Perished or Published: The Fate of Presentations from the Ninth ACRL Conference

Joseph Fennewald

The scientific merit of the Ninth ACRL Conference is assessed by tracking the subsequent publication of its presentations. The results indicate that presentations in all formats—papers, panels, posters, and roundtables—achieved publication in refereed journals. Papers and panels were more likely to be published (18%) than posters and roundtables (8%). Overall, 13 percent of all presentations became refereed articles. In addition, eight percent of the presentations were based on prior publications. The rate of subsequent publication identified here is similar to that of a previous study of a library conference. However, it is much lower than rates reported for medical and scientific conferences. This may suggest that the ACRL conference resembles a technical, not a scientific, meeting with an emphasis on presenting best practices rather than disseminating research. This study should be replicated to determine if the publication of presentations is higher at other and future library conferences.



he conferences of the Association of College and Research Libraries (ACRL) provide librarians with opportunities

to explore new research topics, report on research in progress, or share completed research. As is true of other professional meetings, its roundtables, posters, panels, and paper sessions provide feedback that can enhance the presenter's research and contribute to its subsequent publication.¹ Presentation is often viewed as a preliminary step to publication, especially in a refereed journal.² Refereed journal publications are seen as "the foundation of scientific communication [and] broaden the research base upon which a scientific discipline is built."³ In addition to being important for the profession, the publication of presentations reflects favorably on the conference. One measure of a conference's scientific merit is the subsequent appearance in print of its presentations.⁴

As the "premier professional development experience" for librarians in academic and research institutions, the ACRL conference is a fine venue in which to examine the fate of presentations.⁵ This study focuses on the presentations at the Ninth ACRL National Conference held in April 1999. This conference was

Joseph Fennewald is Head Librarian at Penn State University, Hazleton Campus; e-mail: jaf23@ psu. edu. An earlier version of this study was presented at the Library Research Seminar III in Kansas City, October 2004.

chosen because sufficient time has now elapsed for its participants to publish their presentations. This research explores (1) the proportion of conference presentations published in refereed journals, (2) whether the presentation format predicts publication, and (3) the time from presentation to publication. It also compares these findings to what has been reported previously.

Literature Review

Studies have explored the fate of conference presentations in various disciplines. In 1999, J. E. Bird and M. D. Bird identified twenty-eight such studies, in addition to their own.⁶ Since then, there have been several others.⁷ This research reports that from 26 to 74 percent of conference presentations are published. (See table 1.)

Most of these studies have concentrated on presentations at scientific or medical conferences. There have been few studies of conference presentations in the social sciences or the humanities.

Only one study, that of M. Carl Drott, examined the fate of library conference presentations.⁸ He examined the papers presented at the 1987 meeting of the American Society of Information Science (ASIS). Based on a sample of these papers, he identified a "13% rate of journal article follow-up publication."9 As shown in table 1, compared to other studies, this is low. One reason may be that library conferences resemble technical conferences more than they do scientific conferences. Technical conferences provide practical advice to enhance services; scientific conferences are designed to disseminate research findings.10

Although Drott is the only previous study on the publication of presentations at a library conference, there are two noteworthy studies on the quality of research presented at ACRL conferences. The first study by Caroline Coughlin and Pamela Snelson applied scientific research criteria (presence of independent and dependent variables, quantifiable measures, one or more hypotheses, etc.) to the papers

TABLE 1 Publication Rate of Conference Presentations in Nine Disciplines					
Study	Discipline	Organization Founded	Conference Date(s)	Subsequent Publication	
Drott (1995)	Information Science	1937	1987	13%	
Maxwell (1981)	Oncology Nursing	1975	1977–79	26-56%	
Oseman (1989)	Radiation (Health Physics)	1956	1979	26%	
Seaton & Bermejo (1983)	Speech and Hearing	1919	1978	33%	
Weber, et al. (1998)	Emergency Medicine	1989	1991	45%	
Carroll, et al. (2003)*	Pediatrics	1929	1998–99	45%	
Bird & Bird (1999)	Marine Biology	1981	1989	51%	
Scherer, et al. (1994)*	Ophthalmology	1928	1988–89	66%	
Krzyzanowska, et al. (2003)	Oncology	1964	1989–98	74%	

*Carroll (2003) reports on a conference sponsored by four separate organizations. The earliest of these was founded in 1929. Scherer (1994) also reports on a conference co-sponsored by two groups with the earliest originating in 1928.

presented at the first ACRL conference in 1978.¹¹ This study was repeated by Pamela Snelson and S. Anita Talar in 1991 for papers given at the ACRL conferences in 1981, 1984, and 1986.¹² These two studies found that only 18 to 30 percent of the papers qualified as research by their criteria.

Hypotheses

This study examines the publication of presentations at the ACRL Ninth Conference. It reviews the subsequent publication rate of all presentations-papers, panels, posters, and roundtables-after five years. Several hypotheses were tested. First, the more rigorous the requirements for submitting a proposal, the likelier the presentation will be published. Thus, contributed papers are more likely to appear in print than are the contents of panels, posters, or roundtables. Second, because they are more developed, contributed papers are published sooner than work delivered in other formats. Paper proposals required a 250- to 500-word abstract and a completed paper required between 1,800 and 2,500 words. Panel proposals required a 250- to 500-word abstract with no paper. Poster proposals required a 250-word abstract. Roundtables were only asked to submit ideas for topics.13

Identifying the publication rate of presentations will enable us to compare the ACRL conference with the ASIS conference, as well as with medical and scientific conferences. In addition, examining the number of refereed publications will allow us to compare the research presented at the ACRL Ninth Conference with the first four ACRL conferences. The rate of publication for the ACRL conference was expected to be similar to the rate for the ASIS conference and within the estimated range of "acceptable" research presented at the 1978 through 1986 ACRL conferences. Likewise, it was anticipated that the ACRL rate would be lower than rates reported for medical and scientific conferences.

Methodology

In the 1999 conference, there were 401 speakers in 256 presentations, excluding invited and preconference speakers. A search in Library Literature Index, Information Science Abstracts Plus, and ERIC was conducted for each speaker. To include all possible publications, the search included variations on the presenter's name in the author index of each database (for example, J. Neal, J. G. Neal, James Neal, James G. Neal). Only publications appearing between 1994 and 2004 were included in the results. The five years prior to the conference were included because previous research indicated that some presentations are published before they are presented at a conference.¹⁴ Including five years after the conference likely captured all subsequent publications; research also has shown "that 90% or more of studies are published within four years of the meeting."15

To match publications with presentations, Robert Oseman's criteria from his study of the meetings of the Health Physics Society were adopted.16 Specifically, the author had to be one of the presenters and the key concept of the presentation had to appear in the publication's title or abstract. The key concept was generously interpreted. If the same words, phrases, or project titles appeared in both presentation and publication citation, it was considered a match. If more than one publication fit the criteria, each was recorded. Likewise, if more than one presenter appeared to have published on the key concept of the presentation, they were all recorded. Thus, it was possible for four members of a panel to individually publish on the topic presented, yielding four publications.

Panels are complex and require careful review. There were forty-one panels with 151 presenters, an average of 3.7 presenters per panel. Thus, a panel had three to four times as many potential opportunities to result in a publication. Each of the four panelists, for example, could have published work derived from his or her panel presentation. To reduce the potential for a disproportionate number of publications per panel session, the number of presentations given by a panel was considered. For each of the forty-one panels, its members and abstract were reviewed. If the panel consisted of committee, task force, or special project members reporting on their work, it was counted as a single presentation. Likewise, if the panelists were from the same institution and were presenting on a specific project, it was counted as one presentation. On the other hand, if the panelists represented different institutions and the abstract indicated different viewpoints, it was counted according to the number of institutions. For example, a four-member panel from two different institutions was counted as two presentations. Using this method, eighty-one panel presentations were identified.

Ninety-six speakers, or 24 percent, were not listed as published authors in any of the three databases. Another 157 speakers, or 39 percent, appeared in at least one, but their publications were clearly not related to their presentations. Finally, 148 presenters, or 37 percent, were found with 171 matching publications.¹⁷ Any publication that had the same key words or phrases was accepted, favoring more rather than fewer matches.

To reduce the potential bias in the identification of matches, three librarians were asked to independently assess the relevance of publication to presentation.18 Each librarian was given a list of presentations with matching publications. The presentation entry was taken from the program. It included the title, presenter(s), and, if available, the abstract. (Abstracts are not provided for poster sessions or roundtable discussions.) The related publications included similar information. For 67 percent of the presentation-publication pairs, all three of the librarians agreed that the publication was related or not related to the presentation. For 24 percent, one of the three librarians did not see a match between publication and presentation. For the remaining eight percent, only one saw a match. If two librarians identified a publication as relevant to the presentation, it was included in the analysis. This resulted in a final list of 122 speakers having 141 publications related to their conference presentation.

For these 141 publications, refereed publications were identified using *Ulrich's Directory of Periodicals*. In addition, the number of months between presentation and publication was calculated for every publication. When a presenter had multiple publications related to his or her presentation, the first one after the conference was selected when calculating the time to publication. Seasonal or quarterly publications were treated as published every three months. Winter was recorded as January, spring as April, summer as July, and fall as October.

Findings

Of the 256 presentations at the Ninth ACRL Conference, thirty-four, or 13 percent, were subsequently published in refereed journals. (See table 2.) By a small margin, panels were the most likely to result in a publication. Nineteen percent of the forty-one panels achieved one subsequent publication. Seventeen percent of the papers, 10 percent of the roundtables, and 6 percent of the posters achieved publication. The slightly high number of panel publications was attributed to the number of panelists.

Some proportion of all presentations was subsequently published in refereed journals. Panels and papers were more likely to be published than roundtables and posters. When the rate of panel publications is adjusted for the number of presentations per panel session, panels remain higher than papers, but only by two percent. Thus, the initial hypothesis was not supported. Contributed papers did not result in a greater number of publications than other formats. Yet, because of their more rigorous requirements, panels and papers are published more often than other format. Given the

TABLE 2 Ninth ACRL Postconference Refereed Publications per Presentation					
Presentations	Publications	Percentage	Average Time to Publication	Range	
54	9	17%	26 months	5–55 months	
81*	15	19%	17 months	1–51 months	
48	3	6%	19 months	11–26 months	
73	7	10%	22 months	2–45 months	
256	23	13%	21 months	1–55 months	
	Presentations 54 81* 48 73	CRL Postconference ReferencePresentationsPublications54981*15483737	CRL Postconference Refereed PublicationPresentationsPublicationsPercentage54917%81*1519%4836%73710%	CRL PostconFerence Refereed Publications per PreserPresentationsPublicationsPercentageAverage Time to Publication54917%26 months81*1519%17 months4836%19 months73710%22 months	

*There were forty-one panel sessions. Nineteen panels represented a committee or a single institution. Twenty-two panels had members from different institutions. Eighty-one presentations were given in the forty-one panel sessions.

preparation required of poster sessions, it was thought that poster presenters would be more likely to publish than discussion leaders. It is unclear why roundtables were published slightly more often than poster sessions, but, again, the difference is not large. These findings may be unique to this conference. It would be beneficial to replicate this study for other ACRL conferences.

As shown in table 2, the average time to refereed publication was twenty-one months after the conference. Papers took twenty-six months on average. Panels took seventeen months, posters nineteen months, and roundtables twenty-two months. This disproved the second hypothesis. Papers took the longest time to

		0			
TABLE 3					
Ninth ACRL Preconference Refereed					
Publications per Presentation					
Format	Presentations	Publications	Percentage		
Papers	54	8	15%		
Panels	81	4	5%		
Posters	48	4	8%		
Roundtables	73	5	7%		
Total	256	21	8%		

be published in refereed journals. Posters and roundtables were closer to the average, and panels took the least time. One explanation for papers taking the longest time may be that they alone were included in the conference proceedings. Completing the required 1,800- to 2,500page manuscript for the proceedings may have delayed its further development into a refereed article. Overall, the average of twenty-one months does not seem long in light of the length of the peer review process and the delays necessitated by a backlog of accepted articles. Indeed, it appears that many ACRL presentations were sent to a journal shortly after presentation with little or no revisions as a result of conference feedback. A survey of all pre-

> senters to determine if the publication was enhanced by the presentation would verify this.

> As reported in other studies, a number of related publications appeared *prior* to the conference. Twenty-one presentations, or eight percent, had prior refereed publications. (See table 3.) All eight of the

TABLE 4 Refereed Journals Publishing Ninth ACRL Presentations			
Journal	Frequency		
College & Research Libraries	13		
Journal of Library Administration	7		
Information Technology & Libraries	5		
Journal of Academic Librarianship	5		
The Reference Librarian	4		
Against the Grain	3		
Library Resources & Technical Services	2		
Science & Technology Libraries	2		

papers published before the conference appeared ten or fewer months before the event. This is important. The proposal deadline for papers was June 1998, ten months before the conference. Thus, these papers had not appeared in print at the time of submission (a requirement for submission). The number of prior publications was smaller for the other formats. Previous refereed publications were identified for four panels, four posters, and five roundtable presentations. Finding only four prior publications for panelists was unexpected. In creating a panel, one often recruits librarians with expertise on the topic reflected by a publication record. For this conference, only four of the 151 panelists had written a refereed article on the topic within the five years preceding the conference. (Another four panelists had previously written in a nonrefereed publication.) Given this low number, it is questionable whether past publication is a consideration in selecting panel members.

Combining the pre- and postconference publications, fifty-five sessions, or 21 percent, appeared in refereed journals. Most publications appeared in the "core" library journals.¹⁹ As one might expect, the largest number, thirteen

presentations, appeared in the ACRL publication, *College & Research Libraries*. Seven appeared in the *Journal of Library Administration*, five in *Information Technology and Libraries*, and five in the *Journal of Academic Librarianship*. Three publications appeared in *Against the Grain*, two in *Library Resources & Technical Services*, and two in *Science & Technology Libraries*. The remaining fourteen were published in fourteen separate titles. (See table 4.)

A number of presentations also were published as chapters in books or proceedings or in professional journals, technical reports, or other publications. As noted above, the Ninth Conference Proceedings published all conference papers, but not other formats.²⁰ Seventeen presentations had nonrefereed postconference publications, and seventeen preconference publi

TABLE 5Ninth ACRL Refereed and Nonrefereed Publications,Pre- and Postconference						
Format	Presentation	Refereed Postconference (%)	Refereed Preconfer- ence (%)	Non- refereed Postconfer- ence (%)	Non- refereed Preconfer- ence (%)	All Related Publications (%)
Papers	54	9	8	4	5	48
Panels	81	15	4	5	4	35
Posters	48	3	4	3	4	29
Roundtables	73	7	5	5	4	29
Total	256	13	8	7	7	35

cations appeared in such outlets. In total, 88 of the 258 presentations, or 35 percent, appeared as a publication, either before or after the conference, in a refereed or nonrefereed outlet. (See table 5.)

Discussion

Presentations differ from publications. "The task of preparation of a scientific or technical paper for presentation to a conference, or inclusion in a proceedings volume, is a different chore than that involved in writing for journal literature."21 Likewise, subsequent publications may be altered and enhanced by the conference experience.²² Asking speakers if they published their presentation, or if their presentation was based on previous publications, may provide different results than those found in this study. Yet, few studies have surveyed presenters.23 The methodology used for this study is more common. It also duplicates the search process of someone wanting to learn more about a presentation.

If we seek to confirm publication of a paper, armed with the author's name and a good idea of the subject described, we should be able to identify it amongst literature that lies within reasonable proximity to the core literature of that subject. If we still cannot find an item with comparative ease, then we can only conclude that, if published at all, it must be so remote from the mainstream literature of the subject that it can be ignored for practical purposes.²⁴

Previous studies have concentrated on the fate of conference papers (not other formats). This study found that 17 percent of the papers presented at the Ninth ACRL Conference were subsequently published in refereed journals. (See table 1.) This is similar to Drott's findings that only 13 percent of papers given at the ASIS conference were published. Drott consequently questioned the traditional model of scientific communication in which the presentation presumably precedes publication. Instead, he suggested that we should view the conference presentation as a "final product" in itself.²⁵ If we accept the presentation as the final product, however, much of the information presented at a conference is lost. As this study showed, presentations are seldom published in refereed journals, 21 percent at the conference studied here. This should be a concern for the profession. A presentation that is published reaches a wider audience than just conference attendees. As Scott Walter writes, "Presentations provide an opportunity to lay the groundwork for publication: articulating a significant question for research or practice; proposing an answer to that question; finding an audience interested in hearing your answer; and, effectively outlining your argument."26

Presuming the appearance of a paper in a refereed journal is indicative of its quality as research, we can compare the findings of this study with the level of research Coughlin and Snelson (1983) and Snelson and Talar (1991) reported for the first four ACRL conferences. Because these earlier studies looked only at papers, contributed papers given at the Ninth ACRL Conference alone are considered here. The level of research as identified by publication in a refereed journal was higher for the Ninth ACRL Conference, 32 percent (combining pre- and postconference refereed publications), than for the first four ACRL Conferences, 18 to 30 percent. Based on all these studies, it appears that less than one-third of the papers meet research standards. Snelson and Talar suggested that the ACRL conference is not the only outlet in which librarians present their research.27 Indeed, research is also presented at the Association for Library and Information Science Education Annual Conference, the Library Research Seminar, and the Special Libraries Association Annual Conference, to name only three. It would be interesting to examine

the fate of presentations given at these conferences to learn if they have higher rates of publication.

Conclusion

This study found that 13 percent of all presentations given at the Ninth ACRL Conference were subsequently published in refereed journals. Papers and panels were more likely to be published (18%) than posters or roundtables (8%). When one takes into account preconference as well as postconference publications, papers are the most likely to be published. Thus, the hypothesis, that the more rigorous the submission requirement, the likelier its publication, is supported in this study. In addition, this study found the time to publication was short, less than two years. Along with the number of related publications that appeared before the conference, this suggests that speakers present-and the audience hears-completed research not research in progress.

The proportion of presentations in refereed journals has been viewed as indicative of a conference's scientific merit. Studies of the fate of presentations at medical and scientific conferences found that between 26 and 74 percent achieve publication. These rates are much higher than the rate reported for ACRL (13%). When we consider preconference publications and subsequent publications, 21 percent of all presentations at the Ninth ACRL Conference were published in refereed journals. Equating a conference's merit with the subsequent publication rate of its presentations is based on a classic model of scientific communication. This model views conferences as a preliminary step to research publication. Some have guestioned whether the only value of a conference is the communication of research findings.²⁸ Conferences also provide opportunities for self-improvement, to exchange experiences, to discover new ideas and suggestions for improving practice, and to socialize with colleagues.²⁹ These are important, but the communication of new research is among the most important for any profession.

Presenting completed research or research in progress enhances the scientific merit of the conference. Publication of library presentations contributes to the scientific foundation of the profession and broadens the research base upon which librarianship is built.³⁰ Without publication, most of the information presented at the ACRL conferences is lost. Proceedings publish only papers and not other formats. The ACRL conference presentations do not appear in Library Literature Index, Information Science Abstracts Plus, or ERIC. To save this information and to build on our knowledge base, presenters should be encouraged to further develop their presentations into publications.

Notes

1. Robert Oseman, *Conferences and Their Literature: A Question of Value* (London: Library Association Publishing Limited, 1989), 49.

 Aaron E. Carroll et al., "Does Presentation Format at the Pediatric Academic Societies" Annual Meeting Predict Subsequent Publication?" *Pediatrics* 112, no. 6 (Dec. 2003): 1238–41; M.

^{2.} Krishna Subramanyam, *Scientific and Technical Information Resources* (New York: Marcel Dekker, 1981), 6; William D. Garvey, Nan Lin, and Carnot E. Nelson, "Communication in the Physical and Social Sciences," *Science* 170 (Dec. 11, 1970): 1168.

^{3.} J. E. Bird and M. D. Bird, "Do Peer-reviewed Journal Papers Result from Meeting Abstracts of the Biennial Conference on the Biology of Marine Mammals?" *Scientometrics* 46, no. 2 (1999): 295.

^{4.} Holly Herron and Robert E. Falcone, "Research Presented at AMTC Subsequent Publication in Indexed Journals," *Air Medical Journal* 12, no. 5 (May 1993): 119.

^{5.} Association of College and Research Libraries, "1998–99 Annual Report." Available online at http://www.ala.org/ala/acrl/aboutacrl/whatisacrl/whatacrl.htm.

^{6.} Bird and Bird, "Do Peer-reviewed Journal Papers Result from Meeting Abstracts," 288.

The Fate of Presentations from the Ninth ACRL Conference 525

Bhandari et al., "An Observational Study of Orthopaedic Abstracts and Subsequent Full-text Publications," *Journal of Bone and Joint Surgery* 84, no. 4 (2002): 615–21; Monika K. Krzyzanowska, Melania Pintilie, and Ian F. Tannock, "Factors Associated with Failure to Publish Large Randomized Trials Presented at an Oncology Meeting," *Journal of the American Medical Association* 290, No. 4 (July 23–30, 2003): 495–501; Mary B. Maxwell, "Published or Perished: What Becomes of Papers Presented at Oncology Nursing Society Congresses?" *Oncology Nursing Forum* 8, no. 3 (1981): 73–74; F. A. I. Riordan, "Do Presenters to Paediatric Meetings Get their Work Published?" *Archives of Disease in Childhood* 83, no. 6 (Dec. 2000): 524–26; D. Roy et al., "Publication Rates of Scientific Papers Presented at the Otorhinolarygological Research Society Meetings," *Clinical Otolaryngology and Allied Sciences* 26, no. 3 (June 2001): 253–56; Roberta W. Scherer, Kary Dickersin, and Patricia Langenberg, "Full Publication of Results Initially Presented in Abstracts," *Journal of the American Medical Association* 272, no. 2 (July 13, 1994): 158–162.

8. M. Carl Drott, "Reexamining the Role of Conference Papers in Scholarly Communication," *Journal of the American Society for Information Science* 46, no. 4 (1995): 299–305.

9. Ibid., 301.

10. John C. Rowley, "The Conference Literature: Savory or Acrid?" in *Conference Literature: Its Role in the Distribution of Information* (Marlton, N.J.: Learned Information, 1981), 11–20.

11. Caroline Coughlin and Pamela Snelson, "Searching for Research in ACRL Conference Papers," *Journal of Academic Librarianship* 9, no. 1 (Mar. 1983): 21–26.

12. Pamela Snelson and S. Anita Talar, "Content Analysis of ACRL Conference Papers," College & Research Libraries 52, no. 5 (Sept. 1991): 466–72.

13. Association of College and Research Libraries, "Call for Participation," College & Research Libraries News 59, no. 1 (Jan. 1998): insert.

14. Bird and Bird, "Do Peer-reviewed Journal Papers Result from Meeting Abstracts," 289.

15. Carroll et al., "Does Presentation Format at the Pediatric Academic Societies' Annual Meeting Predict Subsequent Publication?" 1240.

16. Oseman, Conferences and Their Literature, 49–51.

17. This count does not take into consideration the conference proceedings. The proceedings of the Ninth ACRL conference are not indexed by the databases used in this study. They appear in print and on the ACRL's Web site. The print version of the proceedings has fifty-one papers; the Web site has these and one additional paper.

18. My appreciation for the time and work done by Russell Hall, Penn State New Kensington; Shannon Richie, Penn State Hazleton; and, Robyn Rosenberg, Penn State Great Valley.

19. Lois Buttlar, "Analyzing the Library Periodical Literature: Content and Authorship," *College* & *Research Libraries* 52, no. 1 (Jan. 1991): 38–53.

20. As one reviewer noted, many speakers may view the conference proceedings as sufficient and would not rewrite them for a journal.

21. Rowley, "The Conference Literature," 13.

22. Oseman, Conferences and Their Literature, 6.

23. A. J. Agustsdottir et al., "Publication of Patient-related Oncology Nursing Research," Oncology Nursing Forum 22, no. 5 (1995): 827–30; Mary B. Maxwell, "Published or Perished"; William H. Seaton and John Bermejo, "Journal Publication Fate of Convention Presentations," International Journal of Rehabilitation Research 6, no. 2, suppl. 3 (1983): 27–39.

24. Oseman, Conferences and Their Literature, 51.

25. Drott, "Reexamining the Role of Conference Papers in Scholarly Communication," 303.

26. Scott Walter, "Writing from Presentations," in *How to Get Published in LIS Journals: A Practical Guide*. Available online at http://www.elsevier.com/framework_products/pro.

27. Snelson and Talar, "Content Analysis of ACRL Conference Papers," 471.

28. Drott, "Reexamining the Role of Conference Papers in Scholarly Communication," 299–305.

29. Ibid., 302; Clausen and Wormell, "A Bibliometric Analysis of IOLIM Conferences 1977–1999," 158.

30. Bird and Bird, "Do Peer-reviewed Journal Papers Result from Meeting Abstracts," 295.

Is Technology Overwhelming You?

ALA's New e-Learning Services Can Help You Battle *Your* Giants.

Through an arrangement with the Southeast Florida Library Information Network (SEFLIN), ALA members can purchase highquality **technology training** and **management** courses from Element K[®] at affordable prices.

All courses are Web-based, self-paced, and easy to access using a personal computer and the Internet. More than 1,500 courses are available! Course Areas Available:

Office Productivity
Business Fundamentals
Computer-related Topics

For more information visit www.libraryelearning.org/ala

