Management Preparation and Training of Department Heads in ARL Libraries

Stefanie A. Wittenbach, Sever M. Bordeianu, and Kristine Wycisk

This study analyzes the management preparation and training of department heads in ARL libraries. A survey was developed and sent to the heads of cataloging and reference departments in order to establish the number of formal management courses they have taken, the years of on-the-job management training prior to their first department head position, and the amount of continuing education they have pursued after becoming department heads. Libraries' management training requirements for filling department head positions and their support of ongoing training for managers were also analyzed.

The experience of many librarians, as recorded in the library literature, indicates that the library profession does not assign sufficient importance to management training for librarians. It is the responsibility of library administrators, library educators, and professional library organizations to ensure that managers at all levels are prepared to manage effectively their libraries. In his article "Library Managers: Can They Manage? Will They Lead?" Charles R. McClure describes the "crisis" in academic library management and its impact on the quality of library service:

... academic library managers have not provided leadership in the solution of societal information problems, nor have they effectively utilized innovative managerial techniques to administer the library. Instead, a hybrid between "concerned paternalism" and "crisis management" impedes the library from serving as a problem solver in society and limits the librarian from utilizing his/her full potential to improve the performance of the library.1

Are library managers prepared to meet the challenges facing them? While management and leadership talent may be difficult to identify, skills and methods in these areas can be taught and learned in various training settings.2 Management education and training opportunities are numerous and growing. Recent studies indicate that most library schools now offer management courses, and many have a required management component.3 Management workshops and continuing education programs for librarians are available at local, state, regional, and national levels. Recent surveys report that most academic libraries provide both paid time off and financial support for course work and workshop attendance.4 But are library managers—or librarians seeking management positions—taking advantage of management education and training opportunities? And are libraries requiring this prepara-

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tions of their managers? The present study investigates these issues in academic libraries at the department head level since it has been noted that one of the greatest deficiencies in research libraries is management training for middle managers. Whether or not managers apply these learned methods in the workplace is not the focus of this article.

REVIEW OF THE LITERATURE

The subject of managerial development for librarians is well covered in the literature. The topic has received substantially more attention since the late 1970s when the impact of organizational and technological change on the functions and roles of librarians and the need for enhanced managerial sophistication throughout library organizations became widely acknowledged in the profession. A recurrent theme, evident in the writings of McClure, Miriam H. Tees, and Deanna B. Marcum, among others, is that librarians lack the skills and techniques needed for peak managerial effectiveness and that more exposure to, and experience with, management issues is required of both potential and practicing library managers.

Researchers are generally concerned with the scope of existing management education and training opportunities, the adequacy of these programs, and the needs of libraries of all types that are or are not being met. There are marked differences of opinion as to what managerial skills need to be learned, where they should be learned, and when and how they might best be learned. These differences in part reflect differing job requirements in different types of libraries; individual librarians' backgrounds, attitudes, experiences, and managerial expertise; and the inherent strengths and weaknesses of the various education and training options.

John K. Mayeski and Marilyn J. Sharrock, in their 1979 survey of library directors and personnel administrators concerning the recruitment of academic library managers in 30 major research libraries, found that the majority of those interviewed thought that "managerial ability/experience" was both the most desired quality and the quality most lacking in recent applicants for middle- and upper-management positions. Asked what the profession should do, most respondents answered, "pressure library schools to create specific programs for research libraries and management of libraries" and "provide more management training and internal staff development programs, job enrichment, etc." In her 1983 study, Adeline Wilkes surveyed beginning academic librarians concerning the management functions they performed, their perceived abilities to perform these functions, and the experiences that provided the most useful preparation for their management roles. Responding to this third survey area, her respondents ranked on-the-job experience first, observing other managers second, and graduate courses in library schools third in importance, followed by a variety of other experiences including independent study, undergraduate study, graduate courses in business administration, and on-the-job training outside of libraries.

In 1978, Martha Bailey interviewed twenty-three middle managers and administrators in five ARL libraries to ascertain how well library schools were preparing librarians for middle management positions. She also examined job advertisements in several library and information science journals to determine the education and work experience required for such positions. She discovered that most managers thought that library school courses were of little use to them in their positions as middle managers largely because of the time lag (typically three to five years) between when they took their course work and when they first became managers. Conversely, most of the managers interviewed agreed that in-service training in supervision and management, workshops, and continuing education programs were extremely valuable. She also found that while most interviewees stressed the importance of previous work experience in obtaining a management
position and succeeding in it, the qualifications stated in the job advertisements were often vague in terms of years of experience and specific work experience requested.14

Bailey's study, as well as the others mentioned above, points out an additional concern in the literature of managerial development for librarians: the role of experience in determining managerial effectiveness. The study also underscores the lack of agreement in the profession as to the amount and type of experience most desirable for managers, and alludes to the undefined way in which the term experience is often used. In many articles and publications it is difficult to determine whether the experience mentioned, e.g., on-the-job, administrative, organizational, practical, work, etc., refers to management experience, professional experience, technical experience, or perhaps a combination of these. Despite the lack of clarity in the use of the term experience, much of the research points to its value in addition to management education and training. Seldom is experience viewed as sufficient in itself.15

BACKGROUND

Although all of these issues affect one another, managerial preparation and ongoing development are the focuses of the present study. Several hypotheses concerning training for academic library department heads, specifically within ARL libraries, were formulated:

1. Librarians become department heads primarily because of a high number of years of experience (and therefore a thorough working knowledge of operations) in a department, and only secondarily because of the amount of management training or on-the-job management experience they have.
2. Libraries do not include management training or on-the-job management experience as a prerequisite when hiring department heads.
3. Middle managers in libraries do not participate extensively in ongoing management training after becoming department heads, even though numerous training opportunities exist.
4. Libraries do not require department heads to participate in continuing education in management.

METHODOLOGY

A survey was developed that covered three areas: management education and training prior to the first department head position, ongoing management training following appointment as a department head, and current management training support and requirements for managers in ARL libraries. A 2-page survey consisting of 12 questions was mailed in August 1990 to 2 sample groups of middle managers: heads of cataloging departments and heads of reference departments, as identified in the American Library Directory, at the main branches of 105 ARL libraries. Middle managers as defined in this study are persons "above the first level of supervision and below the top level of management," specifically department heads.16 (A copy of the survey instrument is available from the authors.)

The survey categories for formal management training included: (1) management courses in library school; (2) other formal management courses (e.g., business school, M.B.A.); and (3) management workshops, seminars, or continuing education classes. On-the-job library management training included positions as acting department head, assistant department head, unit head or team leader, and other. Some positions listed by survey respondents in the "other" category included coordinator, section head, and staff supervisor. Continuing education management training included courses completed "while serving in department head positions." Survey respondents were given the following categories in which to report ongoing training: (1) formal courses; (2) workshops, seminars, continuing education courses; (3) management/administrative internships; and (4) other.

A total of 146 (70%) surveys were returned, 73 in each sample group. Of those, 67 survey forms in each group were filled out completely and therefore
had usable data (91.78% of those returned). The data collected from the 2 sample groups were then tabulated in a Lotus 1-2-3 file and uploaded to the Statistical Analysis System (SAS) for analysis. The t-test at the 95% confidence level was used to analyze pertinent portions of the data. In most cases, data are not reported for the number of courses or years indicated by less than 5% of the respondents (fewer than 4 people) in order to clarify the reading of the data. The low percentages were, however, included in the statistical analysis of the data. Maximum numbers of courses and years are reported to provide an indication of the range of the results.

Of the cataloging department heads (CDHs), 7 (11%) indicated that their first department head position was not in a cataloging department, while 19 (28%) of the reference department heads (RDHs) held their first department head position in a department other than reference. Cataloging department heads averaged 8.12 years of experience in a cataloging department before becoming department heads, with a maximum of 29 years, and reference department heads reported an average of 5.49 years in a reference department, with a maximum of 20 years. The CDHs reported an average of 8.84 years in department head positions, with a maximum of 29 years. The RDHs averaged 8.25 years as department heads, with a maximum of 34 years reported. Table 1 compares the mean number of courses taken, the mean number of years of on-the-job management training, and the mean number of years in the department for the two sample groups.

**FORMAL MANAGEMENT TRAINING PRIOR TO FIRST DEPARTMENT HEAD POSITION**

Cataloging department heads averaged 3.84 formal management courses, workshops, and seminars, while reference department heads averaged 2.49 courses. Twelve (18%) of the department heads in each sample group had taken no formal management training courses before their first department head position. CDHs averaged 4.76 years of on-the-job management training prior to becoming department head and RDHs averaged 1.71 years in training positions such as acting head, assistant head, or team leader. Seven (10%) CDHs and 21 (31%) RDHs had no prior on-the-job management experience (see table 1).

Of the CDHs who responded to the survey, 28 (42%) reported taking 1 manage-
ment course in library school, 12 (18%) took 2 courses, 4 (6%) had 3 courses, while 22 (33%) had no management course in library school. Sixty-four (96%) CDHs had no other formal management courses before becoming a department head, with 2 such courses being the highest number reported. Twenty-nine (43%) CDHs had taken no management workshops, seminars, etc., prior to their first department head position, while 10 (15%) had taken 1, 7 (10%) had 2, 6 (9%) had 3, 4 (6%) had 5, and 4 (6%) had taken 10. The highest number of workshops reported by CDHs was 20.

Of the RDHs who responded to the survey, 34 (51%) reported taking 1 management course in library school, 10 (15%) had 2 courses, and 21 (31%) had no management course as part of their library school training. Sixty-two (93%) RDHs had no other formal management courses, with 9 such courses being the highest number reported. Forty-one (61%) RDHs had no management workshops, seminars, etc., prior to becoming department head. Fourteen (21%) reported taking either 1 or 2 workshops. The highest number of workshops reported by RDHs was 10.

FORMAL ON-THE-JOB MANAGEMENT TRAINING PRIOR TO FIRST DEPARTMENT HEAD POSITION

Of the CDHs who reported prior on-the-job management training, 29 (43%) had 0.33 to 3 years’ experience as acting department head; 19 (28%) had 1–19 years as assistant department head; 42 (63%) had 1–13 years as a unit head or team leader; and 10 (15%) had 1–6 years in other administrative positions.

Of the RDHs who had on-the-job management training prior to their first department head position, 19 (28%) had 0.5 to 2 years as acting department head; 16 (24%) had 0.5 to 4 years as assistant department head; 12 (18%) had 1–6 years as a unit head or team leader; and 14 (21%) had 1–8 years of other on-the-job management experience.

A t-test for the significance of the difference between means was run. A significant difference exists between cataloging department heads and reference department heads in both years of on-the-job management training and total number of years worked in a similar department prior to becoming a department head. CDHs had nearly three times more years of on-the-job management training experience than did RDHs. In terms of years in the department before becoming a department head, CDHs averaged nearly one and a half times as many years as RDHs. There was, however, no significant difference observed between the two groups in the number of formal management training courses taken (see table 1).

LENGTH OF EXPERIENCE IN A DEPARTMENT

To test the hypothesis that the primary factor in becoming a department head is departmental, not managerial, experience, those department heads with 5.5 or fewer and ten or more years of experience in a similar department prior to becoming department head were analyzed for the amount of formal and on-the-job management training each had (see table 2). Of the respondents with 5.5 or fewer years of departmental experience, 23 cataloging department heads averaged 2.74 years, and 36 reference department heads averaged 2.34 years in a department before becoming department heads. The CDHs averaged 4.35 formal courses and 3.03 years of on-the-job training. The RDHs reported a mean of 2.5 formal management courses and 0.99 years of on-the-job management training.

The t-test revealed that the cataloging department heads with 5.5 or fewer years in a department had significantly more on-the-job training prior to becoming department heads than their reference counterparts. However, no significant difference existed between the number of formal management courses taken by CDHs and RDHs with 5.5 or fewer years of experience.

Of the respondents with 10 or more years in a similar department before becoming department head, 23 CDHs reported a mean of 5.22 formal courses and
### TABLE 2
LOW/HIGH YEARS OF EXPERIENCE IN DEPARTMENT BEFORE FIRST DEPARTMENT HEAD POSITION

<table>
<thead>
<tr>
<th></th>
<th>Cataloging Department Heads</th>
<th>Reference Department Heads</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>≤ 5.5 Years Prior Experience</strong></td>
<td><strong>≥ 10 Years Prior Experience</strong></td>
<td><strong>≤ 5.5 Years Prior Experience</strong></td>
</tr>
<tr>
<td>N = 23</td>
<td>N = 23</td>
<td>N = 36</td>
</tr>
<tr>
<td>Mean years = 2.74</td>
<td>Mean years = 14.36</td>
<td>Mean years = 2.34</td>
</tr>
<tr>
<td></td>
<td>Formal courses taken prior to first department head position</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.35</td>
<td>5.22</td>
</tr>
<tr>
<td></td>
<td>Number of courses per year of experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.59</td>
<td>0.36</td>
</tr>
<tr>
<td>On-the-job training prior to first department head position</td>
<td>3.03</td>
<td>7.86</td>
</tr>
<tr>
<td></td>
<td>Number of years on-the-job training per year of department experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.11</td>
<td>0.55</td>
</tr>
</tbody>
</table>

7.86 years of on-the-job training. Twelve RDHs averaged 2.46 formal management courses and 3.46 years of on-the-job management training. Cataloging department heads with more than 10 years of departmental experience had more than twice as many years of administrative experience prior to becoming department head as did the heads of reference with similar experience.

Prior to their first department head position, CDHs who had worked 5.5 or fewer years in a cataloging department took 4 times as many formal management courses in proportion to the length of time worked than those with ten or more years of similar experience. For RDHs, the difference was 5 times greater. The difference also holds true in the years of on-the-job management training prior to the first department head position for respondents with 5.5 or fewer years of experience in a similar department and those with more than 10 years. Of both CDHs and RDHs, those with 5.5 or fewer years of departmental experience had proportionally twice as many years in on-the-job management positions as those with 10 or more years of experience.

#### LIBRARY TRAINING REQUIREMENTS AT THE TIME OF HIRING

One of the hypotheses tested was that new department heads have little formal or on-the-job management training because libraries do not require it at the time of hiring. Survey respondents were asked whether management training or on-the-job management experience was required, preferred, or not required for their first department head position. Of the CDHs, 21 (31%) indicated that training was required. Thirteen (19%) reported that training was preferred, and 20 (30%) that it was not required. The numbers for RDHs provide even stronger support for the hypothesis: only 4 (6%) reported that training was required, while 22 (33%) indicated that training was preferred and 35 (52%) that it was not required (see table 3).

The mean number of management courses a person had taken prior to attaining his or her first department head position was then compared relative to
requirement, preference, and no requirement by applying a t-test. For both CDHs and RDHs, there was a significant difference between the mean number of courses taken by those respondents who indicated training was a required qualification and those who indicated it was not. Cataloging department heads took an average of 6.43 management courses, workshops, etc., when required and only 3 courses when training was not required. Reference department heads averaged 6.38 courses when training was required and only 1.37 courses when training was not required prior to attaining their first department head position. There was, however, no significant difference between the number of courses taken when such training was required as opposed to preferred.

The t-test was also used to compare the number of years of on-the-job training relative to requirement, preference, and no requirement. On the one hand, cataloging department heads had significantly more on-the-job training when management training or administrative experience was required than when it was either preferred or not required. For reference department heads, on the other hand, no significant difference existed in the number of years of on-the-job training based on whether such training was required, preferred, or not required. The results of this question for both formal and on-the-job training are shown in table 3.

**ONGOING MANAGEMENT TRAINING WHILE A DEPARTMENT HEAD**

To test the hypothesis that middle managers are not committed to participating in ongoing management training after becoming department heads, respondents were asked to list the number of continuing education management courses, workshops, seminars, etc. taken since becoming a department head. The cataloging department heads took an average of 6.01 management training sessions over the course of their careers as department heads (see table 1). The maximum number of courses taken was 48, with 6 (9%) CDHs not having any continuing education in the area of management training.

The reference department heads averaged 5.66 management training workshops, etc. since becoming department heads, with a maximum of 32 courses. Eleven (16%) RDHs did not take management training while in department head positions. The t-test revealed that
there was no significant difference between the two sample groups for the number of years as a department head or the number of ongoing management training courses taken. The average length in department head positions for cataloging and reference department heads is similar, as is the average number of continuing education management courses taken.

Are library managers—or librarians seeking management positions—taking advantage of management education and training opportunities?

Those respondents with 5.5 or fewer total years as a department head and those with 10 or more years as a department head were then analyzed for their commitment to ongoing management training. Of the respondents with 5.5 or fewer years as department heads, 28 CDHs averaged 2.64 years and 27 RDHs averaged 2.48 years in department head positions. CDHs took an average of 3.25 continuing education management courses and RDHs took an average of 2.93 courses. Of the respondents with 10 or more years in department head positions, 30 CDHs averaged 15.02 years of experience and took an average of 9.50 ongoing management training courses and workshops. Twenty-five RDHs averaged 15.08 years in department head positions and took an average of 8.80 continuing education management courses (see table 4). The t-test showed that for both CDHs and RDHs there is a significant difference in the total number of ongoing management training courses taken by those with high experience as compared to those with low experience. Department heads with 10 or more years of experience took more continuing education courses than those with 5.5 or fewer years as a department head. Interestingly enough, however, when comparing the number of courses taken per year of experience, newer department heads take proportionally twice as many courses as do experienced department heads.

### TABLE 4
LOW/HIGH EXPERIENCE IN DEPARTMENT HEAD POSITIONS

<table>
<thead>
<tr>
<th></th>
<th>Cataloging Department Heads</th>
<th>Reference Department Heads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤ 5.5 Years As Department Head</td>
<td>≥ 10 years as Department Head</td>
</tr>
<tr>
<td>N = 28</td>
<td>N = 30</td>
<td>N = 27</td>
</tr>
<tr>
<td>Mean years</td>
<td>2.64</td>
<td>Mean Years</td>
</tr>
<tr>
<td>Mean number of continuing education management courses</td>
<td>3.25</td>
<td>9.50</td>
</tr>
<tr>
<td>Number of courses per year as department head</td>
<td>1.23</td>
<td>0.63</td>
</tr>
</tbody>
</table>

The t-test showed that for both CDHs and RDHs there is a significant difference in the total number of ongoing management training courses taken by those with high experience as compared to those with low experience. Department heads with 10 or more years of experience took more continuing education courses than those with 5.5 or fewer years as a department head. Interestingly enough, however, when comparing the number of courses taken per year of experience, newer department heads take proportionally twice as many courses as do experienced department heads.

### CONTINUING EDUCATION REQUIREMENTS FOR LIBRARY MANAGERS

To test the hypothesis that libraries are not requiring department heads to participate in management continuing education, survey respondents were asked whether the courses taken while serving in department head positions were primarily required, encouraged, or voluntarily attended. Eleven (16%) CDHs and 9 (13%) RDHs indicated that the ongoing management training was required of them. Twenty-seven (40%) CDHs and 26 (39%) RDHs were encouraged to attend these sessions, and 44 (66%) respondents in each group reported that the training activities were voluntarily attended. Table 5 shows the mean number of ongoing management training courses, workshops, etc. attended by each group that indicated training was required, encouraged, or voluntary.
TABLE 5
ONGOING MANAGEMENT TRAINING REQUIREMENT

<table>
<thead>
<tr>
<th></th>
<th>Cataloging</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing training required</td>
<td>N = 11 (16.4%)</td>
<td>N = 9 (13.3%)</td>
</tr>
<tr>
<td>Mean number of courses taken</td>
<td>7.18</td>
<td>8.44</td>
</tr>
<tr>
<td>Ongoing training encouraged</td>
<td>N = 27 (40.3%)</td>
<td>N = 26 (38.8%)</td>
</tr>
<tr>
<td>Mean number of courses taken</td>
<td>5.52</td>
<td>6.58</td>
</tr>
<tr>
<td>Ongoing training voluntary</td>
<td>N = 44 (65.7%)</td>
<td>N = 44 (65.7%)</td>
</tr>
<tr>
<td>Mean number of courses taken</td>
<td>7.25</td>
<td>7.43</td>
</tr>
</tbody>
</table>

The mean number of courses was compared relative to whether such courses were required, encouraged, or voluntarily attended. The t-test revealed that for both CDHs and RDHs there was no significant difference between the number of courses taken, regardless of whether the courses were required, encouraged, or voluntarily attended.

Although this survey made no attempt to evaluate either the quality of the management training or the respondents’ effectiveness as department heads, the respondents were asked whether they had implemented any ideas from the courses, workshops, etc., in their work. Of the CDHs, 29 (43%) reported generally yes, 25 (37%) answered somewhat, and seven (10%) said generally no, they had not used ideas from their management training. Six (9%) CDHs did not answer the question. Twenty-five (37%) RDHs indicated that they had applied ideas to their work, 26 (39%) responded somewhat, and 4 (6%) answered that they generally had not used any ideas from their management training. Twelve (18%) RDHs did not answer the question.

CURRENT MANAGEMENT TRAINING AND SUPPORT IN ARL LIBRARIES

Survey respondents were asked to indicate whether the libraries in which they currently work support continuing education in management through financial assistance, with release time, or do not support it. Fifty-three (79%) of the cataloging department heads and 50 (75%) of the reference department heads reported that the library supports ongoing training with financial assistance.

Fifty-seven (85%) CDHs and 56 (84%) RDHs are supported with release time to attend management training. Two (3%) department heads in each group indicated that the library does not provide any support for continuing education in management.

While a majority of libraries provide some support for management training, very few require managers to participate in continuing education in order to upgrade their management skills. Of the CDHs, only 5 (8%) indicated that their libraries require continuing education of first-time managers, 2 (3%) of upper managers, 2 (3%) of department heads, and 8 (12%) of all managers. In contrast, 54 (81%) reported that their libraries do not require ongoing management training of anyone in managerial positions. Of the RDHs, only 2 (3%) reported that ongoing management training is required of first-time managers, 0 (2%) of upper managers, 0 of department heads, and 3 (5%) of all managers. Fifty-eight (87%) RDHs indicated that their libraries do not require ongoing management training of any managers.

SUMMARY OF THE FINDINGS AND CONCLUSIONS

Based on the findings of the study, the researchers could not conclusively accept hypothesis number one, that experience in the department rather than managerial preparation or training is the determining factor in a person’s becoming a library department head. An equal number of cataloging department heads came to the position with 5.5 or fewer years of departmental experience as did...
those with 10 or more years. Moreover, 3
times as many RDHs had 5.5 or fewer
years of experience in the department
prior to becoming department head as
those with 10 or more years. Of the de-
partment heads, those with less ex-
perience prior to their first department
head position had more management
courses and years of on-the-job manage-
ment experience per year worked than
those with more years of departmental
experience. Contrary to the researchers' 
preconceptions, length of time in the de-
partment and formal management train-
ing appear to have equal weight in
qualifying a librarian to become a de-
partment head. The difficulty in deter-
mining the value of experience in the
department versus managerial prepara-
tion is compounded by the fact that there
are no standards by which to judge ade-
quate, even minimum, levels of manage-
ment experience, training, or education
that qualify a person to be a middle
manager in a library setting.

While a majority of libraries provide
some support for management training,
very few require managers to participate
in continuing education in order to
upgrade their management skills.

This conclusion is supported in the
findings for the second Hypothesis: that
libraries, for the most part, do not re-
quire management training when hiring
department heads. In fact, libraries are
hiring individuals with lengthy de-
partmental experience and little or no
management training as well as those
with less departmental experience but
more formal management training. This
study found that 30% to 50% of library
department head positions did not re-
quire formal or on-the-job management
training as a qualification. Since signifi-
cantly more department heads had
taken courses when training was re-
quired than when it was not, more librar-
ies should require management training
as a qualification for filling department
head positions.

An interesting difference is again
found in comparing cataloging and ref-
erece departments. Cataloging depart-
ment heads averaged three times the
number of years of on-the-job training
prior to becoming department heads
than did their reference counterparts.
CDHs also averaged one and a half times
more years of departmental experience
than RDHs. Possible explanations for
these discrepancies are that (1) in a typi-
cal academic reference department
fewer opportunities exist to hold a posi-
tion as assistant head, unit head, or team
leader than in a typical cataloging de-
partment; and (2) turnover in reference
departments may be higher than in cat-
aloging. The latter assumption has not
been tested in this study.

Regarding ongoing management
training, both CDHs and RDHs with 5.5
or fewer years as department heads took
twice as many management courses,
workshops, etc., per year of experience
as did those with 10 or more years.
Though the level of ongoing manage-
ment training is higher than the re-
searchers initially expected, the adequacy
of that level could not be measured since
no standards exist to judge how much par-
ticipation in continuing management
training is sufficient. Upper library man-
agement, professional library organizations,
and library educators must set minimum
standards for continuing education in
management skills and techniques.

Concerning support for continuing
management training, the current situa-
tion in ARL libraries is that most libraries
provide ample support, both financially
and with release time, but very few re-
quire managers to participate in such
training. This study found that when li-
braries required management training
both prior to and during one's career as
da department head, participation in
training activities was higher. In the
cases when support alone was given,
participation was not so high as when
combined with a requirement. One
strategy that upper library administra-
tion can employ to increase participation
in managerial development is to make
management training a formal require-
ment for library managers at all levels. Another strategy is to make managerial effectiveness a librarywide priority and to recognize and reward good management. Libraries need to take the management crisis seriously by developing those with managerial talent and by removing ineffective managers and department heads from such positions, especially since many of today's middle managers will be tomorrow's upper administrators.

RECOMMENDATIONS FOR FURTHER RESEARCH
Since this study focused on management training and development of middle managers in academic research libraries, similar studies of other levels of management and in other types of libraries are needed. The present study found that 93% to 96% of department heads surveyed had no other formal management training beyond library school. Additional studies might examine the time lag between an individual's completing library school and assuming the first managerial position, and therefore the relevance of management training taken during library school. The study also showed that the number of continuing education courses taken per year of experience was higher for newer department heads than for their more experienced counterparts, suggesting that the number of courses taken during a career drops off over time. These findings present the opportunity to explore the patterns of continuing education of library department heads.

Management is a complex issue that is not limited in application to libraries. Librarians can look to other professions as well as to each other for new and innovative approaches to management issues. Economic and social conditions are forcing business leaders to reevaluate their management philosophies and techniques, and libraries are not immune to these external conditions. Libraries have the additional task of adjusting to rapid technological advances that require new strategies for managing both resources and personnel. Library administrators need to keep pace with the many developments that affect the quality and success of their institutions. Improved managerial preparation and training will enable library leaders to manage and lead libraries successfully in order to meet the challenges that lie ahead. Certainly the talent exists in the profession to provide such leadership.

REFERENCES AND NOTES
10. Ibid., p.153.
13. Ibid., p.328.