Background Characteristics and Education Needs of a Group of Instruction Librarians in Pennsylvania

This paper summarizes a study conducted on a group of instruction librarians in Pennsylvania to describe their backgrounds and determine their perceptions regarding the adequacy of their preparation and their needs for additional training. The study revealed: (1) over 60 percent of the group has taken credit courses dealing with instruction; (2) the majority is trained as reference librarians and works in that area now; (3) they are professionally active and read appropriate journals; (4) they participate in appropriate continuing education activities; (5) they see previous teaching experience as important; and (6) they feel they are adequately prepared, but see benefit from additional education.

A survey was conducted in the spring of 1980 as part of a doctoral dissertation to determine education and training characteristics of a group of instruction librarians at secolleges and universities Pennsylvania. The chief library administrators at these institutions were contacted; they identified a population of 145 librarians involved in bibliographic instruction. A questionnaire was mailed to these librarians. Of the librarians who returned the questionnaire, 12 did not meet the minimum requirements of an MLS degree and two years' instruction experience, producing a sample of 133 and yielding 120 eligible completed questionnaires and a response rate of 90 percent. Many of these librarians took the time to comment on the survey, reflecting professional commitment and a lively interest in bibliographic instruction.

Thirty-nine questions concerning the edu-

cation and training of these librarians, as well as their perceptions regarding the adequacy of their preparation, and their needs for additional training, produced data to answer the objectives of the study. These objectives were:

1. to determine if librarians engaged in bibliographic instruction received education and training, particularly in learning theory, teaching methodology, and/or instructional development;

2. to determine how and when education, training, and experience related to bibliographic instruction were gained:

3. to identify education and training needs of bibliographic instruction librarians as perceived by the population;

4. to gather limited demographic information about the population; and

5. to identify associations between the background of the respondents and their perceptions regarding (a) their need for further education and training, and (b) the adequacy of their backgrounds when they first engaged in bibliographic instruction.

Several assumptions were made in design-

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ing the study: (1) credit course work in learning theory, teaching methodology, or instructional development (comprehensive curriculum development and evaluation), coupled with the MLS degree constitute appropriate background to engage in bibliographic instruction; (2) two years' experience in bibliographic instruction is sufficient to permit the librarians involved to make judgements as to whether their preparation was adequate; (3) concentration in reference work in an MLS program, or assignment to reference duties implies an awareness of bibliographic instruction concerns; (4) membership and activity in professional library and education organizations imply an awareness of bibliographic instruction programs and their problems; and (5) regular reading of library and education journals implies an awareness of bibliographic instruction and the problems associated with it.

The academic institutions involved in the study were selected to include a contained geographical area with the assumption that close proximity would ensure an adequate response rate. And although the institutions are public, they offer the full range of academic programs, from two-year associate degrees to doctoral degrees, and are involved in continuing education programs as well, providing a diverse environment for bibliographic instruction. Location enrollments range from 300 to 32,000. These institutions were chosen, also, because their libraries were known to offer bibliographic instruction to their students.

Responses represent all institutions involved. Descriptive statistics and crosstabulations on selected questionnaire responses were employed in analyzing the data.

Several studies have considered the education of academic librarians, but few have attempted to describe the background of instruction librarians. One exception is a study conducted by Roberts in 1978 concerning credit course instruction at ten State University of New York campuses;² the librarians described are an elite group involved in credit instruction only, however. Bits and pieces of descriptions of instruction librarians are contained in several surveys and directories compiled by various state and regional organizations, but none reviewed is particularly comprehensive.

FINDINGS

These librarians are not young. As table 1 shows, less than 3 percent are under thirty; more than half are forty or older; more than one-quarter are fifty or older. They have considerable experience. Seventy-five percent have been involved in bibliographic instruction for six or more years; nearly a third for twelve or more years. As expected, given the ages of these librarians, they earned their professional degrees some vears Seventy-six percent received the MLS degree ten or more years ago; nearly half earned their degrees ten to fourteen years ago. Ninety-one percent of these librarians are assigned to instruction activities less than halftime. Thirty-nine percent of the respondents hold or are working toward a second master's degree; 15 percent hold or have in progress a doctoral degree.

TABLE 1 Selected Demographic Characteristics (N=120)

(N = 120)			
Characteristic	Frequency	Percen	
Sex:			
Male	46	39	
Female	72	61	
No response	2	_	
Age:			
20-29	4	3	
30-39	45	38	
40-49	38	32	
50 or older	31	26	
No response	2	- 60	
Years since MLS degree ea	rned:		
0-4	6	5	
5–9	23	19	
10-14	56	47	
15-19	18	15	
20 or more	17	14	
Years assigned to bibliogra	aphic instruction	1:	
0-2	8	7	
3–5	21	18	
6-8	27	22	
9-11	27	22	
12 or more	37	31	
Bibliographic instruction a	assignment:*		
Full-time	3	3	
Half-time	8	3 7	
Less than half-time	109	91	
Graduate degrees held:			
MLS†	120	100	
Additional master's	47	.39	
Doctorate	18	-15	

Note: Rounding errors account for column totals ≥ 100 percent.

*Ninety-eight percent of the librarians are full-time employees. †Individuals not holding this first professional degree were eliminated from the study. Formal education and training in appropriate areas are present in the backgrounds of a majority of these librarians. As table 2 shows, 61 percent indicated they had taken a credit course in learning theory, teaching methodology, or instructional development; 52 percent did so while earning their undergraduate degrees. Only 17 percent indicated they received such education and training as part of the course work in their MLS degree programs. Only 13 percent indicated course work related to instruction was part of a second master's degree, 4 percent as part of a doctoral degree.

Indications of education and training of a general nature related to bibliographic instruction are set out in the data in table 3. Only 12 percent of the respondents participated in appropriate in-service training programs, which is more a negative comment on the libraries than the librarians involved. It is interesting to see that fully 55 percent of the respondents concentrated in reference work while pursuing their professional degrees. The amount of self-education as measured by journal reading is considerable. Ninety-eight percent of these librarians regularly read one or more library journals. Fifty-nine percent regularly read one or more education journals. (Regular reading was defined in the questionnaire as reading every issue of a journal.) Many continue to build their backgrounds by participating in instructionrelated continuing education activities. The data show that 54 percent participated in one or more such activities in the past two years.

The amount of related experience and professional activity is also considerable, as shown in the data displayed in table 4.

TABLE 2

CREDIT COURSE WORK IN

LEARNING THEORY, TEACHING METHODOLOGY,
OR INSTRUCTIONAL DEVELOPMENT (N=120)

Course Work	Frequency	Percent
Undergraduate degree	62	52
Master's degree in library science	20	17
Additional master's degree	16	13
Doctoral degree	5	4
Degree and nondegree		
course work*	73	61

N = 119.

TABLE 3 Instruction-Related Education and Training (N = 120)

Type of Education and Training	Frequency	Percen
In-service programs*	14	12
MLS degree		
concentration:†		
Acquisitions	0	0
Administration	4	3 2 55
Cataloging	2	2
Reference	65	55
Other	20	17
No concentration	28	24
No response	1	-
Self-education as indicated b	y number of l	ibrary
journals read:		
0	3	3
1	8	3 7
2	25	21
3 or more	84	70
Self-education as indicated b	v number of	
education journals read:		
0	50	42
1	27	23
2	18	15
3 or more	25	21
Number of continuing educa	tion activities	in past
wo years:		T. P.
0	56	47
1	16	13
2 3	18	15
3	15	13
4 or more	15	13

Note: Rounding errors account for column totals > 100 percent.

*N = 119

†Concentration in reference is the only response indicating appropriate background was received.

Twenty-eight percent of the respondents have taught credit courses in bibliographic instruction; 23 percent had college level teaching experience before they became involved in bibliographic instruction; and 47 percent had prior elementary- or secondarylevel teaching experience. Over half of the respondents have the major part of their noninstruction time assigned to the complementary area of reference work. Table 4 also shows that only 14 percent of the respondents have published, and that less than onequarter have engaged in studies dealing with bibliographic instruction. These librarians are involved in professional organizations to a large degree, however. Seventy-nine percent indicated membership in two or more professional library organizations; 32 percent in two or more professional education organizations. Forty-one percent held office in a library organization in the past two

TABLE 4 Related Experience and Professional Activity (N=120)

Experience or Activity	Frequency	Percent	
Taught credit courses in bibliographic instruction	33	23	
Complementary noninstruction assignment in reference work*	62	52	
College level teaching experience	28	23	
Elementary- or secondary-level teaching experience t	56	47	
Elementary- or secondary-level teaching experience† Articles published or accepted	17	14	
Studies conducted or in progress*	29	24	
Professional organization activity in past two years:	20	-1	
Library organization membership			
0-1	26	22	
2-3	68	57	
4-5	21	18	
6 or more	5	4	
Library organization office held			
Yes	47	41	
No	69	58	
Not a member	2	2	
Education organization membership	4	2	
0-1	82	68	
2–3	29		
4–5		24	
	8		
6 or more	1	1	
Education organization office held	10		
Yes	13	11	
No	84	70	
Not a member	23	19	

Note: Rounding errors account for column totals > 100 percent.

N = 119.

†N = 118.

years; only 11 percent did so in an education organization.

The level of current continuing education activity is encouraging. As shown in table 5, 54 percent of the respondents indicated they participated in one or more such activities in the past two years. Nearly one third (30 per-

TABLE 5
Timing of Appropriate Education and Training (N=120)

Activity	Frequency	Percent
Continuing education ac	tivities in the pas	ttwo
vears:		
0	56	47
1	16	13
2	18	15
2 3	15	13
4 or more	15	13
Course work:	-	
Before instruction		
assignment	52	72
After instruction		412
assignment	9	13
Both	11	15
No response	48	_

Note: Rounding errors account for column totals < 100 percent.

cent) indicated they engaged in three or more related activities in the same time period. Although only seventy-two respondents (60 percent of the total group) reported they had taken credit courses in learning theory, teaching methodology, or instructional development, 72 percent of them indicated that this occurred before they were assigned to bibliographic instruction.

As shown in table 6, 54 percent of the librarians in this study reported they gained relevant education and training through self-study (commonly referred to as independent

TABLE 6
PERCEPTIONS OF PRIMARY MEANS
BY WHICH APPROPRIATE EDUCATION
AND TRAINING WERE GAINED (N=120)

(14 – 120)				
Means	Frequency	Percent		
Self-study	63	56		
In-service programs	1	1		
Conferences	1	1		
Workshops	2	2		
Credit courses	34	30		
Other	11	10		
No response	8	-		

study). That only 3 percent indicated that conferences and workshops were the primary means of acquiring the background in question was unexpected. The data further show that 30 percent of the respondents saw credit courses as their primary means of preparation.

Several factors were identified which could influence whether or not librarians gained the necessary education and training. As the data in table 7 show, libraries continue as they have in the past; they make few demands on librarians to qualify for bibliographic instruction.3 Only 7 percent of the respondents indicated they had to meet any special requirements beyond the MLS degree to participate in an instruction program. Furthermore, only 12 percent indicated their libraries provided in-service training for them. Eighty percent of the respondents see their library administrations as supportive of bibliographic instruction programs vet only 19 percent indicated they received financial support for appropriate education and training. Of the twenty-three librarians who received financial support, 52 percent indicated the funding they received supported more than half of their expenses. It must be kept in mind that participation in bibliographic instruction programs continues to be

part-time, however. The present study reinforces that belief; 91 percent of the responding librarians reported being assigned to instruction less than half time. It is important to note that 62 percent of the librarians in this study perceived themselves as adequately prepared initially to engage in bibliographic instruction.

Although 62 percent of these librarians indicated they felt they were adequately prepared to take on bibliographic instruction activities when they were first assigned to instruction (see table 7), the data in table 8 show that only 7 percent indicated they would not benefit from additional education and training. Forty-three percent chose instructional development as an area of need; nearly one third (32 percent) indicated additional work in teaching methodology would be beneficial, while only 9 percent felt that they needed additional work in learning theory.

Although professional organizations view their conferences as serving a major continuing education function, it is interesting to see that only 1 percent of the respondents saw conferences as the best means of providing education and training for bibliographic instruction. Twenty-eight percent viewed previous teaching experience as the best means

TABLE 7
FACTORS AFFECTING THE ACQUISITION OF APPROPRIATE EDUCATION, TRAINING, AND EXPERIENCE (N=120)

Factor	Frequency	Percent
Presence of entry requirements	8	7
Presence of in-service programs*	14	12
Perception that administration is supportive*	95	80
Presence of administrative financial support for continuing education		
activities*	23	19
Amount of administrative financial support for continuing education		
activities:		
Less than half	7	30
Half	4	17
More than half	12	52
No response	97	_
Amount of personal funding for continuing education activities:		
Less than half	24	. 38
Half	4	6
More than half	36	56
No response	56	00
Assigned less than half-time to bibliographic instruction	109	91
Assigned less than hair-time to bibliographic instruction	62	52
Major noninstruction assignment in reference*	74	62
Perception that adequately prepared	14	02

Note: Rounding errors account for column totals < 100 percent.

N = 119.

TABLE 8
Perceptions Related to Additional Education and Training (N = 120)

Perception	Frequency	Percent
Area of need:		
Learning theory	11	9
Teaching		
methodology	38	32
Instructional		
development	51	43 8 7
Other	10	8
None needed	8 2	7
No response	2	_
Best means of preparation:		
Self-study	8	7
In-service		
programs	22	19
Conferences	1	1
Workshops	28	25
Credit courses	20	18
Other	2	2
Previous teaching		
experience	32	28
No response	7	_
Best means of delivery of		
future education and training	! :	
Self-study	6	5
In-service		
	24	21
Programs Conferences	5	4
Workshops	38	34
Credit courses	37	33
Other	38 37 3 7	3
No response	7	-

Note: Rounding errors account for column totals < 100 percent.

to prepare, a perception supported in the literature. Twenty-five percent selected workshops. When asked what means of delivering appropriate education and training to librarians was best for the future, 34 percent indicated workshops, while 33 percent chose credit courses. These findings as summarized in table 8 compare favorably to a study on

modes of delivery for continuing education conducted by Stone.⁵

As shown in table 9, there is evidence of a strong relationship between librarians' assessments that they were adequately prepared when first assigned to bibliographic instruction, and their assessment that their primary means of gaining appropriate knowledge and information was by having taken credit courses in learning theory, teaching methodology, or instructional development. Only 2 percent of instruction librarians who participated in appropriate course work saw themselves as inadequately prepared while the 32 percent who chose self-study methods viewed themselves as inadequately prepared. Self-study results in only an even chance of being prepared.

In table 10, evidence of a positive relationship between (1) an assessment of having undertaken adequate preparation and (2) prior elementary or secondary teaching experience is shown. Of the 49 percent of instruction librarians who considered themselves prepared to engage in bibliographic instruction activities, 41 percent had had prior teaching experience. Those who indicated they saw themselves as inadequately prepared are nearly evenly divided between those with prior teaching experience and those with none. The results show that those who have had teaching experience tend to see themselves as prepared, however.

The data in table 11 suggest that those who indicated they had taken credit course work dealing with instruction are more likely to select instructional development as an area of need. Those who have not had such course work are more likely to select teaching methodology.

TABLE 9
RELATIONSHIP BETWEEN ASSESSMENT OF
ADEQUATE PREPARATION AND PRIMARY MEANS OF PREPARATION

	Prepa			
Means	Adequate Percent	Inadequate Percent	Percent	otals Frequency
Self-study	32	32	64	56
Credit courses	34	2	36	56 32
Totals				
Percent	66	34	100	
Frequency		58	30	88

Note: Missing values = 8.

Note: Cross-tabulations producing marginal frequencies of ten or less were deleted.

Note: $x^2 = 17.35$ df = 1 p > .01

The data in table 12 indicate that the presence of previous elementary- or secondary-school teaching experience results in the choice of instructional development as an area for further education and training. Absence of prior teaching experience tends to result in an expression of need in teaching methodology.

DISCUSSION AND CONCLUSIONS

On the whole the librarians in this group have acquired education and training appropriate to their assignments. The education and training were not gained as part of their professional degree programs but were

TABLE 10

RELATIONSHIP BETWEEN ASSESSMENT OF ADEQUATE PREPARATION AND ELEMENTARY OR SECONDARY SCHOOL TEACHING EXPERIENCE

		paration		
Teaching Experience	Adequate Percent	Inadequate Percent	Percent	Totals Frequency
Present	41	27	68	73
Absent	8	23	31	34
Totals				
Percent	49	50	99	
Frequency		53	54	100

Note: Missing values = 2.

Note: Rounding errors account for total percent < 100 percent.

Note: Cross-tabulations producing marginal frequencies of ten or less were deleted.

Note: $x^2 = 10.6$ df = 1 p > .01.

TABLE 11

RELATIONSHIP BETWEEN NEED FOR ADDITIONAL EDUCATION AND TRAINING AND CREDIT COURSE WORK IN LEARNING THEORY, TEACHING METHODOLOGY, OR INSTRUCTIONAL DEVELOPMENT

		eed		
Course Work	Teaching Methodology Percent	Instructional Development Percent	Percent	otals Frequency
Present	19	37	56	50
Absent	24	20	44	50 39
Totals				
Percent	43	47	100	
Frequency	38	8 5	1	89

Note: Missing values = 2.

Note: Cross-tabulations producing marginal frequencies of ten or less were deleted.

Note: $x^2 = 3.53$ df = 1 p < .01.

TABLE 12

RELATIONSHIP BETWEEN NEED FOR ADDITIONAL
EDUCATION AND TRAINING AND PRIOR TEACHING EXPERIENCE
IN ELEMENTARY OR SECONDARY SCHOOLS

		eed		
Experience	Teaching Methodology Percent	Instructional Development Percent	Percent	Totals Frequency
Present	12	33	45	39
Absent	32	23	55	48
Totals Percent	44	56	100	
Frequency	38		49	87

Note: Missing values = 4.

Note: Cross-tabulations producing marginal frequencies of ten or less were deleted.

Note: $x^2 = 9.35$ df = 1 p > .01.

gained in undergraduate degree programs, in credit courses, or by self-study. A test of association between means of preparation and adequacy of preparation revealed that taking credit courses is perceived to be a more effective means of preparation than self-study, however.

A majority of the librarians specialized in reference work in their professional training programs, which compares favorably with findings in the literature. They tend to belong to professional organizations; only 2 percent reported "not a member," which compares favorably to other findings.

No record of instruction librarians' publishing and research activities is available. Because the librarians in this study work in an academic environment, a higher rate of activity was expected than the 15 percent response to a record of articles published or accepted for publication and the 25 percent in-

dication of research activity.

A total of 98 percent indicated they read one or more library journals regularly; a total of 59 percent read education journals regularly. The evidence in the literature is not clear, but the response is somewhat higher than expected, especially for education journals. Perhaps this latter finding is explained by the fact that all institutions in the study are involved in teacher training. They did not attempt to update their instruction skills as much as expected, but 54 percent did participate in one or more continuing education activities in the past two years. In light of the fact that their instruction assignments are less than half-time, this record of activity should be viewed favorably.

The perception that teaching is the best means of preparation to engage in bibliographic instruction was supported. Forty-seven percent had prior elementary- or secondary-school teaching experience; 23 percent had prior college-level teaching experience. Seventy-five percent have been involved in bibliographic instruction six or more years. Only 28 percent reported having taught bibliographic instruction credit

courses, however.

Although these librarians are assigned to instruction less than half-time, 52 percent of them have major assignments in reference work, an area of activity that is closely associated with instruction by the profession.

And although 76 percent of these librarians received their professional training ten or more years ago, before the recent decade of activity in bibliographic instruction, their record of training in their undergraduate degrees and elsewhere before their involvement in instruction appears to offset the fact that instruction had not been covered in their professional degree work.

Administrative support for the improvement of the skills of the librarians involved compares with the conclusions drawn in the literature: it is minimal.⁸ Administrators are willing to assign them to instruction but are not willing to find the funds to provide the

opportunity for improving skills.

By and large these librarians feel they are prepared to carry out their instruction responsibilities, but they are nearly unanimous (only 7 percent not agreeing) in their perception that they could benefit from additional education and training in instruction-related areas. In particular they are interested in becoming more competent in instructional development (43 percent) and teaching methodology (32 percent).

Workshops, credit courses, and, to a lesser degree, in-service programs are seen by these librarians as the best means of acquiring appropriate additional education and training

for themselves in the future.

IMPLICATIONS

Lack of specific administrative support for upgrading instruction librarians' skills is again demonstrated in this study. Bibliographic instruction programs and their improvement remain, apparently, labors of love for the librarians involved. It appears that the profession needs to reexamine its stance on instruction, given the evidence that library administrators do not support these programs in concrete terms. Espousing bibliographic instruction at conferences and in the literature while the workplace lacks specific continuing support frustrates the librarians and shortchanges the students.

The profession should take note that in this study the value of conferences is challenged. They are not perceived as a useful means of providing continuing education in this area. This strikes at the heart of the profession's justification for holding conferences.

Again, the view that previous teaching ex-

perience is the most effective means to prepare to teach is supported. Although the needs of bibliographic instruction programs are not being addressed by the library schools,⁹ if programs are developed to meet this need, teaching practicums should be an integral part of the requirements designed to assure competency for librarians who will be called upon to function as skilled professionals responsible for instruction.

REFERENCES

- Barbara J. Smith, "Education and Training Characteristics of Librarians Engaged in Bibliographic Instruction in Eighteen Colleges and Universities in Pennsylvania" (D.Ed. dissertation, Pennsylvania State Univ., 1981).
- Anne Roberts, A Study of Ten SUNY Campuses
 Offering an Undergraduate Credit Course in
 Library Instruction (Washington, D.C.: Council on Library Resources, 1978), ED 157 529.
- Sara L. Whildin, "Library Instruction in Pennsylvania Academic Libraries: A Survey Summary," PLA Bulletin 31:8 (Jan. 1976).
- 4. Roberts, "A Study."
- Elizabeth W. Stone, Continuing Library and Information Science Education (Washington, D.C.: American Society for Information Science, 1974).
- 6. Roberts, "A Study."

- Perry D. Morrison, The Career of the Academic Librarians: A Study of the Social Origins, Educational Attainments, Vocational Experience, and Personality Characteristics of a Group of American Academic Librarians (Chicago: American Library Assn., 1969), ACRL monograph no.29.
- 8. Melissa Cain and Lois Pausch, Library Instruction Programs in Illinois Academic Libraries: A Directory and Survey Report (Chicago: Illinois Library Association, 1978). See also Patricia Senn Breivik, "Leadership, Management, and the Teaching Library," Library Journal 103:2045–48 (Oct. 15, 1978).
- Vida Stanton, "The Library School: Its Role in Teaching the Use of the Library," in John Lubans, Jr., ed., Progress in Educating the Library User (New York: Bowker, 1978).