

NORTH DAKOTA REPORTS ON CONTINUING  
EDUCATION PREFERENCES

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North Dakota, with its population of slightly more than 600,000 people spread across a geographic area of slightly less than 71,000 square miles, often lays claim to being the most rural state in the union. While this distinction is perhaps more likely to be conferred on one of the states to the west of the Badlands, it is reasonable to assume that North Dakota's 76 public libraries, two-thirds of which serve population of under 3,000 and only one of which has a service population of more than 50,000, do indeed provide a typical sampling of rural library concerns.

The Library/Media Department of Valley City State College conducts a program essentially designed to train school media personnel. A 1977 report prepared for the North Dakota Advisory Council on Libraries has suggested, however, that "state colleges offering library science programs develop courses for the training of librarians to work in small public libraries."<sup>1</sup> In recent years, several VCSC workshops and extension courses have attracted public library staff, and in 1981 it was decided to conduct a statewide survey of public librarians' continuing education (CE) interests and programming preferences. ("Continuing education" is something of a misnomer in the present context. Almost 50 percent of the public library staffs, including over 40 percent of the supervisory personnel, have less than a college educa-

tion, and only about 13 percent of the staff members of smaller libraries have any formal training at all in librarianship.<sup>2)</sup> In addition to examining programming preferences, the survey would seek to determine the library staff's perception of barriers and incentives to continuing education.

At another level, the study would attempt to determine variance in preferences between geographic regions, between libraries categorized by size of service population, and between supervisory and clerical personnel.

Finally, an exploratory model, made up of respondent characteristics, would be regressed against interest in an effort to determine the kinds of characteristics which might be used to identify the person with high interest in continuing education.

In its aims, this survey resembles and builds on Steven Herb's survey of public librarians in rural Pennsylvania<sup>3</sup> and on Mary Wagner and Suzanne Mahmoodi's more wide-ranging survey of the continuing education needs of all types of Minnesota librarians.<sup>4</sup>

#### The Questionnaire

The questionnaire for the survey was largely developed from a segment of a 1976 survey questionnaire created by Robert Means to study the CE interests of Illinois community college library personnel.<sup>5</sup> The questionnaire was reviewed by several individuals concerned with CE for public librarians, in order to adapt the response categories of the original questionnaire to the conditions and experience of public librarians in North Dakota. Certain sections of the questionnaire, such as the listing of topical interests, were influenced by the "proprietary" nature of the VCSC study--topics listed reflected VCSC course titles and the broad descriptions of the college's introductory curriculum.

In addition to factual information of a demographic nature, the questionnaire asked for information concerning the respondent's interest in continuing education, program preferences, satisfaction with current CE offerings in the state, and perceptions of barriers and incentives to CE participation. Subjective responses to these questions were made on a Likert scale of one to five.

Variables yielded by the questionnaire covered categories in eleven areas of concern. These are summarized in the appendix. The first area attempted to define each respondent by certain demographic variables, plus the respondent's level of satisfaction and general interest in participation in CE programs. The second area included select topics for programs, rated by respondents. The third area included ratings of modes of delivery, and the fourth through sixth areas concerned scheduling preference. The seventh and eighth areas sought to establish the maximum distance respondents would be willing to travel, and the price they would be willing to pay, for selected programs. Ninth and tenth areas concerned perceptions of obstacles and barriers to participation, and the final area of concern dealt with the respondent's general awareness of, and interest in, Valley City State College's library technician program.

#### Sampling Procedure

The researchers telephoned the head librarians of 57 public libraries throughout the state in an effort to identify the employees at each library who had contact with the public in a service capacity, or who had some responsibility for ordering and processing library materials. These employees, as well as the head librarians, constituted the target population of the study.

The head librarians were recruited to distribute questionnaires to the staff members they had identified, and packets of questionnaires and pre-addressed stamped envelopes were sent to them. In addition, packets with appropriate cover letters were mailed to 19 libraries whose head librarians could not be contacted by phone. These packets contained a questionnaire for each staff member listed in the "Directory of North Dakota Libraries."<sup>6</sup>

One hundred forty-four questionnaires were returned, or 64% of the total sample of 222. Of these, 134, or 60% of total, were useable. Unanticipated limitations of budget and staff time prevented follow-up to be made of non-respondents.

#### Statistical Analysis

Categories in each area of interest were broken down statistically by location (quadrants composed of official state planning districts 1 and 2 (NW), 3 and 4 (NE), 5 and 6 (SE), 7 and 8 (SW); library category (defined by the State Library according to the size of service population: under 3,000; 3,000 - 10,000; 10,000 - 20,000; over 20,000: and job level of respondent ("clerical" or "supervisory/professional"). Analysis of variance was made between categories, and Scheffe's test of variance among categories ( $\alpha = .10$ ) was applied, as well as the Student-Newman-Keuls procedure for determining homogeneous categories ( $\alpha = .05$ ).

Finally, an attempt was made to model respondent interest in continuing education as a function of demographic and situational factors, employing multiple regression.

### Selected Results and Discussion

Although all the areas of concern covered by the survey yielded interesting results, those dealing with scheduling, pricing and distance are perhaps the most place-oriented of the results and will only be briefly summarized in order to put greater emphasis on concerns related to overall interest in CE, topics of interest, preferred delivery modes, and the perceived barriers and incentives to CE participation.

Interest in continuing education. As can be seen in Table A, interest in continuing education is high in North Dakota, with no significant variance in interest between library categories, geographic locations, or job types. The stability of the response to the question, "How inclined would you be to participate in some sort of formal 'continuing education in librarianship?'" indicates that programs, in general, will have an audience among library workers in all job levels and public library categories throughout the state. Of course, programs with geographic limitations, or those which are aimed at specific library categories or working groups, must set their anticipatory levels of "success" to correspond with the market limitations imposed by their situation. And, as is shown in the analyses reported below, there is variance among sub-groups of library categories regarding types of continuing education activities preferred.

It is important to emphasize, though, that no variance in preference was found among geographic or job groups. That is, specific as well as general preference for CE topics and modes of delivery hold true throughout the state, and between both supervisory and non-supervisory personnel. The lack of variation in topical preferences is perhaps reflective of the lack of task specialization in small library jobs.

TABLE A INTEREST IN CONTINUING EDUCATION

	MEAN	STANDARD DEVIATION
Total Population (N=131)	3.93	1.16
BY LIBRARY CATEGORIES		
CATEGORY I Libraries (service population 20,000+) (N=33)	4.03	1.16
CATEGORY II Libraries (service population 10,000-20,000) (N=29)	4.14	1.16
CATEGORY III Libraries (service population 3,000-10,000) (N=28)	4.14	0.76
CATEGORY IV Libraries (service population under 3,000) (N=41)	3.56	1.32
Anova by Categories I-through-IV: F=2.152 P=.0969		
BY LOCATION		
NORTHWEST AREA (Planning regions 1 & 2) (N=27)	3.82	1.21
NORTHEAST AREA (Planning regions 3 & 4) (N=18)	3.67	1.37
SOUTHEAST AREA (Planning regions 5 & 6) (N=40)	4.18	1.01
SOUTHWEST AREA (Planning regions 7 & 8) (N=46)	3.89	1.16
Anova by Location: F-1.013 P=.3892		
BY JOB TYPE		
CLERICAL, NON-SUPERVISORY (N=53)	3.85	1.13
PROFESSIONAL, SUPERVISORY (N=78)	3.99	1.18
Anova by Job Type: F=0.447 P=.5050		

An attempt was made to determine level of general interest in CE as a function of a series of demographic and situational variables. These variables included the staff member's level of employment, years of library employment, age levels of general education and library education, number of professional organizations in which the subject held membership, and the category of library at which the subject worked. The result of this attempt to "model" interest in CE is shown in Table B. Of all the variables tested, only "number of college-level "library science courses taken" and "age" yielded a significant level of predictive power in multiple regression with the other variables. The degree of correlation with interest could be described as only moderate, at best. The positive correlation of completed library science coursework and interest, with a number of other factors held constant, does indicate that undergraduate recruitment to library science courses, or initial recruitment to a CE course, may serve to wet the staff member's appetite for further education. (Of course, more careful theoretical study and empirical research would be necessary to determine whether taking earlier coursework is really a casual factor leading to interest in CE.) Age was negatively related to interest.

Program topic preference. As noted above, program topics suggested for ranking are based on broad descriptions of topics related to an undergraduate curriculum, and the list was reported in order of ratings scores might not be representative of the full range of topics in which there may be interest.

Topics are presented in order of "overall preference" (rating scores) in Table C. Preferences are broken down by library categories and the results of analyses of variance and homogeneity are indicated.

TABLE B

MULTIPLE REGRESSION OF SIGNIFICANT DEMOGRAPHIC VARIABLES  
WITH INTEREST IN CONTINUING EDUCATION (N=100)

	Multi. R	R <sup>2</sup>	R <sup>2</sup>	r
No. of previous library ed. courses	.28	.08	.08	.28
Age	.34	.12	.04	.24

Note. - Mult. R is the coefficient of multiple correlation, an index of the correlation of the regression model with the dependent variable; R<sup>2</sup> is the coefficient of multiple determination, an index of the proportionate reduction of total variation in the dependent variable associated with the set of independent variables in the model; R<sup>2</sup> shows the change in R<sup>2</sup> related to a particular independent variable; r is the simple correlation between dependent and independent variable.



TABLE C

## TOPICS OF INTEREST BY LIBRARY CATEGORY

Topics are presented by overall rating of preference

Topics	Analysis of Variance						F	Prob.	Difference	Homogeneous Groups
	All	I	II	III	IV					
Materials for children and adolescents (N=132,33,28,30,41)	3.83 (s.d.=1.52)	3.18 (1.53)	3.71 (1.74)	4.07 (1.36)	4.27 (1.32)	3.62	.02	IV I	I-II-III, II-III-IV	
Materials selection (N=133,33,28,30,42)	3.68 (s.d.=1.55)	3.48 (1.58)	3.57 (1.62)	3.53 (1.66)	4.00 (1.41)	.90	.44	none	I-II-III-IV	
Reference materials and services (N=132,33,28,30,41)	3.50 (s.d.=1.68)	3.48 (1.66)	4.29 (1.24)	3.13 (1.81)	3.24 (1.74)	2.95	.04	II III, II IV	I-III-IV, I-II	
Classification and cataloging (N=132,33,28,30,41)	3.39 (s.d.=1.74)	3.00 (1.87)	3.21 (1.83)	3.20 (1.77)	3.98 (1.42)	2.40	.07	none	I-II-III-IV	
Innovative techniques for service delivery (N=130,32,28,29,41)	3.38 (s.d.=1.67)	3.38 (1.64)	4.00 (1.59)	3.34 (1.78)	3.00 (1.61)	2.04	.11	none	I-II-III-IV	
Public relations (N=131,33,28,30,40)	3.38 (s.d.=1.79)	3.79 (1.73)	4.43 (1.32)	2.93 (1.78)	2.65 (1.75)	7.62	.00	I IV, I III, II IV	I-II, III-IV	
Administration (N=132,33,28,30,41)	3.29 (s.d.=1.75)	3.48 (1.87)	3.29 (1.70)	3.33 (1.67)	3.10 (1.79)	.30	.82	none	I-II-III-IV	
Media production (N=132,33,28,30,41)	2.74 (s.d.=1.30)	2.94 (1.22)	3.36 (1.37)	2.50 (1.23)	2.34 (1.35)	4.01	.01	I-III, II-III I-IV, II-IV	I-II, III-IV	
Computer applications (N=131,33,27,30,41)	2.54 (s.d.=1.82)	3.67 (1.85)	3.30 (1.73)	1.80 (1.45)	1.68 (1.39)	13.55	.00	I III, I IV, II III, II IV	I-II, III-IV	

Highest scores of general interest dealt with selection of materials, particularly of children's materials. Service delivery, cataloging, and administratively-oriented topics formed a middle group of interest, while media and computer topics were found at the bottom of the list.

Although general preferences are important in the determination of what topics are most likely to be successfully programmed, it is valuable to note the sometimes considerable variance in preference between library categories.

No significant differences were found between Category I and II libraries, the libraries serving populations of over 20,000 and 10,000-20,000 respectively. But staff in Category II libraries often top the list in the level of their interest. It is possible that Category II libraries are at the cusp of library demands and opportunities in North Dakota, engendering a desire among their staffs for new information which is at least on a par with that needed by Category I libraries. Particularly noteworthy are the interests expressed by Category II librarians in the areas of public relations, reference, and service delivery. Category II ratings in these areas far exceed the overall average.

Topics which displayed a number of significant differences between the libraries with larger service population and the smaller libraries included public relations and politics, media production, and computer applications. In the last two cases, lack of interest among the staff of smaller libraries is possibly due to a perceived lack of opportunity to employ the knowledge gained in such programs.

Somewhat more idiosyncratic differences are found on the topics of "material for children and adolescents," which interests Category IV staff (serving populations of under 3,000) considerably more than Category I staff, and

"Reference materials and service," which interests Category II librarians significantly more highly than staff in smaller libraries.

Mode-of-delivery preference. Preferred modes of program delivery are listed in Table D in order of overall preference, and broken down by library category. The high preference of all groups for the short workshop is very evident, with correspondence courses making a good showing among alternate modes. The ratings of the less-popular modes were roughly linear across library categories--the larger the library's service area, the more likely the library's staff was willing to use these modes of delivery. This might be due in part to the greater familiarity the staffs at larger libraries have had in the past to such programs as the Educational Telephone Network, and to the expectation that such programs would continue to be presented most conveniently to the larger libraries. In general, respondents reported workshops of more than one week in length to be undesirable, no variance in preference was found between job levels or geographical areas.

Perception of barriers to participation. The questions regarding barriers to participation in continuing education activities elicited the ratings reported in Table E. Lack of time was the most highly cited barrier. Staff at Category II libraries were highly inclined to indicate the lack of replacement staff to cover their duties inhibited their participation--it ranks the most highly among the barriers cited by members of that category. Staff at Category I libraries were most likely to cite the inadequacy of current programs as a barrier; in that category "nothing fits my needs" ranks second to lack of time.

A significant difference on the "just not interested" barrier was found between clerical and supervisory/professional job categories. Clerical staff were more likely to cite lack of interest as a reason for non-participation.

TABLE D

## PREFERRED MODES OF PROGRAM DELIVERY BY LIBRARY CATEGORY

Modes of delivery are listed by overall rating of preference

Modes of delivery	<u>Analysis of Variance</u>						Prob.	Difference	Homogeneous Groups
	All	I	II	III	IV	F			
Workshop, one day (N=133,33,29,29,42)	4.10 (s.d.=1.51)	4.21 (1.41)	3.90 (1.66)	4.24 (1.46)	4.05 (1.55)	.33	.80	none	I-II-III-IV
Workshop, two-three days (N=132,33,29,28,42)	3.64 (s.d.=1.70)	3.85 (1.50)	4.31 (1.34)	3.29 (1.86)	3.24 (1.70)	2.99	.04	II IV	I-II-III, I-III-IV
Correspondence (N=132,33,28,29,42)	3.21 (s.d.=1.80)	3.24 (1.71)	2.71 (1.86)	3.34 (1.93)	3.43 (1.74)	.97	.41	none	I-II-III-IV
Television course (N=130,33,27,28,42)	2.88 (s.d.=1.74)	3.24 (1.71)	3.37 (1.76)	2.57 (1.75)	2.48 (1.66)	2.31	.08	none	I-II-III-IV
Workshop, four-seven days (N=133,33,29,29,42)	2.86 (s.d.=1.74)	3.36 (1.76)	2.62 (1.16)	2.24 (1.72)	2.38 (1.56)	5.55	.00	I III, I IV, II III,II IV	I-II, III-IV
Classroom course (N=132,33,28,29,42)	2.71 (s.d.=1.73)	3.36 (1.69)	3.00 (1.81)	2.38 (1.52)	2.24 (1.71)	3.40	.02	I IV	I-II-III, II-III-IV
Telephone (ETN) course (N=131,33,28,28,42)	2.53 (s.d.=1.68)	3.12 (1.73)	2.93 (1.76)	2.21 (1.57)	2.00 (1.48)	3.85	.01	I IV	I-II-III, II-III-IV
Workshop, over one week (N=132,33,28,29,42)	2.45 (s.d.=1.71)	3.00 (1.73)	3.14 (1.88)	2.17 (1.56)	1.76 (1.39)	5.73	.00	I IV,II IV	I-II-III, III-IV

TABLE E

## PERCEPTION OF BARRIERS TO PARTICIPATION, BY LIBRARY CATEGORY

Barriers are presented by overall rating

Analysis of Variance

Barriers	All	I	II	III	IV	F	Prob.	Difference	Homogeneous Groups
No time (N=128,33,28,28,39)	3.30 (s.d.=1.69)	3.36 (1.62)	3.64 (1.54)	3.64 (1.73)	2.74 (1.73)	2.27	.80	none	I-II-III-IV
Distance (N=121,31,26,25,39)	3.03 (s.d.=1.71)	2.68 (1.56)	2.77 (1.73)	2.76 (1.67)	3.67 (1.74)	2.76	.05	none	I-II-III-IV
No replacements (N=127,33,28,27,39)	3.03 (s.d.=1.76)	2.40 (1.62)	3.86 (1.58)	3.37 (1.76)	2.74 (1.79)	4.51	.00	II I, II IV	I-III-IV, II-III
Unaware of programs (N=127,32,28,27,40)	3.02 (s.d.=1.79)	2.75 (1.81)	2.93 (1.68)	2.78 (1.78)	3.45 (1.84)	1.21	.31	none	I-II-III-IV
Can't afford (N=129,33,28,28,40)	2.98 (s.d.=1.65)	2.39 (1.62)	3.00 (1.72)	3.43 (1.48)	3.15 (1.66)	2.29	.08	none	I-II-III-IV
Nothing fits needs (N=123,32,28,25,38)	2.53 (s.d.=1.60)	3.19 (1.86)	2.71 (1.61)	2.28 (1.28)	2.00 (1.38)	3.75	.01	I IV	I-II-III, II-III-IV
Past experience discouraging (N=123,31,28,25,39)	2.02 (s.d.=1.43)	2.23 (1.61)	2.14 (1.48)	1.72 (1.28)	1.97 (1.37)	.65	.58	none	I-II-III-IV
Not interested (N=127,32,28,27,40)	1.83 (s.d.=1.39)	1.69 (1.31)	1.64 (1.34)	1.89 (1.50)	2.05 (1.43)	.63	.60	none	I-II-III-IV
Too old (N=129,33,28,28,40)	1.51 (s.d.=1.21)	1.18 (.58)	1.29 (.90)	1.57 (1.43)	1.90 (1.50)	2.65	.05	IV I	I-II-III-IV
Policy discourages participation (N=127,33,28,27,39)	1.39 (s.d.=.98)	1.18 (.58)	1.57 (1.20)	1.68 (1.36)	1.26 (.68)	1.82	.15	none	I-II-III-IV

Perception of incentives to participation. Little variation was observed between categories in the area of incentives to participation. (Table F) Job satisfaction ranked as the highest incentive, overall (significantly higher among Category I staff compared to Category IV), followed by higher salary, formal college credit, and fee rebates. The release time incentive was most highly rated of all in Category III.

Other findings. Respondents preferred early fall (September-October) and spring (March-April; May-June) for continuing education activities. Respondents indicated that programs would be offered most conveniently during the day, at midweek.

One-time events would most conveniently be offered within 50 miles of participants. The maximum distance the average respondent would travel to a regularly-scheduled class would be 20 miles. Those from larger libraries showed greater willingness to travel to events of longer duration than two-to-three days. Estimates of "reasonable price" to pay for selected programs roughly correspond to prices currently asked for such programs.

#### Summary

The survey indicated a high interest in continuing education in all regions of the state and among both clerical and supervisory staff, although those who had taken previous courses in librarianship were more inclined to participate in continuing education.

Course topics related to materials selection held the greatest overall interest, though respondents in the two "large library" categories show strong and sometimes strongest interest in less "traditional" topics, such as public relations, "innovative service delivery", and computer applications.

TABLE F

## PERCEPTION OF INCENTIVES TO PARTICIPATION, BY LIBRARY CATEGORY

Incentives are presented by overall rating

Incentives	Analysis of Variance							Difference	Homogeneous Groups
	All	I	II	III	IV	F	Prob.		
Job satisfaction (N=119,32,27,25,35)	4.13 (s.d.=1.37)	4.63 (1.07)	4.41 (1.22)	3.88 (1.42)	3.63 (1.52)	3.87	.01	I IV	I-II-III, II-III-IV
Higher salary (N=120,32,27,26,35)	3.87 (s.d.=1.69)	4.00 (1.68)	4.19 (1.59)	4.15 (1.52)	3.29 (1.82)	2.06	.11	none	I-II-III-IV
Formal college credit (N=120,32,27,26,35)	3.85 (s.d.=1.71)	3.94 (1.76)	3.81 (1.78)	3.92 (1.52)	3.74 (1.82)	.09	.96	none	I-II-III-IV
Fee rebate (N=119,31,27,26,35)	3.72 (s.d.=1.62)	3.90 (1.54)	3.44 (1.69)	4.15 (1.41)	3.46 (1.75)	1.33	.27	none	I-II-III-IV
Encouragement from superiors (N=118,32,26,25,35)	3.49 (s.d.=1.73)	3.69 (1.65)	3.54 (1.84)	3.72 (1.62)	3.11 (1.81)	.84	.48	none	I-II-III-IV
Release time (N=120,32,27,26,35)	3.42 (s.d.=1.68)	3.88 (1.52)	3.15 (1.75)	4.38 (1.10)	2.49 (1.63)	9.01	.00	I IV, III IV, III II	I-II, I-III, II-IV
Greater power (N=119,31,27,26,35)	3.00 (s.d.=1.79)	3.32 (1.80)	3.37 (1.84)	2.85 (1.78)	2.54 (1.69)	1.58	.20	none	I-II-III-IV
Release from routine (N=119,32,27,25,35)	2.51 (s.d.=1.69)	2.63 (1.79)	2.48 (1.89)	3.08 (1.68)	2.03 (1.32)	2.00	.12	none	I-II-III-IV
Special recognition (N=120,32,27,26,35)	2.28 (s.d.=1.66)	2.69 (1.77)	2.63 (1.67)	2.00 (1.72)	1.86 (1.40)	2.11	.10	none	I-II-III-IV

Short workshops were much preferred for programs, although somewhat less resistance to alternate delivery modes was found in larger libraries.

All respondents highly rated lack of time as a barrier to CE participation, though staff at Category II libraries indicated that lack of back-up staff to substitute for CE participants was an even greater barrier. Staff in the category made up of smaller libraries were most likely to sense the distance to CE activities and were most likely to be unaware of these activities.

A number of incentives to CE participation were rated highly, job satisfaction ranking most highly of all. Higher pay, college credit, and fee rebates were also highly ranked.

The collection interval data regarding preferences, while it provided greater accuracy in the regression of demographic factors on preference, complicated the interpretation of the results. Although the use of a "hedonic scale" is widespread in preference research, its underlying assumptions are ambiguous, i.e., it is assumed on faith that levels of preference are equally spaced along the psychological continuum that holds true across the entire population being sampled.<sup>7</sup> Interpreting the analyses of interval preference data is also difficult. The very practical question soon arises: at what point along the scale of one to five is the respondent indicating a real likelihood of participating in the activity being "rated?" This question may have been best answered by a survey requesting, say, "yes/no" responses regarding the respondent's likelihood of taking courses on particular topics, or on courses with particular methods of delivery. Barriers and incentives could be ranked in order of appropriateness to the respondent's conditions. Modal or median responses could then be calculated and categorical comparisons could be made using chi-square or rank correlation.



On the other hand, some researchers despair of the validity of hypothetical "yes/no" responses and counsel the collection of interval preference ratings. Such ratings as we have used, while seeming less concrete, are not so likely to lead to the overestimation of the number of likely participants.<sup>8</sup>

Despite the perhaps unavoidable use of slippery interval data, the present study served to outline the characteristics of demand for continuing education in a particular rural setting, and showed how such demand varied, or failed to vary, across sets of geographic, job, and size categories. Similar studies in rural settings would be likely to have considerable practical use, while contributing to the theory of continuing education demand.

## Reference

<sup>1</sup>Ronald J. Rudser, Education for Public Librarians in the State of North Dakota (Bismarck, N.D.: State Library Commission, 1977), p. 10.

<sup>2</sup>Ibid., p. 4.

<sup>3</sup>Steven Herb, "A Survey of Rural Librarians on Continuing Education," Rural Libraries 1 (Fall 1980), pp. 89-118.

<sup>4</sup>Mary M. Wagner and Suzanne Mahmoodi, "Continuing Education Needs of Minnesota Library/Information Center/Media Center Personnel," Minnesota Libraries 26 (Winter 1979-80), pp. 509-526.

<sup>5</sup>Robert Means, A Study of the Continuing Education Interests of Illinois Community College Library and Learning Resource Center Personnel (Grand Forks, N.D.: ERIC Microtext Center, ED 168 529, 1979).

<sup>6</sup>North Dakota State Library, "Directory of North Dakota Libraries," Flickertale Newsletter 12 (November 15, 1980).

<sup>7</sup>Ralph L. Day. "Measuring Preferences," in Handbook of Marketing Research, ed. Robert Ferber (New York: McGraw-Hill, 1974), p. 3, 108ff.

<sup>8</sup>cf. David A. Aaker and George S. Day. Marketing Research: Private and Public Sector Decisions (New York: John Wiley and Sons, 1980), p. 533.

APPENDIX

VARIABLES YIELDED BY THE QUESTIONNAIRE

i. Library/Librarian Characteristics

- L1 Library type (Not used in analysis)
- L2 Library location (By Planning District)
- L3 Library Category (By State Library designation. Inverted in analyses to provide a progressive designation of size of service population)
- L4 Library code (Not used in analysis)
- L5 Librarian's job level (Nonsupervisory = 1, Supervisory, professional = 2)
- L6 Librarian's age
- L7 Library employment in year
- L8 Education (Junior high = 1; High school = 2; Some college = 3; College = 4; Some graduate school = 5; Master's degree = 6; Beyond Master's degree = 7)
- L9 College-level library science courses taken
- L10 Professional memberships
- L11 Satisfaction with organized CE efforts
- L12 Satisfaction with personal CE efforts
- Q General interest in CE

ii. Interest by Topic

- S1 Materials selection
- S2 Classification and cataloging
- S3 Materials for children and adolescents
- S4 Reference materials and services
- S5 Administration
- S6 Innovative techniques for delivery of services
- S7 Computer applications

S8 Public relations; Library politics

S9 Media production

iii. Interest in Mode of Delivery

M1 Correspondence

M5 Workshop, Week+

M2 Telephone course

M6 Workshop, 4-7 days

M3 Television course

M7 Workshop, 2-3 days

M4 Classroom course

M8 Workshop, one day

iv. Time-of-year Preference

Y1 January-February

Y4 July-August

Y2 March-April

Y5 September-October

Y3 May-June

Y6 November-December

v. Time-of-day Preference

T1 Before 5:00 PM

T2 After 5:00 PM

vi. Preference for Day of Week

W1 Monday

W5 Friday

W2 Tuesday

W6 Saturday

W3 Wednesday

W7 Sunday

W4 Thursday

vii. Distance Preferred (in Miles)

D1 To weekly classes

D4 To workshop, 4-7 days

D2 To workshop, one

D5 To workshop, week+

D3 To workshop, 2-3 days

viii. Cost Preference

(Less than \$5 = 1; \$6-15 = 2; \$16-25 = 3; \$26-35 = 4; \$36-45 = 5; \$46-55 = 6;  
More than \$55 = 7)

C1 For course C4 For workshop, one week

C2 For workshop, one day C5 For workshop, two weeks

C3 For workshop, three days

ix. Barriers to Participation

B1 No time after work

B2 No replacement staff for time off

B3 Can't afford expenses

B4 Library policy discourages participation

B5 Too old

B6 Nothing available fits needs

B7 Programs too far away

B8 Past experience discouraging

B9 Don't know what's available

B10 Just not interested

x. Incentives to Participation

I1 Release from routine responsibilities

I2 Higher salary

I3 Special recognition

I4 Greater power in decision-making

I5 Encouragement from superiors

I6 Job satisfaction

I7 Fee rebate

I8 Release time

I9 Formal college credit

xi. Re: VCSC AA Program

V1 Awareness of program

V2 Inclination to participate