

## **ACRL Science and Technology Section Continuing Education Survey 2009 STS Continuing Education Committee**

Report Compiled by Kara Whatley, New York University  
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### **About the Survey**

The Continuing Education Committee of the Association of College & Research Libraries (ACRL) Science and Technology Section (STS) conducts a biennial survey to identify the continuing education interest of its constituents. In Fall 2009, the survey was distributed through STS-L, the discussion list of the Science and Technology Section of ACRL; SLA-DST, the discussion list of the Science-Technology Division of SLA; CHMINF-L, Chemical Information Sources Discussion List; and ELD-L, the discussion list for members of the Engineering Libraries Division (ELD) of the American Society for Engineering Education (ASEE). A total of 111 responses were received, significantly less than the 375 responses received in 2007 when an incentive for completing the survey was offered. The results of this survey are presented in this report. The full survey, including all answer options, is appended to this report.

The 2009 survey was prepared by the STS Continuing Education Committee. Analysis of the data collected and the preparation of this report were done by Kara Whatley. Questions about this survey may be directed to Kara Whatley, [kara.whatley@nyu.edu](mailto:kara.whatley@nyu.edu).

### **Results Summary**

Based on this sample our typical science and technology librarian is a female who holds an undergraduate or graduate degree in a science, applied science, or engineering field; has been a librarian for ten or fewer years; and works in an academic library.

- 78.7% of respondents were female
- 57.6% of respondents hold an undergraduate or graduate degree in the sciences
- 50.9% of respondents graduated from library school 10 or fewer years ago
- 93.7% of respondents work in an academic library

Our typical science and technology librarian is also a member of ALA, ACRL, and STS. She may also be a member of SLA, ASEE, and various other library associations, including her state library association.

- 84.3% of respondents were members of ALA
- 79.6% of respondents were members of ACRL
- 73.1% of respondents were members of STS
- 25.9% of respondents were members of SLA (includes appropriate "Other" responses)
- 25.9% of respondents were members of ASEE

This typical librarian prefers to receive continuing education via online information, but she is also open to in person continuing education at a workshop, preconference, or traditional credit course.

- 72.1% of respondents prefer web-based information
- 36.% of respondents prefer distance education credit courses
- 24.3% of respondents prefer email tutorials
- 59.5% of respondents prefer national conferences/preconferences
- 47.7% of respondents prefer in-person workshops
- 10.8% of respondents prefer traditional credit courses

The typical science and technology librarian responding to this survey is most interested in the learning more about the future roles for libraries and librarianship. She also wants to learn more about the future of reference technologies and about how to further her collaborations with faculty and students. This librarian also sees a need to learn more about library instruction, assessment, and surveys; specifically assessment related to the evaluation of existing services and the development of new services. She is equally interested in keeping current with technology and advancing her skills in the specific subject areas in which she works.

- On a scale of 1-5, Future Roles for Libraries and Librarianship: 3.86
- On a scale of 1-5, Future of Reference Technologies: 3.74
- On a scale of 1-5, Collaboration with Faculty and Students: 3.73
- On a scale of 1-5, Library Instruction, Assessment and Surveys: 3.71
- On a scale of 1-5, Evaluating Existing Services/Developing New Services: 3.67
- On a scale of 1-5, Keeping Current with Technology: 3.65
- On a scale of 1-5, Specific Subject Area Librarianship – Advanced: 3.65

## **Detailed Results**

### **Q1. Where do you work?**

<u>Answer Options:</u>	<u>Response Percent</u>	<u>Response Count</u>
Academic library	93.7%	104
Corporate library	0.0%	0
Government library	2.7%	3
Public library	0.9%	1
Other type of library or library organization	0.0%	0
Do not work in a library	2.7%	3
	answered question	111
	skipped question	0

## Q2. Years since receiving your master's degree in library science

<u>Answer Options:</u>	<u>Response Percent</u>	<u>Response Count</u>
Less than 3	20.0%	22
3-5 years	12.7%	14
5-10 years	18.2%	20
More than 10 years	49.1%	54
	answered question	110
	skipped question	1

## Q3. What is your background in the sciences, applied sciences, or engineering?

<u>Answer Options:</u>	<u>Response Percent</u>	<u>Response Count</u>
Some undergraduate study	24.3%	27
Undergraduate degree(s)	27.9%	31
Some graduate study	4.5%	5
Masters degree(s)	21.6%	24
Ph.d.(s)	8.1%	9
Continuing education	8.1%	9
Non-librarian work experience	16.2%	18
Other	5.4%	6
None of the above	11.7%	13
	answered question	111
	skipped question	0

## Q4. What is your gender identity?

<u>Answer Options:</u>	<u>Response Percent</u>	<u>Response Count</u>
female	78.7%	85
genderqueer	0.9%	1
male	20.4%	22
transgender	0.0%	0
	answered question	108
	skipped question	3

**Q5. What professional organizations do you belong to?**

<u>Answer Options:</u>	<u>Response Percent</u>	<u>Response Count</u>
ALA	84.3%	91
ACRL	79.6%	86
STS	73.1%	79
ACS CID	1.9%	2
ASEE ELD	25.9%	28
SLA STD	16.7%	18
Other (please specify)	36.1%	39
	answered question	108
	skipped question	3

**Q6. How would you prefer to receive continuing education?**

<u>Answer Options:</u>	<u>Response Percent</u>	<u>Response Count</u>
Credit courses – distance	36.0%	40
Credit courses traditional	10.8%	12
E-mail tutorials	24.3%	27
In-person workshops	47.7%	53
Mentors	19.8%	22
National conference/Pre-conference workshops	59.5%	66
Teleconferences	43.2%	48
Web based information	72.1%	80
Other (please specify)	8.1%	9
	answered question	111
	skipped question	0

**Q. 7 On a scale of 1-5 with 1 being "least interested" and 5 "very interested," please indicate how interested you are in learning more about the following topics.**

<u>Answer Options:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N/A</u>	<u>Rating Average</u>	<u>Response Count</u>
Advocacy, generating awareness of library services	15	20	36	27	6	0	2.89	104
Evaluating existing services/developing new services	2	12	26	44	21	0	3.67	105
Managing and utilizing usage statistics	3	19	32	34	16	1	3.39	105
							answered question	105
							skipped question	6

**Q8. On a scale of 1-5 with 1 being "least interested" and 5 "very interested," please indicate how interested you are in learning more about the following topics related to Librarianship.**

<u>Answer Options:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N/A</u>	<u>Rating Average</u>	<u>Response Count</u>
Building and utilizing institutional repositories	9	30	41	19	5	0	2.82	104
Collection development, print and electronic resources	4	11	39	34	16	0	3.45	104
Improving document delivery services	21	41	26	9	2	3	2.29	102
Library instruction, assessment and surveys	3	13	19	45	24	0	3.71	104
Managing archival rights	28	32	28	8	3	4	2.25	103
Patent and trademark sources, searching, etc.	18	29	34	15	7	0	2.65	103
Specific subject area librarianship – introductory	22	12	32	17	17	3	2.95	103
Specific subject area librarianship - advanced	9	11	21	28	34	1	3.65	104
							answered question	105
							skipped question	6

**Q9. On a scale of 1-5 with 1 being "least interested" and 5 "very interested," please indicate how interested you are in learning more about the following topics related to Technology.**

<u>Answer Options:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N/A</u>	<u>Rating Average</u>	<u>Response Count</u>
Designing Web tutorials	14	16	39	25	10	0	3.01	104
Enhancing access to full text through tools like Google Scholar	8	23	35	34	5	0	3.05	105
Federated searching	11	30	38	21	3	0	2.76	103
Informatics	8	22	37	20	14	2	3.1	103
Invisible web	5	25	31	32	10	1	3.17	104
Keeping current with technology	4	11	29	33	27	0	3.65	104
							answered question	105
							skipped question	6

**Q10. On a scale of 1-5 with 1 being "least interested" and 5 "very interested," please indicate how interested you are in learning more about the following topics related to Changing Times.**

<u>Answer Options:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N/A</u>	<u>Rating Average</u>	<u>Response Count</u>
Alternative publishing models and the cost of serials	4	12	33	39	17	0	3.5	105
Copyright in the electronic age	6	14	37	35	11	1	3.3	104
Future of reference technologies	0	12	22	51	19	0	3.74	104
Future roles for libraries and librarianship	2	6	24	43	28	0	3.86	103
Library as place	9	15	36	33	10	0	3.19	103
							answered question	105
							skipped question	6

**Q11. On a scale of 1-5 with 1 being "least interested" and 5 "very interested," please indicate how interested you are in learning more about the following topics related to Professional Development.**

<u>Answer Options:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N/A</u>	<u>Rating Average</u>	<u>Response Count</u>
Collaboration with faculty and students	3	11	24	39	27	0	3.73	104
Consortial collaboration	7	21	39	27	9	0	3.1	103
Management skills, budgeting, personnel recruiting, training, and evaluation, etc.	18	22	29	24	10	0	2.86	103
Professional advancement	15	18	30	29	12	0	3.05	104
							answered question	104
							skipped question	7

**Q12. Did rating the pre-selected topics jog your memory about other topics of interest? If so, please describe.**

<u>Answer Options:</u>	<u>Response Count</u>
answered question	19
skipped question	19
	92

**Q13. Do you have any other suggestions for ACRL, ACS, ASEE or SLA regarding their continuing education opportunities? If so, please describe.**

<u>Answer Options:</u>	<u>Response Count</u>
answered question	19
skipped question	92

### **Appendix I: STS Continuing Education Survey 2009 Questions**

2009 STS Continuing Education Survey  
Tell us about yourself.

1. Where do you work?
  - Academic library
  - Corporate library
  - Government library
  - Public library
  - Other type of library or library organization
  - Do not work in a library
2. Years since receiving your master's degree in library science
  - Less than 3
  - 3-5 years
  - 5-10 years
  - More than 10 years
3. What is your background in the sciences, applied sciences, or engineering?
  - Some undergraduate study
  - Undergraduate degree(s)
  - Some graduate study
  - Masters degree(s)
  - Ph.D.(s)

Continuing education  
Non-librarian work experience  
Other  
None of the above

4. What is your gender identity?

female  
genderqueer  
male  
transgender

5. What professional organizations do you belong to? (Mark all that apply)

ALA  
ACRL  
STS  
ASEE ELD  
SLA STD  
ACS CID  
Other (please specify)

6. How would you prefer to receive continuing education? (Mark all that apply)

Credit courses - distance  
Credit courses - traditional  
E-mail tutorials  
In-person workshops  
Mentors  
National conference/Pre-conference workshops  
Webconferences or teleconferences  
Web based information  
Other (please specify)

7..On a scale of 1-5 with 1 being "least interested" and 5 "very interested" please indicate how interested you are in learning more about the following topics ["No answer" or "not applicable" option is on the far right, beyond "very interested."]

- Assessment
  - Advocacy, generating awareness of library services
  - Evaluating existing services/developing new services
  - Managing and utilizing usage statistics
- Librarianship
  - Building and utilizing institutional repositories
  - Collection development, print and electronic resources
  - Improving document delivery services
  - Library instruction, assessment and surveys
  - Managing archival rights
  - Patent and trademark sources, searching, etc.
  - Specific subject area librarianship – introductory
  - Specific subject area librarianship - advanced



- Technology
  - Designing Web tutorials
  - Enhancing access to full text through Google Scholar
  - Federated searching
  - Informatics
  - Invisible web
  - Keeping current with technology
- Changing times
  - Alternative publishing models and the cost of serials
  - Copyright in the electronic age
  - Future of reference technologies
  - Future roles for libraries and librarianship
  - Library as place
- Professional Development
  - Collaboration with faculty and students
  - Consortial collaboration
  - Management skills, budgeting, personnel recruiting, training, and evaluation, etc.
  - Professional advancement

8. Did rating the pre-selected topics jog your memory about other topics of interest? If so, please describe: [text box]

9. Do you have any other suggestions for ACRL, ACS, ASEE or SLA regarding their continuing education opportunities? Please describe. [text box]

**Appendix II: Write-in Responses**

**Q5. What professional organizations do you belong to?**

<u>Respondents</u>	<u>Response</u>	<u>Other (please specify)</u>
1	11/03/2009	SLA DBIO
2	11/03/2009	mla
3	11/03/2009	American Physical Society
4	11/03/2009	PaLA, BCLA, Del Valley ACRL
5	11/03/2009	SLA PAM
6	11/03/2009	GSIS, SLA PAM
7	11/03/2009	MAGERT
8	11/03/2009	TXLA
9	11/03/2009	SLA PAM, SLA ENG Medical Library Association, Special Libraries
10	11/03/2009	Association
11	11/03/2009	SLA PAM
12	11/03/2009	ALA RUSA

13 11/03/2009 USAIN  
 14 11/03/2009 carl  
 15 11/03/2009 SLA PAM  
 16 11/03/2009 ACS CINF  
 17 11/03/2009 California Academic & Research Libraries  
 OCUA, OLA, CACUL, CLA (Canadian Library  
 organizations)  
 18 11/03/2009 USAIN, AgNIC  
 19 11/03/2009 CBPQ  
 20 11/03/2009 MLA  
 21 11/03/2009 ASEE, GSIS, MPLA  
 22 11/03/2009 AAAS, Sigma Xi  
 23 11/03/2009 State library association  
 24 11/04/2009 MLA  
 25 11/04/2009 AACP  
 26 11/05/2009 SLA, NASIG, ASIST, other ALA divisions  
 27 11/05/2009 sla PAM  
 28 11/23/2009 MPLA, State Association  
 29 11/23/2009 ACRL-IS, ALA-SRRT  
 30 11/30/2009 USAIN  
 ACRL EBSS, AAAS, Society for Scholarly  
 Publishing  
 31 11/30/2009 GSIS  
 32 11/30/2009 none  
 33 11/30/2009 GSIS, AESS  
 34 11/30/2009 ASIST ACM ALISE  
 35 12/01/2009 ASIST  
 36 12/01/2009 SLA PAM  
 37 12/01/2009 Canadian Library Assoc  
 38 12/01/2009

**Q6. How would you prefer to receive continuing education?**

<u>Respondents</u>	<u>Response</u> <u>Date</u>	<u>Other (please specify)</u>
	11/03/200	
1	9	Web based tutorial; Virtual Conference
	11/03/200	
2	9	web based courses, non-credit courses
	11/03/200	
3	9	sessions during ALA -- not pre conf
	11/03/200	Acrobat Connect is good. Also, I really like conference
4	9	sessions as a way to keep informed.
	11/03/200	Incorporated as part of hte regular conference programming
5	9	- isn't that why I go to a conference?
	11/03/200	
6	9	webbinar like Knovel does
7	11/03/200	reading literature in the disciplines

	9	
	11/17/200	
8	9	Webinars, if not encompassed in web-based info
	12/01/200	
9	9	webinar

**Q12. Did rating the pre-selected topics jog your memory about other topics of interest? If so, please describe.**

<u>Respondents</u>	<u>Response Date</u>	<u>Response Text</u>
1	10/30/2009	Scholarly communication
2	11/03/2009	nope, nothing sprang immediately to mind
3	11/03/2009	Web Usability and Web Metrics
4	11/03/2009	I would like to know about librarians' role in data curation, especially in the sciences.
5	11/03/2009	buying green library furniture and such
6	11/03/2009	I am interested in facilitating interdisciplinary research using library resources that are not federated.
7	11/03/2009	instruction for graduate students - thesis students; course masters (older students, often internationally trained). Short Courses - 2-3 days - like engineers do (they're usually M - F)
8	11/03/2009	My interest would depend upon the scope and focus of the topics described. There are whole areas of the application of technology to libraries that were excluded from the list of topics. I think that you are missing the point of where the profession needs to be.
9	11/03/2009	promoting change throughout the library organization (takes more than one); getting the rest of the staff on-board with change; why your job description doesn't matter all that much
10	11/03/2009	Emerging technologies - changing/moving target & keeping up with things is essential; also each library/institution has different policies about what can be used - particularly interested in Open Source technologies and examples of how they have been applied to different functions
11	11/03/2009	"How to shake some sense into the average faculty member, graduate student, and undergraduate student to make them realize what a vast trove of resources and services their local academic library provides them."
12	11/03/2009	No
13	11/04/2009	-

14	11/04/2009	No it covers the subjects I'm interested in. As a new subject-specific science librarian, I'm hoping to build up more
15	11/04/2009	knowledge in chemistry, physics, geology, environmental science, etc. Part of that is to maintain a better collection.
16	11/05/2009	Librarian/Faculty partnerships
17	11/23/2009	collaboration with faculty/researchers to extend scientific literacy to a broader swath of the population
18	11/30/2009	e-science
19	11/30/2009	Data curation is a critical area for STS librarians now; it should be included in the survey.

**Q13. Do you have any other suggestions for ACRL, ACS, ASEE or SLA regarding their continuing education opportunities? If so, please describe.**

<u>Respondents</u>	<u>Response Date</u>	<u>Response Text</u>
1	10/30/2009	Continuing education opportunities should be free for members especially in these economic times. Put together some joint things, developed across the groups, that could be offered to all (or at least most) of the groups. For instance, a copyright or author rights workshop
2	11/03/2009	might play well to librarians from all those groups.
3	11/03/2009	No, but I do not see the relationship between the substance of the survey(CE programs) and the question about gender. HOw about some jointly offered ed opportunities. e.g. with
4	11/03/2009	ASEE, CMS vendors; publishers, Engineering Education groups; Professional Engineering Societies Again, most of my interests and involvements are outside of library organizations. While organizations like CNI may not offer continuing education, they are critical to staying up to date with where things are going. The approach here
5	11/03/2009	seems to be on what I would call, "remedial education." continuing education needs vary by size of the organization; many of the programs seem geared toward people in ARL size libraries where you might actually have someone who is the copyright librarian (for example). How can smaller
6	11/03/2009	institutions, where a person wears multiple hats keep up with all the expectations
7	11/03/2009	for Web-based or online CE maybe partner with USAIN, AgNIC, SLA or other similar organizations
8	11/03/2009	Need flexibility - webinars are too rigid if only available at a given time, etc.
9	11/03/2009	I'm most likely to learn about continuing ed. opportunities via e-mails -- I hope ACRL and ASEE/ELD will be sure to use e-

mails to advertise. Would be interested in Web-based (credit or non-credit) continuing ed. opportunities.

10 11/04/2009 I was not aware that ACRL had continuing education opportunities. In fact, I've been told they do not.

11 11/04/2009 -

12 11/04/2009 No

13 11/04/2009 The initiatives sounds good. Webinars, remote trainings seem appropriate for this time, considering restricted funding for travel.

14 11/05/2009 Electronic destruction of Libraries. What's the balance for good librarianship and the opportunity to make room for tables and meeting places.

15 11/20/2009 I could use subject training as a librarian who covers all the sciences. (Perhaps aimed at science librarians at small university's thus must have a broad knowledge base). Naturally, most people in this situation would not have backgrounds in all areas, & I think others like myself probably have very little academic training in the sciences. In small universities often anyone willing to take on the sciences gets put in the position, most people with an academic background in the sciences seem to go to a place where they can specialize in their expertise.

16 11/23/2009 Remote access is best for lower cost, bad budget times...

17 11/30/2009 Preconferences on PubMed, IEEE and SciFinder Scholar Please seek out people who can lead and then schedule data curation tutorials and workshops at your conferences and annual meetings.

18 11/30/2009 need some sessions on change management and similar topics for managers in libraries - not just resource or skill based learning but sessions that support managers and enhancing the skills/knowledge/abilities of library staff

19 12/01/2009