding 900,000 employees in the same period although this figure amounts to only a 30% expansion in the ten year period. (3)

Significant trends can also be observed when the national work force is analyzed by occupational as distinct from industry categories. Of the four major occupational groupings, white collar and service occupations are expected to gain persistently at the expense of blue collar and farm workers. Service workers are expected to account for one out of seven employed in 1975, and to gain in numbers by one third over the 1965 figure. Work done in service occupations is associated with housekeeping, food preparation, lodging, barbering, amusement, practical nursing, laundering, shoe repair, police and building custody and is performed in part but by no means entirely, in the service industry.

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Moreover the trend of growth in white collar occupations, which overtook the blue collar group in 1957 seems likely to continue. By 1975 it is anticipated that almost half the national work force will consist of white collar workers and that the number in professional technical and kindred occupations alone will exceed the number of employed as skilled craftsmen.

When the picture is examined on a regional basis, it reveals that states historically showing the most rapid growth in work force have given emphasis to service producing industries and white collar occupations. California is one of eight states in the nation that have expanded their work force at double the national rate in recent years.

As early as 1940, California's service producing industries employed almost twice as many workers as the number engaged in producing goods, the proportion anticipated for U.S. as a whole in 1975. During and shortly after World War II, the allocation to goods production gained moderately, but by 1965, almost 68% of the California work force was engaged in producing services.

(4) The share of California jobholders employed in government has already grown, with minor setbacks, from just under 10% in 1940 to very nearly the one in six level predicted nationwide by 1975. Wholesale and retail trade still dominate the employment picture in the service producing group, albeit with a gradually declining share over the twenty year period ending in 1965, while the service industry still remains in second place in the service producing sector, though gaining steadily on the leader.

From the standpoint of its occupational composition, the California work force already contained more white collar than blue collar workers in 1950. By 1960 the white collar group accounted for virtually half of all California workers and the professional technical and kindred group had very nearly overtaken the skilled craftsmen in the numbers employed. (5)

It is within this frame of reference we are studying outlook for particular California occupations. Because information about the occupation under consideration, like many others we might consider, is extremely fragmentary, this approach to the subject will be of the broad brush variety.

Library Technician, for example, has never been defined in the system of classification used by the Manpower Agencies, namely the Dictionary of Occupational Titles. (6)

For the sake of those of you who are not familiar with the system, let me explain briefly. The <u>Dictionary of Occupational Titles</u>, now in its Third Edition, was originally published by the United States Employment Service in 1939, to provide uniform

language for exchange of needed occupational information among employment service personnel. The Third Edition published in 1965 lists 21, 741 separate occupations which are known by a total of 35,550 defined titles. Of this number, 46 separate occupations, known by 68 titles ranging from Acquisitions Librarian to Young Adult Librarian, are related to library work. In Volume I of the Dictionary jobs are listed by title in alphabetic order and in Volume II by six digit code in numeric order.

In Volume II of the Third Edition occupations are arrayed numerically in nine major categories, which are Professional, Technical and Managerial; Clerical and Sales; Service; Farming Fishery, Forestry and Related; Processing; Machine Trades; Bench Work; Structural Work; and Miscellaneous. This arrangement of blue collar workers does not classify them according to skill level - a significant difference in structure as compared with the grouping in the preceding edition of the <u>Dictionary</u>.

The title of the occupation "LIBRARY TECHNICIAN" was not disclosed by occupational research preceding the latest compilation of the <u>Dictionary</u>; hence no listing appears for that occupation. Consequently, the problem at hand is being attacked largely on the basis of analogy, that is, by reference to similar occupations for which research has been undertaken by various agencies of government.

Over the course of almost twelve years, the Department of Employment has developed guides for over 425 California identifiable occupations, including those of Librarian, Medical Records Librarian, and Library Assistant, all of which are listed in the Dictionary of Occupational Titles and identified there by a numerical code. Library Assistant most nearly resembles Library Technician and is assigned code 249.368, which also refers to such titles as Credit Reporter, Test Technician, and Loan Officer. The code is given more precise definition in the system of a classification by a three digit suffix code 050 which limits the scope of the code reference uniquely to Library Assistant.

The first digit "2" of its occupational code places Library Assistant in the Clerical and Sales group of occupations. Other titles associated with this occupation in the <u>Dictionary</u> are book loan clerk; circulation clerk; desk attendant, library attendant, library clerk and library helper. In order to more closely pinpoint the nature of the occupation under discussion, the job statement given in the <u>Dictionary</u> may be helpful. The Dictionary discloses that the Library Assistant compiles records, sorts and shelves books, and receives library materials, such as books, films and phonograph records; records identifying data and due date on cards by hand or using photographic equipment to issue

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books to patrons; inspects returned books for damage, verifies due date, and computes and receives overdue fines, reviews records to compile list of overdue books and issues overdue notices to borrowers; sorts books, publications and other items according to classification code and recorns them to shelves, files or other designated storage area; locates books and publications for patrons; issues borrower's identification card according to established procedures; files cards in catalog drawers according to system; repairs books, using mending tape and paste and brush; answers inquiries of nonprofessional nature on telephone and in person; and refers persons recording professional assistance to librarian; may type material ca ds or issue cards and duty schedules.

Despite the absence of positive identification of Library Technician in the <u>Dictionary</u> itself our occupational research in developing the Guide for Library Assistant reveals that the term Library Technician is used interchangeably with Library Assistant in some regions of the State. (7)

In developing our Guide for Library Assistant, one of the more interesting job specifications turned up was provided by the Los Angeles County Civil Service Commission. These specifications, which are currently in process of substantial revision, indicate that the Library Assistant "operates a branch library or mobile library with an annual circulation of between 25,000 and 75,000, a borrower registration between 2,000 and 6,000 and a book stock of between 5,000 and 12,000 volumes; operates a library in an institution or nonteaching hospital with a book circulation of less than 25,000 and a bock stock of less than 5,000 volumes; or acts as first assistant to a librarian in charge of a large branch or moderate size institutional, hospital or other special library."

In a regional and central library headquarters the specifications by the Los Angeles Civil Service Commission for the occupation more closely resemble the job description provided in the <u>Dictionary of Occupational Titles</u>.

Perhaps more relevant to the present discussion is the minimum requirement set for Library Assistant by the Commission which is "Completion of two years in an accredited college and either six months' experience in an organized library or completion of 6 units in an accredited college in clerical library work." However, library experience may be substituted for college training on a year for year basis.

It seems clear that the occupation under discussion has not been the object of precise definition. Moreover the lack of supporting statistical series dealing in detail with this sector of the job market renders forecasting somewhat hazardous. In order to establish a framework for projections of occupational needs, it is helpful to examine data for the United States as a whole about the related professional Librarian.

Our basic source of occupational reference for this purpose is the Occupational Outlook Handbook. (8) Although lacking specific mention of library assistant this publication does contain recent data about librarians, which can be related to library assistant in dealing with the specific California job market.

According to the <u>Handbook</u> about 72,000 people were employed as full time professional <u>librarians</u> in the U.S. in 1965. School librarians and those in public libraries each accounted for about one third of that number.

The remainder was employed in colleges, universities and special libraries. An additional 15-20,000 partly trained and part-time people were also working as librarians at that date.

The employment outlook for trained librarians is expected to be excellent through the mid 1970's, involving not only new positions, but also replacements for several thousand young women who vacate their jobs each year for domestic reasons and those who transfer to other types of work, retire or leave the field entirely. Over the lifteen year period ending in 1975, the Bureau of Labor Stat stics anticipates an average annual growth in employment of librarians amounting to something like four percent a year. This does not take into account those leaving the profession for whom replacements must be found.

Since the <u>Handbook</u> indicates that the greatest shortages will be in school libraries, we might well assume that increased employment of librarians is associated with the growth of elementary and secondary school enrollment in California. The California Department of Finance has estimated that this group will expand in number from about 3,3J0,000 in 1960 to over 5,000,000 in 1975 or an average rate of $3\frac{1}{2}\%$ a year. (9)

According to the 1960 Census, California accounted for about one in ten librarians in the nation. If we conservatively assume that California will merely hold its own, there will be almost two thirds again as many librarians here in 1975 as in 1960.

Although we do not have as good estimates of the number of library assistants working at a given time in California, it is possible to make some reasonable judgments about the level of employment in the occupation from research done by Los Angeles area staff of the Department of Employment. Our Occupational Guide written about this vocation in 1966 indicates that there were about 3,000 professional librarians and 6,000 library em-

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ployees below the professional level in Los Angeles County at that time. The Guide for Librarian indicates that the City and County Libraries alone will be recruiting approximately 100 librarians a year for the next few years. If parity between professional and subprofessional classes is maintained, this implies recruiting at least twice that number of subprofessional employees over the same time period. This of course does not take into account the substantial needs of schools, colleges and medical services in the County. The Guide goes on to mention two factors that will support continued demand for the services of the library subprofessional, namely, the shortage of professional librarians, which persists in the face of a rising number of library school graduates and secondly, the growing recognition that lesser trained people would and can handle the more routine library tasks so as to free the librarian to utilize her training to the maximum.

To this point I have discussed outlook for library assistants in rather general terms. To close this discussion, I should like to refer briefly to the East Bay Manpower Survey conducted by the California Department of Employment under auspices of the City of Oakland. (10) This study is similar in concept and technique to Manpower Surveys made in other areas by the various State Employment Service agencies. The library assistant is one of the hundreds of job classifications examined in the course of the study, whose results represent a sampling of about 50% of wage and salary employment in Alameda County.

Based on 1966 data, an increase in total jobs by 57,000 over the succeeding five year period, was projected for the County. During the same five year interval there will be an estimated 10,000 jobs to be filled each year as a result of vacancies that occur when workers leave the area, retire, or die, a figure almost equal to the number of new jobs added to the work force in the same period.

This survey reveals that in July 1966 there was a total of 607 librarians employed in Alameda County, 502 of them in schools and libraries. Over the five year period this number is expected to increase by 12% to 678 in 1971. At the same time there were 531 library assistants working in Alameda County - a ratio of almost 9 assistants to every 10 librarians in the County. Their numbers are expected to grow to 594 by 1971, also an increase of about 12%. This does not take inco account the library assistants needed to replace those vacaling existing jobs. I am tempted at this point, but will not yield to the temptation to attribute to the State the number of Alameda County library assistants times the ratio of California to Alameda County work force. Alameda County just might not be typical of the State.

Instead I will close with an appeal for your support and assistance in perfecting the demonstrably limited amount of

labor market information existing for this and other occupations - information critical in many cases for effective curriculum planning.

REFERENCES

- (1) The Emerging Labor Force of the United States Seymour L. Wolfbein, Temple University, P. 13.
- (2) Manpower Report of the President, April 1967, P. 274
- (3) Occupational Outlook Quarterly Bureau of Labor Statistics, May 1967, P. 19.
- (4) Estimated Civilian Employment, Unemployment and Labor Force California Department of Employment and Industrial Relations, January 1967.
- (5) 1950 Census of Population, California PC-5, Table 84 1960 Census of Population, California PC (1) 6D, Table 125.
- (6) <u>Dictionary of Occupational Titles</u> Manpower Administration, 1965.
- (7) Occupational Guide No. 417, Department of Employment, P. 1.
- (8) Occupational Outlook Handbook Bureau of Labor Statistics, 1966-67 Edition, P. 253.
- (9) California Population 1966 · California Department of Finance.
- (10) East Bay Manpower Survey Alameda County, 1966-71 Department of Employment in cooperation with City of Oakland 701 project, July 1967, P. 22-24.

RECRUITMENT AND PLACEMENT IN THE LIBRARY TECHNICIAN PROGRAM

BY

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Any consideration of recruitment and placement must begin with a clear idea of what a library technician should be. The two instructors who pioneered this program at City College of San Francisco believed that this person should be first of all a good clerk, with additional library skills; but they realized from the beginning that differing opinions were held by others.

Some administrators, due probably to their having so often seen students engaged in pasting and mending activities, considered library "work" as something done with the hands rather than the head, and wanted us to find places for students of below average capability. We believe that there may indeed be places in libraries for "hewers of wood and drawers of water" and we remember the WPA programs in the thirties in which hundreds of unemployed were put to work in library mending and binding projects. But we believe the library technician should be a supervisor of such work rather than employed in doing it.

Again, some counselors saw in our program a place for the physically and emotionally handicapped, and we were too plentifully supplied with candidates who suffered from epilepsy, cerebral palsy, and other nervous and muscular defects. While we feel that it will be possible to find places for many of these unfortunates, this is not the image we held of library technicians in general, and we felt it very necessary that our first graduates be definitely employable.

Another difficulty we have had with counselors is their unwillingness to allow their better students to enroll in the program. While we agree that the student who intends to work for an A.B. degree should not take courses which cannot be transferred, and so counsel them ourselves, we feel that a number of students who are enrolled in secretarial courses would do well in our program. Most of the counselors have been of the opinion that there would not be employment opportunities for them and have kcpt them out of the program.

In spite of these difficulties we persisted, and have now reached a place where administrators and counselors see our program more realistically. The quality of our graduates has been surprisingly high and placement one hundred per cent successful. I attribute this to several factors: First, the introductory course serves to eliminate the obviously unsuitable candidates who drop before the end of the first mid-term period. A good dose of Dewey makes an excellent screen. Second, a suprising number of middle aged housewives wishing to return to the labor market have heard about the course and have demanded training. Many of these are of very high potential and in many cases already have the A.A. degree or its equivalent. Third, the counselors' reluctance to allow good students to enroll in the program does not extend to the minority groups, and we have acquired some excellent students from among these people. Fourth, the typing requirement has served as a hurdle to prevent unqualified people from entering the program. Typing is not a prerequisite for entrance, but is required for the certification of completion. A student who in two years cannot acquire proficiency in this skill will probably never be a successful library technician. And fifth, the requirements of the A.A. degree itself in humanities, mathematics, social studies, and a C average throughout, insure that only good students complete the course. Frankly, we have been surprised to discover that in spite of an unpromising start, the graduates we have had so far have been of high quality.

We have only had nine so far who have completed the course, earned the A.A. degree, and been awarded our certificate of proficiency. With the expeption of the one boy who went into the army the others have all been placed. Among the employing firms are two hospitals, the local branch of the Federal Reserve Bank, a privale college, the University of California Medical School, a private school, the California Academy of Sciences, and Standard Oil Company. We feel that the future holds great promise.

IV. LIBRARY TECHNICAL ASSISTANT TRAINING PROGRAMS AND PROFESSIONAL ASSOCIATIONS

SPECIAL LIBRARIES ASSOCIATION AND LIBRARY TECHNICIAN TRAINING PROGRAMS

ROBERT S. MEYER, Library Consultant Walnut Creek, California

CALIFORNIA SCHOOL LIBRARY ASSOCIATION AND LIBRARY TECHNICIAN TRAINING PROGRAMS

ANNA MARY LOWREY, President California Association of School Librarians

THE LIBRARY TECHNICIAN TRAINING PROGRAM AND THE CALIFORNIA JUNIOR COLLEGE ASSOCIATION

FLOYD L. YOUNGER, Assistant Superintendent of Instruction Cabrillo College Aptos, California

AMERICAN LIBRARY ASSOCIATION INTEREST IN LIBRARY TECHNICIAN TRAINING PROGRAMS

MRS. JOLEEN BOCK, Head Librarian Rio Hondo Junior College Whittier, California



ROBERT S. MEYER - Library Consultant Walnut Greek, California 1. GENERAL CONSIDERATIONS

The introduction of library technician training programs has created a good deal of discussion by individuals and in the literature, but I do not believe the Special Libraries Association has taken an official position on the question. As a member of the Education Committee of the local S.L.A. chapter, I queried some of my colleagues about the matter, and gathered a number of mixed reactions, as might have been anticipated. This paper will discuss a number of factors which bear upon the question, and will summarize them into a position which the writer hopes will be acceptable to all parties concerned.

First, we should consider three primary characteristics of special libraries and the consequences those characteristics have for library technicians. One characteristic is that most special libraries are small. A relatively small staff will mean that there is little time available for as much in-service training as is generally desired, so special libraries should welcome a program which promises to do this for them. Operating with a small staff which is required to perform all the library functions of a larger staff also means that special libraries require people who are quite versatile and flexible, so that each person can perform a variety of jobs during the normal working day. Another result of having a small staff and too little time is the need for people who require relatively little supervision, and who are intelligent and conscientious enough to take on responsibility fairly early in their career with the library.

A second characteristic is that special libraries are libraries, after all, so have somwhat similar personnel requirements to those of other libraries in many respects. A liberal arts background and desirable personal qualities are needed just as in other libraries. Perhaps special libraries, which are required to be much more responsive to the requests of individuals whose satisfaction is practically mandatory for continued employment, have a greater need for a pleasant and receptive attitude toward their customers. Performance standards should be high for any kind of library. In general, the types of work required to be performed by library technicians will be quite similar in most libraries, although the specific details of their execution may vary considerably.

The third characteristic of special libraries is that they are special, since they are usually attached to a specific organization with a specific clientele and/or a specific subject field. Because of this, they often have the need and the opportunity to employ methods and procedures which are not typical of other libraries. Their special subject orientation means that they will prize and utilize the special subject background an individual

may possess, if it is appropriate to their needs. Special libraries can frequently offer higher salaries and quicker promotion than other libraries, but these benefits are usually accompanied by greater demands on performance. Continued employment itself is highly dependent on continued high-quality performance.

The special library, then, while it should welcome the library technician program as a time-saver, and although it has somewhat similar personnel needs as other libraries, operates in such a competitive and pragmatic environment that it simply cannot and will not accept any product that does not meet its standards. The commercial demands of the marketplace force the special library to be just as demanding as its parent organization in the search for quality performance. The other side of the coin is, however, that when it finds the high-qualify product it is seeking, it is usually quite ready, willing, and able to pay for it.

I would guess then, that the attitude of the special library to the library technician training program would be similar to the attitude of the professional sports teams when they were given the opportunity to employ members of other races. In general, their completely pragmatic attitude was often stated as, "If he can help our team win, we want him." Similarly, the special library should welcome the trained library technician, but only if he possesses the qualities that will "help the team." If he does not have these qualities, he will not make the team, regardless of his paper qualifications. Powever, if he can help the team, he will be appropriately welcomed and rewarded. This is how the commercial marketplace works.

II. PLANNING THE PROGRAMS

In my opinion, the most essential ingredient to the success of this program is the establishment of a real working partner-ship between the professional association and the colleges, in order to have the training reflect the actual needs of the prospective library employer. This workshop is a fine move in this direction, and its planners should be highly commended for their recognition of this need.

To present the needs and the "slant" of special libraries, it should be mandatory that special librarians be asked to serve on advisory committees, planning committees, curriculum committees, etc., which affect library technician training.

The local chapter of the Special Libraries Association has an Education Committee which has been very active in presenting programs for library assistants as well as for professional librarians. I would suggest that this Education Committee could serve valuable liaison and assistance functions for the library



technician training programs of the community colleges, and would be the appropriate body to represent special librarians of this area in such capacities. Perhaps the community colleges could form a similar committee of their own, with whom the professional library associations could deal, to facilitate communication between the two working partners.

Because of the necessity of this working partnership between the colleges and the libraries, I will divide each of the remaining sections of this paper into two parts, one for the Special Libraries Association and one for the community colleges.

III. THE INSTRUCTION ITSELF

The Special Libraries Association can assist the library technician training programs by furnishing some instructors, expert librarians who are well-versed in library practices and who have interest and competence in teaching them to others. It could also assist in furnishing reading matter, sample forms and procedures, practice materials, etc. Some of its members could provide field trips to special libraries which would be a valuable educational experience. Some S.L.A. members can offer temporary employment in their libraries as an opportunity for practical work experience as part of the training program, but again it must be kept in mind that the nature of the special library requires nigh performance levels of the student and relatively little training or supervisory time from the librarian.

As their contribution to this working partnership for instruction, the colleges should make it a rule that all their library courses be taught only by professional librarians; it is only natural that the library field would distrust the quality of any other arrangement. To acquire the services of the best library instructors available, the colleges should provide part-time teaching posts to accommodate those librarians who are already employed full time as working librarians. The course content should be based on a good liberal arts foundation, and should include training in various clerical skills as well as in library practices. In every phase of the program, course content and individual performance alike, the libraries are relying on the colleges to maintain high standards in which everyone can take pride.

IV. RECRUITING PROSPECTIVE STUDENTS FOR THE PROGRAM.

By using various promotion devices at its disposal, by designing some of its meetings accordingly, and by continuing to present workshops for library assistants, the Special Libraries Association can assist in recruiting students for the library technician programs. By looking toward their own library staffs,

the S.L.A. members can encourage attendance of their employees by such inducements as paid leave or make-up time allowances, provision of course-related work projects, and the granting of rewards upon completion of the program.

For their part, the colleges should maintain appropriately high standards of qualification for the program, recommending it only to those who possess the background, motivation, and personal qualities required for successful performance on the job. As prospective students, the colleges should encourage attendance by others besides high school graduates continuing their education, such as employed people, housewives, etc., whose background and maturity are desirable assets for libraries. To accommodate such people, the colleges should offer evening and Saturday courses, and the opportunity of part-time enrollment. In its promotion of the library technician program, the college should be honest and realistic, and recognize the library technician as a clerical specialist; the college should not represent this training as professional or even as pre-professional education, in all fairness to the student and to the employer.

V. THE GRADUATES OF THE PROGRAM

Another committee of the S.L.A. is its Employment Committee, which could assist library technician graduates with job placement, although the Committee has traditionally dealt with only professional librarian employment until now. The S.L.A. could help gain acceptance of the program through publicizing it and its benefits in the professional literature. But the essential incentive to continue the program will be in employing its graduates at higher salaries and status, but not as professional librarians, and only if quality standards are met. After the graduates are on the staff, employers could further stimulate them and utilize their training by allowing them more participation in daily planning decisions, and by giving them more advanced in-service training. The graduates should also be encouraged to build upon their good foundation by being allowed to attend S.L.A. meetings, continue their education in various ways, and become memters of S.L.A. itself.

The colleges, in turn, should maintain high standards for graduation from the program, for the benefit of all concerned. However, they should use their influence to see that these graduates are properly employed as subprofessionals and not as cutrate professional librarians. The colleges should also perform continuous follow-up studies of graduates and their employers to provide feedback information for evaluation of the program, to ensure that it is reflective of actual and current needs, and to suggest possible improvements in the program.





VI. CONCLUSIONS

Although the library technician training program has grown rapidly, only time will tell of its eventual success and permanence. If it is done well, the program could provide much-needed time and work assistance for libraries and librarians. It could enable the professional librarian to up-grade the level of his performance, while at the same time providing society with a new job specialty and good training for those who desire to enter it. If it is done poorly, the program could fail because of poor performance of its graduates, which would in turn result in low acceptance by society. Furthermore, poor library technicians could even lower the status of professional librarians in the minds of those who might not be aware of the differences among library employees.

Thus we come to this proposed position: If the colleges do their part by maintaining high standards of training which is geared to the actual needs of libraries, the Special Libraries Association (and other library associations) should support and encourage the program in every way.

We must repeat that the most essential ingredient for the success of the program is the establishment of a good working partnership between the librarians and the colleges. Both have a vital stake in seeing the program succeed. This workshop is a good example of the right direction to follow, cooperation for the good of all concerned. Such a partnership could well result in a significant improvement in the continuing development of the field of librarianship.



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CALIFORNIA SCHOOL LIBRARY ASSOCIATION RELATIONSHIP WITH THE LIBRARY TECHNICIAN PROGRAM

BY
ANNA MARY LOWREY, President
California Association of School Librarians

ANNA MARY LOWREY - California Association of School Librarians
Libraries today are faced with providing better and more complex service to their particular library community than ever before. The constant growth of interest in the pursuit of know-ledge and the dramatic developments in communications media place demands upon the library staff which become increasingly difficult to meet. School libraries are no exception.

The strong movement to espouse the Instructional Materials Center concept, the advent of large sums of money for materials through the Elementary Secondary Education Act titles and the perceptible trend toward individualization of instruction, require the provision of services wider in variety and greater in depth than was formerly the case. I think we all realize that it is becoming increasingly difficult also to obtain the necessary, qualified personnel to staff these kinds of library programs.

I have been invited to speak to you as President, of the California Association of School Librarians. To represent an association in this capacity is not always an easy thing to do, for we must admit that we do not necessarily reflect the opinions of all members. Certainly the California Association of School Librarians accepts the need for library technicians as evidenced in the Standards for the Declopment of School Library Programs in California, published by C.A.S.L. in 1967. In that document, the personnel section lists three types of positions - the librarian, the library technician, and the clerk. We must also recognize, however, that the training programs for library technical assistants and the utilization of these assistants have not been without their critics.

Specific concerns have been expressed about the Library Technology programs offered throughout the state, with the criticism that these are sometimes "watered down" library science courses. There also exist the concerns that library technical assistants will be used in place of the professional librarians by some school districts, that the function or role of the library technical assistant is not clearly defined, and that within the present salary schedules of most districts there is no provision for the status and compensation level of these positions.

How we react to the concerns of the critics is of primary importance at this time. It is our professional responsibility to plan future staffing for library programs which clearly identifies all personnel needs in perspective. We cannot afford to be defensive. We must take a positive approach - which means a close cooperation with the junior colleges training library technical assistants, to assure programs designed to instruct students in the proper skills for that position. Even if the library schools could produce enough professionally trained librarians to meet the need, we must face the fact that it is educationally and financially unsound to use professional staff to

perform technical and clerical routines. Many school libraries in California are still weefully understaffed professionally. It is imperative that districts strive to provide professional staff and to supplement the staff they already have. It is also imperative that they recognize and use the educational potential of the professicual staff as it is intended. One way to do this is to utilize the library technical assistant, who is well trained in specific technical competencies.

I should point out here, that we do not see library technical assistants serving as professional librarians in any instance. Rather, they are a source of assistance in the clerical and technical aspects of the library program, permitting the librarian to assume his rightful role - that of an active member of the instructional staff.

I see three areas in which cooperation between the California Association of School Librarians and this group could prove beneficial.

- 1. We need to communicate to school administrations the difbetween the educational contribution of the professional librarian and the technical contribution of the library technician.
- 2. We need to clearly define, through job descriptions, the kinds of tasks which the library technician performs. These task definitions could serve at guidelines for the necessary course work within the junior college Library Technology programs.
- 3. We need to work toward the establishment, within school districts, of job classification for the two-year program technical assistant and a pay scale commensurate with this training and skill.

Finally, we can never forget that our primary goal is to provide an excellent library program and that we can do this best when the library staff is composed of professional librarians supported by trained technical assistants. We must remember that the important thing we are pursuing is better library service to students. For what other reason are we here?

THE LIBRARY TECHNICIAN PROGRAM RELATIONSHIP WITH THE CALIFORNIA JUNIOR COLLEGE ASSOCIATION

BY

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Recognizing the concern that exists in the minds of many librarians regarding the functions that should be performed by a library technician and wishing to provide the technical instruction that is necessary to perform library technician tasks, careful attention must be given to the balance of academic work with the preparation of technical skills. It is not intended that the library technician replace the librarian in dealing with questions of academic origin or that she simply be a glorified library clerk. It is also realized that the technician who is to exceed the functions of a library clerk must have an academic background which will enable her to assist library users with questions that deal with academic subject matter. To this end, it is therefore suggested that the library technician program involve liberal arts preparation in an academic field leading to the Associate in Arts or Associate in Science degree with a minimum of technical courses which will provide the students competence in the fields of technical processing, library services and the role that the library plays in the college and the community. The technician should also be introduced to the tools of the library to the extent that she may be of assistance with librarian responsibilities. Those who have such a background and demonstrate the necessary attitudes and capabilities may then continue toward the training of a graduate librarian with a minimum of loss in time and credit. The general education background of the student cannot be overemphasized in its importance as a basis for the execution of technical tasks.

AMERICAN LIBRARY ASSOCIATION INTEREST IN LIBRARY TECHNICIAN PROGRAMS

BY

MRS. JOLEEN BOCK, Head Librarian Rio Hondo Junior College Whittier, California

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MRS. JOIEEN BOCK - Head Librarian, Rio Hondo Junior College
In 1966 the Library Administrative Division and Library Education Division established the Committee on Subprofessional or Technician Class of Library Employees. It was charged with the responsibility of defining this class of employee and drawing up classification specifications, including statements of typical duties. At the same time the Junior College Library Section of American College and Research Libraries through an Ad Hoc Committee on Vocational Education did a survey of curricula in this area.

The theme of the 1967 American Library Association's Annual Conference in San Francisco was "Manpower." In the various general sessions and study groups, library technical assistants were discussed frequently with some vehemence at times. The program of the Junior College Library Section in San Francisco was devoted to the utilization of technical assistants and discussion of training needed for these people.

Because of the upsurge of interest and proliferation of training programs, the Library Education Division, in July, 1967, established the Interdivisional Committee on Training Programs for Supportive Library Staff. This committee is composed of a state librarian, a director of a library school, the chairman of the Library Administrative Division and Library Education Division report, two professors of library science, the director of the Library Education Division office, and myself, representing the Junior College Library Section of American College and Research Libraries. We met for the first time in Miami at midwinter and spent three days discussing (1) the importance of advisory committees, their makeup and responsibilities; (2) the relationship of the library program to other junior college curricula; (3) financing programs; (4) qualifications and teaching load of faculty; (5) facilities needed; (6) student recruitment and placement; and (7) core curriculum. I presented the outline report for our committee, spelling out in some detail the general thinking of the group, to both the LED and JCLS Executive Committees. The support which the LED group gave to the report was most encouraging. (Earlier in the same meeting they had approved the final LAD-LED report on Library Technicians.) They asked that the Committee proceed as quickly as possible and hopefully to come up with a finished document for consideration in June, 1968. The LED office is constantly receiving requests for assistance in establishing programs and would like to have printed guidelines available. The JCLS Executive Committee offered to send the final draft for comments to some junior colleges having library terminal programs.

At no time has the American Library Association interest been higher concerning the two-year library programs, and they are looking to conferences such as this for leadership as guidelines are being developed.

V. THE FUTURE OF LIBRARY TECHNOLOGY PROGRAMS

NEW DIRECTIONS: WHERE DO WE GO FROM HERE?

MRS. ALINE CROWLEY WISDOM, Head Librarian Citrus College Azusa, California

THE DIVISION OF INFORMATION TECHNOLOGY: 1973

JOHN L. MARTINSON, President

Communication Service Corporation

Washington, D.C.

ERIC

MRS. ALINE CROWLEY WISDOM - Head Librarian, Citrus College I. INTRODUCTION

This workshop has been like a dream come true for me. I have been involved in teaching classes for Library Technicians since 1955, my second year at Citrus College Library.

My courses in this area, like the library profession itself, have gradually evolved until we have developed a curriculum that I feel needs even more recognition than it has, and I feel that a workshop as we have just concluded is going to help bring about this recognition.

I would hope that this recognition could come in four ways (1) from among ourselves as people involved in junior college work
either as librarians directing the program teaching in the program,
or in some other capacity; (2) from personnel departments of the
school districts and city and county governments where those who
complete the course work of the library technician program attempt
to secure positions; (3) from those responsible for issuing credentials and setting up standards in the State Department of Education or writing descriptions for Civil Service Examinations;
and (4) from our professional organizations.

II. WHAT DIRECTION SHOULD THE RECOGNITION AMOUNG OURSELVES TAKE?

I hope this workshop has laid some common grounds for courses taught in our various junior colleges throughout the State.

This is a much better way for us to learn exactly what is taught than to try to learn this by reading college catalogs. I know that for several years my program of four different courses was listed in the college catalog as one course that could be taken for four semesters. This gave a very incorrect picture because the one entry in the catalog did not reveal that the library science curriculum actually consisted of four distinct courses rather than one as the catalog suggested. I am sure that there are instances with other colleges where the true picture of courses offered in library science is not obtained by looking at the college catalogs.

If courses and course content in the other colleges have evolved the way mine has at Citrus College, you have built the content around the needs expressed by the students who have enrolled in the classes or by talking with members of your advisory committee especially those first classes when you were building the courses. I welcome this workshop and its interchange of ideas, both formally in the planned program for the two days and informally as we have had a chance to talk outside the structured program. In planning this workshop, we did not want to prescribe course contents, because the committee recognized that this must

be an individual matter. However, I am sure that each of you, like me, will evaluate the content of each of the courses ou are offering in light of what you have experienced here in this two-day workshop.

Perhaps some of you present learned of how you can begin a program of library technology and relate it to the vocational program of your school so that the program will bring financial remuneration to your district.

III. PERSONNEL DEPARTMENTS OF THE SCHOOL DISTRICTS AND CITY AND COUNTY GOVERNMENTS WHO ARE THE EMPLOYERS OF THESE PEOPLE WHO COMPLETE THE LIBRARY TECHNICIAN PROGRAMS:

I would hope that word could get around to them that these people are equipped with certain skills and techniques that qualify them to do a more successful job of giving assistance in a library than those people who make applications to take the test given by personnel departments and because they score high on the test are given preference for the job over the applicant who has completed one of the library technician courses.

I have no problem in helping to place those who complete my courses so long as the person who is responsible for the hiring, or the recommendation for hiring, is a professional librarian. This person knows the value of having someone who understands the terms used in the various phases of library work, as well as possessing knowledge of library techniques and skills. The librarian of a technical library in Southern California who recently contacted me for a recommendation to fill a vacancy for a library technician position, expressed it this way: "I like to hire those who have taken the library courses for these people have an idea of the many detailed jobs that have to be done and they learn from having had the course whether or not they will have an interest in doing all these details and being careful in doing them."

I do not know exactly how we can reach the personnel officers who are responsible for hiring technicians to assist in the various kinds of libraries, but with the increased interest that is being shown throughout the State in the library technician program, I feel that eventually they will get the word and will stipulate that applicants for the position must have had training in the library technician program. Again, I cite experiences of my own - I know of one unified school district and a public library who will not consider an applicant unless this person has had this training.

IV. SETTING REQUIREMENTS FOR GOOD LIBPARY PROGRAMS IN ELEMENTARY AND SECONDARY SCHOOLS AND RECOGNITION OF THE LIBRARY TECH-1 13 12 1 12 13 15 15

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Even if the school districts could have the ideal situation and have a professionally trained librarian in each elementary, junior high and senior high school library, there would still be the need for a properly trained technician to do so many of the details so that the librarian could be free to do the job that he or she should do in giving library service to the faculty and students... tall grown or try not buy

with the second of We all know, however, that in most districts there is just not enough money to hire a professional librarian for each of the schools of the district. But I would hope that the area of the State Department of Education responsible for setting standards for school libraries would suggest that each district have a certain number of professional librarians, not the principals, who could work with the personnel office of the district in selecting properly trained library technical assistants to work in the various libraries of the district. An organizational pattern like this would make it possible for the children in the various schools to have much better library service than they get from volunteer P.T.A. helpers who do the best they can without any guidance from a professional librarian.

The government projects that have made money available for all kinds of library materials in the schools makes it even more important for the districts to recognize that the best use can be made of these new materials if they are interpreted correctly. This is exactly what the proper number of professional librarians with a sufficient number of library technical assistants can do so that the tax payers can get the most for their dollars and the boys and girls can have the kind of library service that they should have.

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Those responsible for the wording on Civil Service releases should also be reached so that they might help in the acceptance of the Library Technical Assistant who has had the training, and assist in improving the pay scale for this person.

RECOGNITION FROM PROFESSIONAL ORGANIZATIONS FOR THE LIBRARY TECHNICIAN PROGRAM:

1 4 152 3 The California School Library Association has expressed an interest in the program and has endorsed the guidelines that we discussed in the group discussions yesterday afternoon.

One reason that I have been involved in the planning of this workshop here on the University of San Francisco campus is because I attended the national meeting of the Library Technology program in Chicago last May. This Chicago meeting was planned and organized by John Nicholson of Catonsville College, Catonsville, Maryland. There were some fifty people registered for this national meeting and a decision was made at the conclusion of the sessions to have workshops during the next school year - one on the East coast and one on the West coast.

The East coast workshop was held in Baltimore, Maryland last October and their program was somewhat similar to what we have had these last two days. I did not get to attend, but Mr. Nicholson and Rhua Heckert of the University of Toledo, Ohio, my cochairman of the national group, both wrote me that even though there were only twenty-some in attendance, the experience had been very worth while. We have had eighty to ninety in attendance at this West coast workshop and I feel that this too has been very worth while. From what John Martinson said yesterday about COLT, or the Council on Library Technology, there have been some developments of which I am unaware.

In Chicago last May, we agreed to follow the workshop meetings with another national meeting in 1968. Plans for this are still very nebulous as far as I know, but I personally would hope that one of the topics of discussion at this national meeting would be the rough draft of the ad hoc committee of the American Library Association for a Library Technician program.

Joleen Bock, one of the participants of this workshop conference, was a member of this ad hoc committee and I have asked her to speak on her committee's report.

Even though I have been a participant in a national meeting on the Library Technology program that was unrelated to American Library Association, I am very much in favor of working to have recognition of ALA members for the Library Technical Assistant program. I see no reason for having a splinter group and I feel the entire profession of librarianship will profit from the Library Technician program, as it is refined and matures. I think this can best come within the realm of the existing professional organizations

VI. CONCLUSION:

In summary, I say again that I hope this two day workshop has done much to (1) help us in evaluating and screngthening our own programs as well as providing a sense of direction to those schools that are just launching such a program; (2) that personnel departments at all levels, responsibile for hiring library technical assistants, will become aware of what we are doing in our library technician programs; (3) that the division of the State Department

of Education responsible for standards and credentials for the elementary and secondary school libraries and the members of the Civil Service Commission can give impetus for the proper recognition to those who receive this training in the library technology courses; and (4) finally that an effective compromise can be worked out so that the professional organizations of car State and the American Library Association accept the fruits of our labors in the Library Technician program as a significant cortribution to the profession of librarianship.

I thank you.

THE DIVISION OF INFORMATION TECHNOLOGY: 1973

BY
JOHN MARTINSON, President
Communication Service Corporation
Washington, D. C.

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MR. JOHN L. MARTINSON - President, Communication Service Corporation

While present concern with the training of library technicians form the focal point for our recent discussions, I would like to invite you to speculate with me a little about possible future developments. As a way of summing up the last two days' activities, I want to sketch out the idea of a Division of Information Technology in some community college of the future. Library technicians would be trained in such a division of the college along with members of other specialities. The entire group might be called "Information Technicians," though I prefer to consider this a generic term for several kinds of paraprofessionals and then suggest more specific terms for each of the groups.

The basic assumption which underpins my speculations is that the emerging discipline of Information Science will produce a body of general theory permitting us to integrate and differentiate a variety of ways to handle and manage information. I think the emergence of Information Science will probably have considerable impact on professional education in the library field* as well, but that is a subject deserving of a conference in its own right. Our proper concern here is the training of library technicians. The proposition I now put forth for consideration is that such training is best viewed in the context of other kinds of training for other information workers. Hopefully, Information Science will provide us with a sound basis for deciding who is or isn't an "information worker" and what basic core of knowledge all information technicians need to possess.

Always at home where angels fear to tread, I would propose the following scheme as a reasonable approach to curriculum planning by community college administrators during the next decade. Under the generic term <u>Information Technicians</u> on the accompanying chart are listed five specialties as job titles likely to be given to graduates holding the Associate of Arts degree from a community college with a Division of Information Technology.

To begin with, I see at least five kinds of information workers being trained in community colleges: Teacher Assistants, Library exchnicians, Museum Technicians, Media Technicians, and Data Processing Technicians. These would be job titles for people whose work assignments might have considerable similarity, but their working environments would be in quite different institutional settings. The institutions employing information technicians would be: Schools, libraries, museums, instructional

* A recent enlightening discussion of this issue was held at the Special Library Association Convention in New York at the Education session on the first afternoon of the conference. materials centers and computer centers, respectively. Within each of these settings the missions served by the different institutions immediately suggest other sub-specialities. For instance, in the school environment there is a need for competent paraprofessional help in the offices of the school administrators and the school counseling staff as well as in the classroom. Counselor aides or school administration aides could be trained in a Teacher Assistant curriculum if a proper sequence of electives or substituted courses were offered. Likewise, Media Technicians might develop special competence in film-making, graphic arts or other particular media.

One test, of course, for the reasonableness of putting five such curricula into a single division of the college is whether a body of knowledge can be identified in which all information technicians, regardless of specialty, should be instructed. I believe this can be done. I will also argue that there is enough commonality in the work likely to be performed to require that each kind of information technician have at least working acquaintance with the main tasks of his cohorts in related fields. That is to say, teacher assistants needn't learn computer programming, but with the appearance of computer-assisted instruction and teaching machines in the classroom it would be unwise to grant the A.A. degree to a teacher assistant who didn't appreciate the implications of a computer console for individualized instruction. Likewise, in learning circulation procedures, library technicians should become acquainted with key punch machines.

The effort to identify a core curriculum for information technicians properly begins, however, with a consideration of general education in two-year colleges. By well-established practice community colleges usually require approximately 30 semester hours of general education in the liberal arts and sciences as a requirement for the A.A. degree. While the information technician programs should permit a graduate to enter the world of work directly, there is no reason why at least 30 hours of his work should not apply as credit toward the Bachelor's degree should he desire to continue his education. In most twoyear college programs the remaining 30 or more semester hours are often divided about equally between electives and special courses in the student's field of concentration. There is no reason why the proposed Division of Information Technology should depart from this general practice. recognizing, of course, that technical courses in the field of concentration may not transfer with full credit to four-year colleges. Those more experienced than I in community college administration can specify the liberal arts content of an Information Technology curriculum. My only specific recommendation would be in favor of survey courses in the sciences with emphasis on the history of science and technology rather than conventional undergraduate laboratory science courses.

Beyond the core of liberal arts studies recommended for information technicians there should be a common core of information technology with which all students should be acquainted. I have facetiously referred to this as the Marshall McLuhan Multi-Media Mix; however, I suggest that a one or two-semester course (with laboratory practice) could be developed which would acquaint students with the full variety of techniques and materials used to store, search and utilize information in different institutions.

The core course or general survey of information technology would probably best be offered during the second and third semesters of a four-semester sequence. At the beginning of the third semester students would also begin course work in the specialty of their choice. The specialized courses oriented toward work in schools, libraries, museums, instructional materials centers or computer facilities should be organized on a work-study basis in cooperation with those institutions. Students in any one speciality would be encouraged to take some of their electives in other specialties according to their personal interests. Some library technicians might want additional background in data processing, but equally likely, some would want courses in graphic arts or children's literature depending on their own career plans. An integrated Information Technology program would permit students to develop individual talents in a productive way while preparing ther for employment upon graduation.

Except for work in museum methods, many of the courses which would be part of the Information Technology Division are already being offered in community colleges. Data processing and library courses are probably the most widely offered, though many courses in audi-visual techniques and graphic arts are also offered at present. A number of community colleges are already preparing students to work as assistants in nursery schools and a small but growing number are preparing teacher assistants to work in elementary and secondary schools. Even many of the skills needed by museum workers can be acquired in community colleges. These are rarely oriented toward museum employment though, nor are these skills (mostly in fine arts, history, and natural sciences) offered in a way that gives students an understanding of museums as organizations for storing and retrieving information in special ways.

In speculating about a college Division of Information Technology it is worthwhile thinking about the high school experience which should precede the instruction provided and other kinds of employment which might follow graduation. The accompanying chart lists other business activities which seem likely to recruit and employ information technicians. The institutional settings which suggest the five basic job titles under the generic heading of Information Technician are mostly educational or nonprofit organizations operating in the service sector of the economy. But in-

formation technicians are also needed in businesses such as advertising, printing and publishing, bookselling, film-making, exhibit design, industrial training, computerized information services, broadcasting, and other fields.

In thinking about high school preparation for work in information technology it must be remembered that most high school programs for students who intend to continue their education are "college prep" oriented. That is, "going on" after high school usually connotes preparation for a Bachelor's degree. This is slowly changing,* but pre-technical high school programs especially designed for students headed toward an A.A. degree in a technical field are statistically infrequent. Without attempting to specify an entire high school program it seems reasonable to suggest some essential skills which could be taught in secondary schools.

Information technicians of every sort should certainly possess at least minimal typing skills. Use of the library and the card catalog; acquaintance with office machines, movie projectors, and tape recorders; knowledge of simple bookeeping and filing procedures - most of these skills can be or are learned by high school students. Mechanical drawing or other drafting courses would be recommended to pre-technical students interested in information technology along with art or design courses. Key punch operation and other clerical skills related to data processing are now taught in many high schools. Though traditional "print shop" activity would not be recommended as preparation for community college work, high school instruction could include a general introduction to reprography and printing methods.

Since these remarks have been frankly speculative, I would like to suggest an area of research in secondary education. I think it should be possible to design a high school program which permits graduates to either enter the world of work at the clerical level or become a technician by entering the Information Technology program of a community college. To do this it would be necessary to identify clerical level tasks in the institutions which employ technicians. This will require special research efforts but should not be a particularly difficult task.

Of course, any effort to develop a college Division of Information Technology should be preceded by research in occupational analyses, selection procedures or aptitude testing, development of instructional materials and follow-up studies of graduates'

* See <u>Curriculum Programs in Action</u>, the proceedings of a recent conference at the Center for Technological Education of San Francisco State College.

employment experience. My own concerns are particularly with the training and employment of library technicians, but I think research on these problems can be advanced by research that comprehends wider aspects of information technology. Since this seems to me to be the "wave of the future" I recommend to you the close observation of such trends during the next decade.

INFORMATION TECHNICIANS

(Educational and Non-profit)

WORKING ENVIRONMENT II. (Business & Industry)

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