Engineering Libraries

Division Newsletter

September 2002

Chair's Message

A warm welcome to new and old members! I am pleased to welcome a large number of new members to the Division this year, and I hope new and old alike will find ample opportunity to get involved in professional issues through ELD. As this newsletter issue illustrates, our members are active. You are invited and encouraged to contact committee or taskforce chairs and volunteer!

Goals for this year include working with the Extended Executive Committee to support initiatives that maximize member participation. We will put a Special Interest Group model in place (look for an upcoming announcement for an Information Literacy SIG). A new Bylaws Review Taskforce will look at our voting procedures, to enable all members to cast a ballot, not just those at the conference. Another goal is to build on the already high quality of all that we do. A third focus is to promote the Division's leadership role in the profession, through support of task force initiatives and our liaison activities. Please contact me with your ideas to help us reach these goals.

I'd like to take this opportunity to single out some people who served the Division with distinction last year. First, Past Chair, **Mel DeSart**, who supported new initiatives, including the Reference 24x7 task force, and an ELD logo contest, was very helpful with conference planning, built up sponsorship of the Division, and, along with past-Membership Chair, **Glee Willis**, spearheaded a very successful membership campaign. Next, **Glee Willis,** who is stepping down after serving the Division for so many years as Membership Chair. Over the years, Glee wrote many letters on behalf of the Division, inviting and welcoming new members. She worked hard to highlight and involve new members in Division activities, both at the Annual Conference and throughout the year. Glee is largely responsible for the often noted, and much appreciated, welcoming feeling new members find in ELD.

Thanks to all the ELD members who contributed to the Annual Conference. This Program Chair found members of the Executive Board always ready with help and ideas: **Mel, Larry Thompson, Suzanne Weiner, Leslie Reynolds**. Director **Suzanne Weiner** planned a wonderful Banquet at the Hotel InterContinental. **Glee Willis** organized a great new members reception. Our technical session moderators came up with interesting session topics and speakers, and dealt courageously with large crowds, small rooms, and the unexpected: **John Saylor**, **Godlind Johnson**, **Linda Martinez**, **Kate Thomes**, **Jill Powell**, **Jay Bhatt**, **Andy Shimp, Sandy Lewis**, **Bill Mischo.** All the fabulous speakers, including ELD members: **Frank Elliott**, **Kimberly Douglas**, **Kate Thomes**, **Bill Mischo, Cecilia Mullen, Linda Martinez, Karen Andrews and Christy Hightower,** and our poster session presenters: **Janardan Kulkarni, Godlind Johnson, Tracy Gabridge, Jean McKenzie.** My apologies if I missed the names of anyone in this list.

We appreciate the support given the Division by a number of corporate sponsors. **Elsevier Engineering Information Inc**., sponsored our annual Banquet - delicious food, drink (and games!); **IEEE**, provided the great eats at our New Members Reception. We are grateful to both **Cambridge Scientific Abstracts,** and to **INSPEC**, who underwrote the costs of our technical sessions, including equipment and Internet connections. **ISI Researchsoft**, chartered a bus for the participants in the EndNote Workshop. This generous corporate support makes many of our events possible.

Looking forward, the Executive Committee has appointed **Amy Van Epps** to serve as Membership Chair, and **Mel DeSart**, has been chosen to lead a Bylaws Review task force. Expect to hear from them in the upcoming months.

Feel free to contact me or other members of the Executive Committee with your comments, questions, and good ideas!

Gretchen Sneff
Chair, ELD
gsneff@temple.edu

News From the Program Chair
Nashville News!!

Planning is well underway for the ELD portion of the 2003 ASEE Annual Conference and Exposition to be held in Nashville, June 22 –25.

The topics to be covered by ELD include:

Information Literacy / Library Instruction
Measuring / Assessing / Creating Web Pages
Licensing / Big Deal / Business Models of Publishers
Marketing / Outreach
Course Management Systems and the Engineering Librarian
General Technical Papers Session

Details on these topics have been sent out via the ELDNET-L listserv. If you have questions about any of them, please contact me: larryt@vt.edu.

Some of you may have an idea for a presentation, but the topic doesn't fit any of the first five sessions in the list. Don't despair! The General Technical Papers Session was set up for just such an occasion. It's a venue for great ideas and great papers that don't fit the topics of the other sessions.

Please remember the deadline for abstract submission: **October 31, 2002**. If your abstract is not submitted to the CAPS system by that date, you cannot present. This is an ASEE requirement, and ELD cannot change it. Unlike previous years, **this deadline applies to poster presentations as well as paper presentations**. If there's a possibility that you may want to present a poster session, be sure to submit an abstract. You can always decide later not to present the poster session, but if you don't submit an abstract by October 31, you cannot decide later that you do want to present a poster session. Please go to the following site for more information:

http://www.asee.org/conferences/annual2003/default.cfm

In addition to the topical sessions, committee members are busy planning for the traditional Get Acquainted Session, Banquet, and New Members Reception. The Get Acquainted Session took on a new format in Montreal, and was enthusiastically received. We're building on that experience to plan the session this year. The Banquet and New Members Reception are favorites, and the ELD directors are exploring the possibilities that Nashville has to offer for these two events.

No doubt about it, this is shaping up to be a great conference. We hope to see all of you there.

Larry Thompson
ELD Program Chair 2002-2003
larryt@vt.edu

Nominations sought!

This year's ELD Nominating Committee (Beth Brin, Mel DeSart, Steve Gass) is accepting nominations for the positions of Director and Secretary/Treasurer. If you would like to nominate someone for either of these positions, please check with that person first to see if they are interested/willing to be nominated for the position. If the response is positive, then please send that nomination to Mel DeSart at **desart@u.washington.edu**. If you would like more information about the duties and responsibilities of these positions, terms of office, etc., please see the ELD Bylaws http://www.englib.cornell.edu/eld/bylaws.html and position descriptions http://www.englib.cornell.edu/eld/jobdescriptions.html

Mentoring Task Force Update

The Task Force recently requested feedback from ELD members on the "desired" traits of an engineering librarian and for interesting, effective interview questions. Our goal is to create a web site of resources specifically for ELD members.

Linda Martinez
l.martinez@duke.edu

People & Places & A Position Opening

Orion Pozo's library and his university, **North Carolina State University**, did a nice job of promoting his winning the **Homer Bernhardt Award** in Montreal this year. You can find the press releases at:

http://www.ncsu.edu/news/press_releases/02_08/217.htm, &

http://www.lib.ncsu.edu/administration/publications/newsreleases/NR_pozo_02.pdf

Jim Van Fleet of **Bucknell University** will be taking on more responsibilities as a liaison to the science departments. As a result, Bucknell has created a librarian position dedicated to serving the Engineering College. They are now looking to fill the position of **Librarian/Information Specialist for Engineering Resources**. You can see the complete position description at:
http://www.isr.bucknell.edu/employment_opportunities/

ELD/SPARC Liaison Report

Much of SPARC's energy these days is directed at their upcoming "Institutional Repositories: A Workshop on Creating an Infrastructure for Faculty-Library Partnerships". This will be held in Washington, DC in October and will feature presentations by our own Kim Douglas from Caltech. For more information on the workshop please see http://www.arl.org/sparc/IR_flier.pdf

My expectation is that the workshop will present a case for institutional open archives as a mechanism for keeping scholarly works freely accessible to society without license barriers and restrictions. I expect it will also address to some extent retention of copyrights by individual faculty or by their academic institutions. I will be attending the workshop and will summarize it for ELD afterwards.

Kate Thomes
ELD/SPARC Liaison
kthomes+@pitt.edu

EEVL Feedback Needed From ELD

During the Professional Issues Forum (2002 ASEE Annual Conference, Session 3641), we briefly discussed getting feedback from ELD members about the **EEVL Internet Guide to Engineering, Mathematics, and Computing**. At the IATUL conference in June, I met with Michael Breaks, the President of IATUL, and the Project Director of EEVL, and discussed possible contributions from ELD members toward further refinement of EEVL. He is interested in getting feedback from us. (A summary of this meeting is in the article following this.)

The EEVL web site is at: http://www.eevl.ac.uk/

"EEVL's mission is to provide access to quality networked engineering, mathematics and computing resources and be the national focal point for online access to information in these subjects."

Please have a look at the EEVL interface and send your critiques and any suggestions for improvement to me. I will compile the feedback and send it to Michael Breaks Thanks and looking forward to your ideas.

Jay Bhatt
bhattjj@drexel.edu

Annual IATUL Meeting Liaison Report

I truly enjoyed the International Association of Technological University Libraries (IATUL) (http://www.iatul.org) 23rd Annual conference which took place in Kansas City, MO June 2 – 6, 2002. It was a great learning experience and I had several opportunities to discuss possible collaborative opportunities on several projects between IATUL and ELD. Michael Breaks, president of IATUL, gave me an opportunity to talk about partnerships, and I was also able to show my PowerPoint presentation to the entire membership during the business meeting. I distributed copies of my handout to all participants. Abstracts, full text documents, and PowerPoint presentations from the conference are online. See:
http://www.iatul.org/conference/cvol12.html
http://library.ucsc.edu/science/ELD/iatul02.ppt
http://www.iatul.org/conference/02/bhatt.ppt

Michael, Judith Palmer of the Radcliffe Science Library at Oxford University, and I brainstormed several ideas:

1. My PowerPoint presentation will be distributed on the IATUL list. It will also be linked from the IATUL website (see links above).

2. EEVL - Michael suggested that we get feedback from ELD members about EEVL. Critical evaluation of EEVL will be extremely useful for further improvement of EEVL. Several issues such as interface, scope, coverage, links, suggestions to add links, evaluated resources, and any other ideas can be explored. I can compile the feedback from ELD as a group, and send it to Michael. One possible suggestion was to have a presentation on EEVL during the next year's conference by an IATUL member. Martin Boemeke, Engineering Subject Gateway ViFaTec, from the University Library of Hannover and Technical Information Library also approached me about having his presentation at next year's ASEE conference.

3. Electronic 24x7 - This generated a lot of interest among the members. Several members approached me after my talk about the possibility of integrating and collaborating with the ELD task force. We talked about creating a committee or a task force of IATUL members comprising several geographical regions. The chair of this task force would then collaborate with ELD for global representation. Michael and I talked about sending an email message to the IATUL listserv seeking volunteers. Three members have already talked to me about their strong interest.

4. JSTOR Engineering Titles - We will seek an international perspective from IATUL. Again, an email will be sent to the members for investigating JSTOR

engineering titles. We will think about the possibility of a member who can coordinate this with John Saylor.

5. Scholarly Communication - This generated stimulated discussion among several members. Are there any engineering titles that can be supported by SPARC? How do we help SPARC determine those titles? How do we motivate faculty in publishing SPARC supported journals? Before we suggest that our engineering faculty consider SPARC, there should be some more SPARC supported journals available.

6. International adaptation of information literacy competencies for engineering. Investigate possible ways of collaborating with ELD and IATUL.

My special thanks goes to the IATUL committee for their excellent organization and hospitality.

Jay Bhatt
bhattjj@drexel.edu

SLA Sci-Tech Division Annual Meeting June 9-12, 2002, Liason Report

Web Site: http://www.sla.org/division/dst

A. Business and Board Meeting Activities

During my reporting to the SLA Sci-Tech Division at the incoming board meeting as liaison from the SLA Sci-Tech to ALA/ACRL/STS (Science & Technology Section), I discussed possibilities for coordination of these two organizations and perhaps with ELD as well. As a result, Sci-Tech board members discussed the possibility of an Internet survey partnership between the Sci-Tech Section (STS) of ALA/ACRL, SLA Sci-Tech Division, and ELD. This could be coordinated with the Continuing Education Committee of STS to produce topics that are wanted and needed by conference attendees, and also with the STS committee Comparison of Science and Technology Libraries, with which incoming SLA/Sci-Tech board Chair Mitchell Brown has been involved for a number of years. Survey results would be posted on the websites of all three organizations. The most recent survey topic that has been discussed by Comparison of Sci-Tech Libraries is a database use survey. Mitchell Brown can be contacted at Princeton University, 609-258-3150, email: mcbrown@Princeton.EDU.

Another area of discussion raised by me was that of the STS Task Force for Information Literacy of which I am chair. This is another possible area of coordination between the three organizations. As part of this discussion I reported on my liaison position with ELD to SLA/Sci-Tech, talked about the ELD liaison structure, and relayed some of ELD's goals for promoting cooperation between ELD and other organizations. I gave a copy of the ELD Engineering Literacy Standards draft to James Manasco, next year's incoming chair of SLA/Sci-Tech, and encouraged cooperation between the three groups in adapting the ACRL information literacy standards for applicability to Sci-Tech librarianship.

I also reported that there was a session on the Patriot Act at ALA Midwinter, January 2002 in New Orleans. There is embodied in the Patriot Act an ultimate threat to our libraries' patron information protection. Members of all three organizations, STS, Sci-Tech, and ELD need to familiarize themselves with this act and its possible consequences. Here is a possibility for multiple organizations to speak together on a specific issue.

Sci-Tech Division board members are examining the possibility of an online ballot for elections. The biggest problem is getting an accurate membership list from SLA.

Conference session descriptions are submitted to the listserv, to Sci-Tech News, and will be posted on the Sci-Tech web page.

The next annual SLA conference is in New York City, June 7-12, 2003. Winter meeting is in New Orleans, LA, January 23-25, 2003. Because of the cost of the conference at the New York location, SLA is looking at having tracks by day to facilitate attendance on one day only in order that an attendee might more thoroughly cover a single topic or issue. The 2004 conference will be in Nashville.

B. Programs and Events at the 2002 SLA Annual Conference that were sponsored or co-sponsored by the Sci-Tech Division are the following:

- Newcomers Brunch for first time attendees as well as current members.
- Science and Technology Annual Business Meeting – a breakfast meeting with awards
- Computer Science Literature Roundtable
- Sci-Tech Searching on the Internet
- Assessing the Impact of E-Journals on Libraries and Users: What's Been Learned so Far
- Needs Assessment
- Teaching Science Information: Taking Users to the Next Level
- Consolidation of Companies
- Sci Tech Contributed Papers
    1. "Marketing Library and Information Services: Comparing Experiences at Large Institutions"
    2. "Homing in on Our Customers: How the Praxair Information Resource Center Reevaluated and Implemented a New Marketing Strategy"

3. "Collaborative Marketing: Library and Vendor Partnerships"

- New Paradigms of Information Access. Topics: Data Mining, Knowledge Management, and Distance Education for Libraries.
- Sci-Tech Farewell Reception

C. Division Objectives and Contact Information for past, present, and future chairs can be found at http://www.sla.org/content/chdiv/divisions/division.cfm

Virginia Baldwin
vbaldwin@unlnotes.unl.edu

American Chemical Society, Chemical Information Division, Liaison Report

I was at the American Chemical Society (ACS) 224th National Meeting in Boston August 18th-22nd, 2002, and am the ELD liaison to the Chemical Information Division (CINF) of the ACS. CINF is a large body comprised of academic and corporate librarians, chemical information specialists, information producers such as indexers and abstractors and database producers. There are 15 committees and 3 liaisons. Committees are ACS Nomenclature, Archivist, Audit, Awards, Careers, Constitution and Bylaws, Education, Fundraising, Membership, Legislative Issues, Nominations, Procedures Manual, Program, Publications and Tellers. The Liaisons are to: Special Libraries Association (SLA), ASIS, Biotechnology Secretariat (BTEC). The Biotechnology Secretariat of the American Chemical Society promotes interdisciplinary, divisional activities in areas of broad and current interest to ACS membership in area of biotechnology. It allows more programming flexibility among ACS Divisions.
http://membership.acs.org/b/btec/btechome.html

I attended the Education Committee meeting as well as the executive committee meeting of the CINF.

At both meetings I made a short presentation on behalf of ASEE/ELD about who we are, what our goals are and what activities we are involved in. I mentioned our interests in Scholarly communication and information literacy. Also that we will be interested in collaborating with them on any projects that straddle our areas, chemistry and chemical engineering. They are very much interested. We will just keep it mind when a new project comes up or if we have one we can initiate.

- At the **Education Committee Meeting**, discussions centered on how they can help small schools with small budgets gain access to Scifinder Scholar and the ACS journals in order to comply with the guidelines of the Committee on Professional Training (CPT) for Chemical Education.

  At the Spring Meeting in New Orleans, there will be a symposium of all stakeholders, members of the ACS governing board on publishing, CAS, producers of Scifinder Scholar the and CPT members.

  A survey of small schools is being proposed to find out their total budget and what percentage of that needs to be spent on chemical information resources to meet accreditation standards

  They have just prepared a supplement to CPT guidelines. This supplement calls for librarians' participation in chemical education. Librarians in some schools are already teaching credit courses, solo or in collaboration with teaching faculty.

  (I should add) The education committee teaches a chemical information workshop at least twice a year: one at the National Meeting and the other at the Regional Meeting. They charge $100.00 per person.

- At the **executive meeting**, the chair of each committee gave a report. The most significant are the reports of the Membership, Education, Awards, Careers, and Publications committees.

  Membership reported on a recently completed successful survey to determine what areas of service members are interested in. This is expressing interest in serving on one of their fifteen committees, or carrying out some other chores such as editor of the Chemical Information Bulletin, or web author.

  Education (see above)

  Awards Committee CINF has four major awards:

  - **Herman Skolnik Award** to recognize outstanding contributions to and achievements in the theory and practice of chemical information science. This award is $2,000 and a plaque.
  - **Lucille M. Wert Scholarship** to recruit people into the profession of chemical information. This scholarship has a stipend of $1,000.
  - **Meritorious Service Award** to recognize outstanding contributions to the Division.
  - **Chemical Structure Association Trust** This is an internationally recognized Trust established to promote education, research or development in the area of systems methods for the storage, processing and retrieval of information on chemical structures, reactions and compounds. The chair of this committee talked about getting money for the award. They have sources of funding, from corporate sponsorship to the parent body, ACS.

They write grant proposals to solicit for funding. They already have the steady income to fund these awards. More information about the awards can be found at: http://www.lib.uchicago.edu/cinf/cinf_awards.html

Careers Committee did a salary survey for 2000. Another one is being planned for 2003, to be published in 2004.

Publications Committee publishes two publications: The Chemical Information Bulleting (CIB) and the CINF E_News. Their listserv is CHMINF-L.

For more information, see the CINF web site at http://www.lib.uchicago.edu/cinf/

Ibironke Lawal
iolawal@virginia.edu

ASEE ELD Officers & Committees

Division Chair: Gretchen Sneff
Director, Science & Engineering Libraries
Temple University
Philadelphia, PA 19122
gsneff@unix.temple.edu
ph: 215-204-4724 fax: 215-204-7720

Immediate Past Chair: Mel DeSart
Head, Engineering Library
University of Washington
Box 352170
Seattle, WA 98195-2170
desart@u.washington.edu
ph: 206-685-8369 fax: 206-543-3305

Chair-Elect/Program Chair: Larry Thompson
College Librarian for Engineering
Virginia Tech
Blacksburg, VA 24061
larryt@vt.edu
ph: 540-231-8693 fax: 540-231-7808

Secretary/Treasurer: Andrew Shimp
Engineering & Applied Science Librarian
Engineering & Applied Science Library
Yale University
P.O. Box 208284
New Haven, CT 06520-8284
andy.shimp@yale.edu
ph: 203-432-7460 fax:203-432-7465

Director 2002-2004: Greg Raschke
Assistant Head, Collection Management Department
North Carolina State University
NCSU Libraries
Campus Box 7111
Raleigh, NC 27695-7111
greg_raschke@ncsu.edu
ph: 919-515-1624 fax: 919-513-1108

Director 2001-2003: Suzanne Weiner
Head, Collection Management Department
NCSU Libraries
Campus Box 7111
Raleigh, NC 27695-7111
Suzanne_Weiner@ncsu.edu
ph: 919-515-7110 fax 919-513-1108

Accreditation and Standards
Mark Shelton, Chair 2002-2004
Mark_Shelton@brown.edu
Members: Ginny Baldwin, Jay Bhatt, Susan Herring, John Matylonek, Jean McKenzie, Nestor Osorio, Pat Johnston, Greg Raschke, Sharon Shafer, Tom Volkening

Archivist
Don Richardson, 2001-2003
drichard@wpi.edu

Awards
Greg Raschke, Chair 2002-2004
greg_raschke@ncsu.edu
Members: Larry Clemens, Honora Nerz

Bylaws Revision Task Force
Mel DeSart
desart@u.washington.edu

Duplicates Exchange
Orion Pozo
orion_pozo@ncsu.edu

Electronic Discussion Lists Editor
Mel DeSart, 2001-2003
desart@u.washington.edu

JSTOR Task Force
John Saylor, Chair 2001-2002
jms1@cornell.edu
Members: Jay Bhatt, Dorothy Byers, Sheila Curl, Patricia Johnston, Beth Smith

Membership
Amy Van Epps, Chair 2002-2004
vanepa@purdue.edu
Members: Eileen Dorschner, Norma Godavari, Joanne Goode, Deborah Kegel, F. Orion Pozo, Andy Stewart

Membership Directory Editor
Andy Stewart, 1999-2001
astewart@umr.edu

Mentoring Task Force
Linda Martinez, Chair , 2002-2003
bookworm@duke.edu
Members: Honora Nerz , Sharon Siegler, Tom Volkening, Suzanne Weiner

Nominations
Mel DeSart, Chair, 2002-2003
desart@u.washington.edu
Members: Beth Brin, Steve Gass

Publications
Ann Morgan, 2002-2004
aemorgan@csupomona.edu

Literature Guides Subcommittee
Open – if interested contact:
aemorgan@csupomona.edu
Members: Vladimir Borovansky, Craig Beard Paige Gibbs, Michaelyn Haslam, Christy Hightower, Sandy Lewis, Nestor Osorio, Carol Robinson, Ron Rodrigues

Newsletter
Karen Greig, 2001-2003
kareng@stanford.edu
Reporters: Amy Kindschi, Maria Kochis

Union List of Technical Reports, Standards, and Patents in Engineering Libraries
Mary Schlembach
schlemba@uiuc.edu
Members: Craig W. Beard, Janardan Kulkarni, Bruce Neville, Doug McGee, Greg Raschke

Reference 24x7 Task Force
Jim Ottaviani, 2002-2004
Jim .Ottaviani@umich.edu
Members: Julie Arnold, Jay Bhatt, Karen Clay, S. Norma Godavari, Najwa Hanel, Deborah Helman, Maurita Holland, Patsy Hulse, Janardan M Kulkarn, Kate Lee, Ann Ready, Sharon Siegler, Haymwantee Singh, Donna Swischer, Dianne, Taylor-Harding, Amy S. Van Epps, John J Wanserski, Charles Wenger, John Whelan

Webmaster
Jill Powell, 2001-2003
jhp1@cornell.edu
Members: Karen Clay, Bob Heyer-Gray, Godlind Johnson, Angela Locknar, Andy Shimp , Michael White

Minutes of the ELD Annual Business Meeting – Montreal, Quebec, 6/18/02

The meeting was called to order by the ELD Chair, Mel DeSart. The agenda was previewed and additions or corrections were called for.

A motion to approve the minutes of the 6/26/2001 ELD Annual Business Meeting was made and seconded. The minutes were approved with no changes.

ELD Officer Reports

Program Chair Report

Gretchen Sneff, this year's program chair, announced that the sessions held thus far were going well. The EEC meeting would begin tomorrow at 10:00 AM.

Banquet Report

Suzanne Weiner, banquet coordinator, gave directions for reaching the banquet, which would be held in "The Vaults" at the Hotel Inter-Continental. Reservations have been made for 110 diners, the largest ELD banquet ever. Cocktails and hors d'oeuvres will be served beginning at 6:30, with dinner being served at 7:30.

Secretary/Treasurer Report

Larry Thompson, ELD Treasurer, reviewed the report that was given in the May ELD Newsletter. He noted that the balance of the BASS Account at the end of the 2nd quarter, (March 31, 2002) was $12,115.74. This does not include contributions of $750 from Cambridge Scientific Abstracts and $500.00 from INSPEC. It also does not take into account any expenses for the 2002 conference. A question was raised about why there was smaller income from Membership and Division Dues this year ($545.00) as compared with last ($830.00). The differential occurs because last year's dues income was a total for the entire year, while the current fiscal year dues income is the total for dues received only through the second quarter.

Committee Reports

Nominating Committee

Linda Musser, chair of the Nominating Committee, presented the slate of candidates for Director, 2002-2004: Greg Raschke, Kate Lee, and Honora Nerz, as well as for Secretary/Treasurer 2002-2003: Mary Schlembach, Amy Van Epps, and Andy Shimp. Ballots were distributed to the ELD members and collected. After the committee reports were given, it was announced that Greg Raschke was elected as Director and Andy Shimp as Secretary/Treasurer. The other candidates for office were thanked for standing for the positions.

Accreditation and Standards

The committee met during the lunch break on 6/18/2002 and is continuing to work on the Information Literacy guidelines.

Awards

The Awards Committee made three presentations:

The 2002 Homer I. Berhnardt Distinguished Service Award was present to Orion Pozo, Collection Manager for Engineering at North Carolina State University. Linda Martinez, chair of the Awards Committee made the following comments about Orion:

> The Homer I. Bernhardt Distinguished Service Award is given to recognize an individual who contributes to the advancement and development of excellence in Engineering Libraries. The 2002 Homer I. Bernhardt Distinguished Service Award is presented to Orion Pozo.
>
> Orion received his undergraduate degree in Math and the Philosophy of Science from Fordham University in 1970 and his MLS from SUNY/Geneseo in 1972. In the early part of his career he worked in a variety of interesting institutions in the New York area: the New York Botanical Garden Library as a manuscript cataloger, the Yonkers Public Library as a reference librarian, and the New York Zoological Society Library as a cataloger.
>
> In 1974, Orion moved to SUNY/Albany where he held a number of positions – including biology bibliographer, assistant coordinator of information retrieval, coordinator of library services to the disabled, and reference librarian.
>
> In 1979, Orion moved South and joined the staff at North Carolina State University as an engineering reference librarian. Since 1991, he has been the engineering and physical sciences collection manager. He has been an active member of ASEE/ELD for many years. He has participated at a number of ASEE Annual Conferences as an attendee, moderator, and presenter. In 2000 he presented on NCSU's experiences with E-Books, which was one of the most successful sessions at that conference.
>
> In the dictionary, Orion is defined as the most conspicuous constellation in the heavens. Well, anyone who knows our Orion, would not use the term conspicuous to describe him. In fact, one of his nominators wrote, "Orion is one of those quiet contributors who is always there doing things for the organization without a lot of fanfare."
>
> Since I have moved to North Carolina, I have had the pleasure of directly working with Orion and now that I have knowledge of his background, it explains a lot.
>
> He began as a mathematician/philosopher, and has worked as both a cataloger and as a reference librarian. This combination of interests and experiences explains his various projects. For example, Orion, the public service librarian, organized the first ever meeting of North Carolina university engineering librarians. I attended this meeting and it was extremely successful and would never have happened without his efforts.
>
> Orion, the technical services librarian, created and has coordinated ELD's Duplicates Exchange program for the last 10 years. This internet based project serves over 100 North American academic engineering libraries.
>
> Orion, the mathematician, loves econometrics. In 1993, he developed a database of circulation data and compared this data to expenditures by LC class and in 1994, employed a local journal utilization report as a tool for successful serials review. Another nominator commented that Orion answers the questions that many of us want to ask but haven't the time to investigate.
>
> Trust me, you don't know how "deep" a meeting can be until you have heard Orion provide all the circulation data for every journal in every Triangle Library for the last 10 years – all from the top of his head!
>
> It is with much pleasure and appreciation that we honor Orion with the Bernhardt Award.

The 2002 Best Paper Award was presented to "Information Competencies: A Strategic Approach" written by Honora Nerz and Suzanne Weiner of North Carolina State University. This paper was previously recognized as the ASEE Best Conference Paper for 2001. The paper particularly appeals to engineers because it provides concrete and measurable strategies and goals for information competencies. Many of us have been able to use their paper to promote information literacy programs at our own institutions.

The 2002 Best Reference Award was given to the *International Encyclopedia of Ergonomics and Human Factors*, edited by Waldemar Karwowski and published by Taylor and Francis. Prof. Karwowski, from the University of Louisville, is a highly recognized expert in the field of ergonomics. The encyclopedia applies the scientific method to the development of theory, principles, and data relevant to design.

Duplicates Exchange

Orion Pozo gave a brief overview of the exchange and how it works.

E-Lists

The report is contained in the May 2002 newsletter.

JSTOR

John Saylor reported that the task force is building a list of twenty-five engineering journals that have the potential of being included in the JSTOR collection. As the project continues, there will be a need to find libraries that have collections that can be scanned.

Liaisons Report

The report is contained in the May 2002 newsletter.

Membership

Glee Willis distributed the Membership Committee Report. The ELD roster from ASEE headquarters shows a membership of 207, up from 185 for 2001.

Membership Directory

Andy Stewart announced that the Membership Directory is being circulated during the conference so that revisions can be made.

Mentoring

Jay Bhatt announced that an expertise database is being developed. Also, at the New Members reception on Monday night, three mentoring contacts were initiated.

Newsletter

Karen Greig had no announcements concerning the newsletter.

Publications

Andy Shimp reported that the literature guide income for the past year was $210.00. Of this, ELD received royalties of $21.00. Future guides will be produced only in the online format.

Mary Schlembach announced that a new edition of the union list is in the works, and that it will be available online at no charge.

Website

Jill Powell reminded members that the ELD logo designs are on the website and that members should vote for their design choice. July 15th is the deadline for this. Several members expressed interest in increasing the number of design choices available, or perhaps modifying the present designs. The possibility of having a student graphic designer do the work as part of a class or community project was also suggested.

24 x 7 Engineering Reference

Jim Ottavani briefly discussed the progress of this new task force. A final report is not due until the 2003 annual meeting.

PIC IV Report

Mel DeSart announced that the bylaws of PIC IV are being revised. Changes will be made in the procedures for the Best Paper Award.

Annual conference sites have been chosen for 2007 (Hawaii) and 2008 (Reno).

The new PIC IV chair is Barbara Olds from the Colorado School of Mines.

Annoucements

Andy Shimp expressed appreciation for the sponsorship by ISI ResearchSoft of the shuttle to the off-site EndNote Workshop on Sunday.

Old Business

Alternative to the ASEE Picnic – Many ELD members have expressed dissatisfaction with the ASEE Sunday afternoon picnic. It was suggested that it might be better to have an ELD sponsored alternative activity. Advantages of an alternative activity would be better quality and adequate amounts of food, as well as the possibility of decreased cost. Disadvantages of an alternate activity are the loss of contact with teaching faculty and loss of visibility of ELD within the ASEE organization. The ELD chair will appoint a committee to look into the possibility of an alternate activity.

New Business

Revision of ELD voting procedures – There are approximately 200 ELD members. About 80 or 90 attend the annual conference each year and they are the only ones who can vote for ELD officers. It has been suggested that the ELD bylaws be changed so that members can vote online before the annual meeting. This would allow all ELD members to vote and would also make it possible for newly elected officers to know that they have been elected before the conference starts. The change in voting procedure could not take place until 2004, because a change in the bylaws would need to be voted on at the annual conference in 2003.

Creation of an ELD by-laws revision committee – In addition to the possible changes in voting procedure, there are other by-laws revisions that should be considered. In order to thoroughly review the bylaws, it was moved, seconded, and approved that the Executive Committee establish a bylaws review task force that would present revised bylaws for consideration and vote at the 2003 annual conference.

There being no further business, the meeting was adjourned.

Minutes submitted by Larry Thompson
ELD Secretary / Treasurer, 2001 – 2002.

Extended Executive Committee Meeting – 6/19/02, Montreal

Present: Karen Andrews, Mel DeSart, Karen Greig, Christy Hightower, Linda Martinez, Ann Morgan, Jill Powell, Greg Raschke, John Saylor, Mary Schlembach, Andy Shimp (Secretary), Gretchen Sneff (Division

Chair), Andy Stewart, Larry Thompson (Program Chair), Suzanne Weiner, Glee Willis

Session I
Chaired by Gretchen Sneff

1. Montreal Conference
   a. Attendance: the average ELD session attendance has been in the mid-90s. Bill Mischo's session was the most highly attended at 107. Banquet attendance was 110.
   b. ASEE will not collect session evaluation forms. They will look at the conference evaluation forms, so it will be useful to encourage people to submit those forms.

2. Publications Committee
Andy Shimp resigned as chair. Ann Morgan, chair of the Literature Guides Subcommittee, volunteered to serve as chair. Mary Schlembach, editor of the Union List, also expressed interest, but thought she would be more needed in her current position as a new online edition of the Union List is being developed. The Executive Committee will appoint a chair.

3. Accreditation & Standards Committee
Karen Andrews proposed possible changes to the committee, including creating a separate interest group for information competencies/literacy. Karen reported that twenty-seven people had expressed interest in an information competencies/literacy interest group. Recommendations for activities included hosting a listserv for sharing ideas, and a LOEX-type clearinghouse for sharing materials.

Karen further reported that at the committee meeting held on 6/18, thirteen attendees reviewed a revised draft of the Information Competencies for Engineering document. Karen will send out a new draft incorporating changes. A committee member noted that the ABET standards for "Information Technology" programs may include information literacy. Committee members expressed continued interest in developing information competencies, gathering comparative data, and instruction. Five committee members expressed interest in remaining on the Accreditation & Standards Committee, even if the information competencies area is removed. A future agenda item for the committee would be to discuss whether data collection/standards are still needed.

Karen suggested two names to replace her as chair, perhaps serving as co-chairs. The Executive Committee will appoint a chair.

The Extended Executive Committee decided to form an interest group on Information Competencies/Instruction. Suzanne Weiner will put out a call for a volunteer to chair the interest group and moderate a listserv. The Division Chair will appoint a chair for the interest group. Nominees should present a vision statement. The chair of the interest group will serve a two-year term.

4. Mentoring Committee
Linda Martinez will serve as the new chair of the Mentoring Committee.

5. Division Planning
   a. Focus of the Division:
      Quality/Leadership/Inclusion: build on quality, including program quality, liaison activities, and keeping ELD members involved.
   b. Comments on direction of the Division:
      1) Create interest groups
      2) Develop ELD as a consortium
      3) Strengthen liaison programs
      4) Require speakers to publish papers
      5) Schedule outside speakers in prime time slots
   c. Schedule the Extended Executive Committee meeting for Wednesday afternoon so that prime time slots can go to technical programming.
   d. The Executive Committee will assign a chair to lead a task force to revise the bylaws.
   e. Create a program committee for conference planning. The Division Chair will appoint Larry Thompson as Program Committee Chair.

6. Liaisons Committee: Christy Hightower (Liaisons Chair) presented a number of issues to the Extended Executive Committee that she had previously submitted via email.
   a. Reporting: Committee liaisons will report to the chair of the Liaisons Committee. If ELD has a similar standing committee, the liaison should report relevant activities to the ELD committee chair. The chair of the Liaison Committee will bring to the Extended Executive Committee any items that will require work or decisions, and where no corresponding ELD committee exists.
   b. Scope: Individual liaisons can attend sessions at their own discretion (i.e., ELD will not attempt to mandate that liaisons attend particular programs.)
   c. Publisher liaisons: The Extended Executive Committee recommended that publisher liaisons not be initiated at this time.
   d. Liaisons to ASEE annual conference non-ELD programs: The Division Chair will issue a call for volunteers to report on sessions of possible interest to ELD members.
   e. If an ELD committee decides it does not want to work with an identified liaison group in another organization, the committee chair should report the reason to the Extended Executive Committee.

f. The Division Chair will make committee chairs aware that liaisons may contact them about partnership opportunities.

Session II: Program Planning for Nashville
Chaired by Larry Thompson

1. Picnic
The Division Chair will appoint an exploratory committee to investigate organizing an alternative picnic.

2. Mel recommended scheduling a technical session for committee meetings to insure that committees have a free period of time to meet.

3. Possible Monday schedule:
   a. Get Acquainted Session at 10:30. Seek a sponsor for coffee and donuts. The moderator may want to attempt to get people in early so that the food will not impact meeting time.
   b. Technical session at 12:30
   c. Poster session at 2:30
   d. New members reception in the evening. The new members reception might also be combined with the alternative picnic.

4. Keep the Technical Papers session as a forum for the presentation of papers that do not logically fit with other programming. Seek a moderator as a backup in case there are no papers to present.

5. The new Program Committee will create moderator guidelines with the aim of standardizing the quality of the sessions.

6. Attempt to schedule the Extended Executive Committee meeting for late Wednesday so that technical sessions have the opportunity for better time slots.

7. Topic ideas:
   a. Marketing outreach
   b. Licensing issues/pricing models/business models
   c. Engineering Library role in K-12 education
   d. Courseware for library applications
   e. Future of librarianship
   f. Solicit additional topic ideas on ELD-L.

Minutes submitted by Andy Shimp
ELD Secretary/Treasurer 2002-2003

Conference Session Summaries

Session 1541 Poster Session

The slides for **By the Bootstraps: Building an Engineering Collection from the Ground Up** session are available at:

http://www.yorku.ca/jdupuis/asee2002/

John Dupuis
jdupuis@YorkU.CA

Session 1609 New Programs and Textbooks in BME

Monday, June 17th, 4:30 pm-6 pm

Teaching Biology from an Engineering Perspective: Integrating Biology into Undergraduate Engineering Education
Kjell Nelson, University of Washington

Mr. Nelson is a Ph.D. candidate in Bioengineering, investigating surface modification of biomaterials, and protein patterning. He holds a position at the UW Center for Engineering Learning and Teaching, developing curricula that integrate biology into undergraduate engineering education.

His modular course design approach focuses on topics such as:

DNA Forensics:
- Support/Refute Anna Anderson's Claim. http://www.accessexcellence.org/AE/AEPC/geneconn/fingerprint/anastasia.html
- Learn basics of central dogma inheritance, DNA variation
- Laboratory experiments

Osteogenesis Imperfecta:
- From genes to tissues
- Point mutation in collagen gene results in severely weakened bone
- Study protein expression, integration of cells into tissues
- Image analysis

Bioremediation
- Energy metabolism and Ecology
- Microbial solutions to environmental contamination

In the process, students apply a modular approach to learn different aspects of biology that include elaborate mechanisms of DNA variation and repair, bioimaging, and modeling. The course also stresses the design projects involving biology in engineering. In future, they expect to

develop a junior level biology course targeted for engineering students which will be a fundamental course for advanced undergraduate and graduate students.

No text books were used in the class. Students were required to do research using web resources. To follow up, during the question-answers session, I talked about the ELD, its relationship to the ASEE, and tried to make sense of what they meant by 'web resources'. Are the electronic subscription based databases and ejournals being used by the students? Do faculty recommend them or point out the library contact to the students? Dr. Nelson pointed out that the University of Washington has good library subscribed electronic resources and he usually recommends them to his students in the class. Except for his comments, no other faculty in the audience appeared to have a clear grasp of the point that I was trying to make.

Biology for Engineers: Progress on a New Text
Arthur T Johnson, University of Maryland – College Park
http://www.agnr.umd.edu/users/Bioreng/johnson.htm

Dr. Johnson is the author of the following books:

1. Transport Processes in Biological Engineering
2. Biological Process Engineering.
http://www.chipsbooks.com/biolproc.htm

His interests include bioengineering, food engineering, and exercise physiology in animals and humans, development of the biological engineering program, research on optimization of respiratory masks, and physiological response to respiratory stress.
According to him, even though engineering students may have taken Biology courses earlier, they may not have integrated them into their thinking. A new approach in writing textbooks is required to overcome this problem. His upcoming book "Predictive Biology for Engineers and Technologists" is written from the conceptual and predictive standpoint and stresses the importance of a knowledge of biological principles and how its expertise can lead to the development of new products. The books contain numerous illustrations, and are crucial in understanding concepts introduced. Major subject areas including Physics, Chemistry, and Mathematics principles as applied to Biology are covered in the book.

The book comprises sections such as Introduction to Biological Engineering, Principles from Science, Utilizing Living Systems as in Biomics (Living system used as as a part of the Design). Its mission is to develop abilities to transfer known information about living systems in the development of new products.

Future plans:

Dr. Johnson plans to use this book with with Seniors at the University of Maryland. Other sites are welcomed to participate in testing his book. The book has undergone 4-5 drafts and will be thoroughly student tested.

NOTE:

Coincidentally, Dr. Johnson and I were in the same flight from Montreal. I had a brief talk with him about ELD, future partnership with the faculty, and electronic resources and how they are viewed by faculty. We talked about ELD and how dynamic we are; what we do and so on. I casually asked him about possible partnership with ELD by having his presentation (which in addition to textbooks would include other resources, how faculty are using them, and possible other innovative ideas). He is very much interested in having a joint meeting. He also thought that many other faculty may be interested in such a session.

New Directions for Textbooks and Courses in the Biomaterials Field
Kirk Bundy, Tulane University

Dr. Bundy's main research areas include Biomaterials, Bioadhesion, Corrosion and Environmental Science. He also teaches a course titled Surgical Applications of Biomaterials.

He outlined the limitations of previously published Biomaterials texts. In summary, they are:
- Restricted breadth of coverage
- Inclusion of Materials Science elsewhere rather than in the same books
- Limited discussion of clinical applications and case studies
- Omission of salient aspects of 'Biology' (Previous presentation addressed this problem, (e.g. Teaching Biology for Engineers by having course on biology for engineers; presenter seem to concur with this since he did not use texts in his class)
- Little or no discussion of history on biomaterials.
- Insufficient coverage of biomolecules, biomaterials, tissue engineering, biotechnology
- No glossary of terms.
- No list of variables.
- Inadequate amount of homework problems

According to Dr. Bundy, his book 'Fundamentals of Biomaterials' addresses many of these limitations. It emphasizes new areas currently being explored. Single authorship tends to provide added value to students. Book includes 130 tables, 550 figures and 265,000 words, and contains 544 pages. Some of the topics covered include: materials science and engineering basics, material science

of natural tissues, failure analysis, implant design, tissue engineering, experimental methods, history and summary of biomaterials, physics, biology and chemistry of the interface between tissue and materials, failure and surgical implant materials and devices, implant failure modes of mechanical and chemical origin and many other evolutionary topics on Biomaterials.
Current status and future directions are also covered in this book.

He provided some useful hints to the textbook writers:
- Start early.
- Invest time and energy.
- If you are not enthusiastic, forget it.
- Work on it every day.
- Develop a plan for writing that works for you.
- Get feedback from students.

(Prepared by Jay Bhatt, Information Services Librarian, Engineering Drexel University)

Session 1641 – "Emerging Information Technologies"

Monday, June 17, 2002, 4:30-6pm

Moderated by Bill Mischo, Engineering Librarian & Professor of Library Administration, University of Illinois at Urbana-Champaign

Summary:
Bill Mischo began this lively and instructive session by addressing the key role of emerging information technologies on the virtual digital library. Emerging technologies addressed during the session included Digital Object Identifiers (DOI's) and linking technologies, the virtual journal, metadata and markup standards, publisher full-text repositories, and simultaneous search and local reference resolvers.

PowerPoint slides of each presentation are available at: http://dli.grainger.uiuc.edu/idli/asee02/index.htm.

Papers:

The CrossRef Collaborative Reference Linking Service
Ed Pentz, Executive Director, CrossRef

Mr. Pentz began with statistical evidence of the significant shift to online journals and related developments in user expectations for online journals, including easily accessible content with comprehensive reference linking. He then introduced CrossRef as a non-profit membership organization founded in 2000 to develop a cross-publisher citation-linking network based on Digital Object Identifiers (DOI's). After describing CrossRef's mission, "to be the complete citation linking backbone for all scholarly literature in electronic form", Mr. Pentz gave an in-depth description (using text, images, and screen captures) of how CrossRef functions - available at http://dli.grainger.uiuc.edu/idli/asee02/asee2002_crossref_files/frame.htm. He went on to provide evidence of CrossRef's successful expansion.

Future steps for CrossRef identified during the presentation include: 1) expanding content types to include conference proceedings and reference works; 2) incorporating multiple resolution features to allow one DOI to refer to, for example, multiple URLs for dispersed mirror sites, pointers to metadata records, different versions of the same material (i.e. html or pdf), and author information; 3) developing a distributed cross-publisher search offered from publishers' sites and direct to end users by CrossRef to present a central index of peer-reviewed full-text articles.

Mr. Pentz concluded by speculating on future trends for CrossRef and scholarly publishing including:
- Digitization of older articles
- Users expecting access to be instantaneous/real-time
- Changes in the article economy such as
  - Journal issue deconstruction continuing to accelerate
  - Users expecting easy access - pay-per-view more common
  - Article-by-article online publishing (volumes, issues and print follow later)
  - E-articles becoming the articles "of record"
- Increased collaboration and standard setting to meet user demands

The Adaptation by Publishers of New Information Technologies
Tim Ingoldsby, Director of New Product Development, American Institute of Physics

Mr. Ingoldsby began by providing an overview of AIP's journal offerings and publishing platform. He then progresses through a fascinating list of predictions summarized here and available in full at http://dli.grainger.uiuc.edu/idli/asee02/tiASEE2002_files/frame.htm.

He then went on to discuss predictions he made in October 2000, including:
1. Publishers will continue to add value to online collections and online articles will become the versions of record
   - most publishers have added linking capabilities and search improvements while some are preparing to declare online versions definitive (AIP will do so January 1, 2004)

2. Transition of library subscriptions from print (with online access) to online only will continue and accelerate
    - this is happening: 0.1% in 1999; 1.0% in 2000; 3.0% in 2001; 6.0% in 2002
3. Digitization of publisher "back files" will continue and accelerate
    - ACS and Elsevier are evidence of this trend

Mr. Ingoldsby moved to 2003/2004 with more predictions, including:

4. Virtual journals exist for every new "hot" field of research
5. Subscription model still reigns supreme, but institutions are beginning to experiment with alternatives such as article bundles and deposit accounts
6. Every scientist has "personalization" features available (i.e. personal homepages, stored searches, automated profiles)

He then goes to 2006 with some thought provoking predictions, including:

7. Journal issue "deconstruction" nearly complete
    - journal "brand" remains a key attribute and the mark of quality
    - issues no longer exist, but some print subscriptions remain
    - standard citation uses DOI
    - virtual journals and new products (e.g. eBooks packaged with the articles it references) take increasing market share
    - Journal article as core artifact will remain preeminent while the core mission of publishers will remain judgment and selection
8. Article content has evolved to include multimedia and active equations
9. Individual journal subscriptions replaced by database access fees to all of a publisher's content

Mr. Ingoldsby finishes by speculating what publishing will look like at the "event horizon":

10. Virtual worldwide database of all scholarly research
11. "Artificial intelligence" at many stages of the publications process
12. Demise/restructuring of the secondary publishing industry

The Role of XML, Metadata Standards, Simultaneous Search and Local Reference Linking
Bill Mischo, Engineering Librarian, University of Illinois at Urbana-Champaign

Mr. Mischo wrapped up the session with an intense overview of key information retrieval and digital library technologies. He began by stating that "we may use these tools to pursue the grand challenges of Information Retrieval," including a standard retrieval environment (Web) and interface/client (Web Browser), standardized search/retrieval mechanisms (HTTP Post/Get, SQL, Z39.50), standard language for describing and transforming content and metadata (XML, XSLT, DC, DCQ, RDF, Schemas), and standard transport mechanisms to connect heterogeneous content (HTTP, SOAP, OAI).

He went on to analyze the current and future status of digital libraries, summarized evolving full-text technologies, and provided an overview of scholarly communication. Next, he discussed the distributed information model academic libraries currently employ with its multiple elements, relationships, and nodes and the subsequent need for gateway, interface, and navigation tools as well as for document representation, transmission, linking, and retrieval middleware tools and standards. Mr. Mischo described the needs of a distributed repository as the integration of discrete electronic collections, simultaneous searching of discrete repositories, 24x7 remote reference, and metadata harvesting and archiving. He went on to cover the potential of metadata linking and standards and XML in bringing about an effective distributed repository model.

After displaying a locally developed search aid (best viewed at http://dli.grainger.uiuc.edu/idli/asee02/aseeemerging_files/frame.htm), Mr. Mischo moved on to the Open Archives Initiative (OAI). He described OAI as a mechanism for data providers to expose their metadata through an HTTP protocol and a mechanism for harvesting records containing metadata from repositories. In discussing the many philosophical issues behind OAI, he pointed out that it could potentially serve as a mechanism for Scholarly Communication and an alternative dissemination model for scientists.

He concluded his discussion by stating that science & technology libraries have always had the essential roles of collecting source materials, organizing those materials, and providing access to materials. Now, they do it in a web-based distributed environment where the library as function takes over for the library as place.

(Prepared by Greg Raschke, Assistant Head, Collection Management Department, North Carolina State University)

Session 2341 Information Guidance /Navigation/Control

Tuesday, June 18, 2002, 10:30 am - noon

Moderated by Jill Powell, Cornell University

First Presenter

Linda Martinez, Duke University
Topic: Biomedical Information Resources for Duke Undergraduates

Linda Martinez described the process that was used to develop a half credit once per week course for Biomedical undergraduate students at Duke University. The objective of the course was for students to develop and demonstrate the ability to locate, analyze and communicate information from the major engineering/technical information resources in both print and electronic form. The course contained a final project and weekly homework assignments.

Below is a list of the topics presented. (For more detailed information see: http://www.lib.duke.edu/egr/bme265/syllabus.htm)

Week 1 Class Overview
Week 2 Classification Schemes, OPACs and Database Structures
Week 3 Internet and WWW Resources
Week 4 Medline
Week 5 Science Citation Index and Journal Citation Reports
Week 6 AXIOM/INSPEC
Week 7 Engineering Village 2
Week 8 Biotechnology and Bioengineering Abstracts
Week 9 Expanded Academic Index
Week 10 Patents
Week 11 Standards and Manufacturer's Catalogs
Week 12 NTIS & Government Documents
Week 13 Project Presentation
Week 14 Class evaluations and information survey

In the final project the students created a pathfinder for a biomedical engineering topic of their choosing. The students discussed what resources they used, why they chose them and how they evaluated them.

Most of the students who took the class had heard about it through word of mouth. 60 percent had taken part in a library orientation program. Among the reasons students reported taking the class was to get information faster and get better information. Often the students were looking for information that is just good enough to do the assignment or get a good grade.

Other statistics:
57 percent visited the library weekly
42 percent reported NOT enjoying browsing in the library
52 percent reported spending 1-5 hours per week web surfing.

A before and after look at student information seeking practices provided the following results.

Pre	Post
48% Google	88% Library databases
18% Friends	16% OPAC
14% OPAC	6% Web search

After the class 80 percent of the students agreed there should be an information literacy course. They also agreed that faculty needed to support that type of class. Students also reported problems understanding the mechanics of the library.

In January 2002, the Duke Libraries launched an Instruction Task Force. Among its objectives, the Task Force is charged with investigating the use of this type of class in other disciplines. Additionally, the Task Force is working to get information literacy skills classes into the university curriculum.

Third Presenter

Cecilia Mullen, Sandra Kajiwara, and Lisa Taber, San Jose State University
Topic: Engineering Research Web Modules – Designing for Students

The project was initiated because the librarians at San Jose State University became increasingly aware that their methodologies for presenting library resources did not address all the needs of their student population. At SJSU 72 percent of the engineering students are "minority" students. There was also a feeling that many of those students are non-native English speakers or English as a Second Language students. In addition, it was known that faculty did not like to spend class time teaching students how to do research.

The team had the help of two faculty members. They also received an instruction development grant. The grant was especially helpful in that it released their time to work on the project. The objective was to design an electronic guide that would be used by engineering students at SJSU to find information resources in specific fields. It needed to be ADA compliant, informal, easy to read, inviting and interactive, and use as few words as possible. For software they used Hotmetal Pro and Homecite. They currently have two subjects completed, Chemical Engineering and Materials Engineering. To view these go to: http://library.sjsu.edu/staff/kajiwara/info.html

Currently they have counters on only two pages, but counters will be added to all the pages in the future. The counters will allow the team to analyze use and help to focus the need for updates or further explanation.

When the team began to build the modules, they decided that the terminology and the order of the information

should follow how students might look for it. Subjects like Chemicals, Equipment, Government Information, Finding Books, Finding Articles were used instead of library terms like databases, encyclopedias etc. The same thinking was used in subcategories; for example, under Chemicals the subcategories were Elements, Prices, Safety, Uses or Applications. Under Applications, subcategories then included Agrochem/Pesticides, Biological/Environmental, etc.

Every page of the website has an email address and a home button. There is a section on finding references and citations, how to write references, why do I need references, how do I write a technical report, etc.

Because the grant required an assessment section, the team needed to design some type of assessment information gathering mechanism. They decided upon citation analysis of student papers. They selected two courses and analyzed date and source information from students' papers. They also surveyed a Chemical Engineering class mid way through the semester asking them if they would use the guide again. The majority of those surveyed said they would. Any sections of the site that are not heavily used will be evaluated.

The team reported that the grant was very helpful. And once the first module was created the remaining modules will be much easier to complete. However, now that the grant time is over the remaining modules will have to be worked on during their normal workdays.

Third Presenter

Frank Elliot, University of Minnesota
Topic: Information System Use Studies – Naturalistic/Qualitative Methods To Understand User's Needs

Frank's original starting point for this research was end user searching. But the increasing problem of the complexity of information models became evident as he became more involved in the research. He was also interested in doing a naturalistic/qualitative study.

He began his research by doing a literature search on end user searching in college and university libraries. He eliminated any article under four pages in length and looked at the first fifty articles.

The articles he found were grouped into the following categories:

- How we did it well
- Collection of stats on users or surveys
- Transaction logs
- Semi-experiments
- Theory building and review articles
- Case studies

Frank recommends the book Doing Naturalistic Inquiry: A Guide to Methods, by David Erlandson as a good introduction to doing this type of research. The study process begins by identifying a problem that will provide direction for the study. A problem is defined as a state of affairs that begs for additional understanding, identifies the need for choosing between alternative courses of action, or leads to undesirable consequences. The purpose of the research inquiry is to resolve the problem.

This study identified the problem that people did not understand the library and that faculty are the key in students understanding the library. Frank created a survey form for faculty to evaluate journals and databases. He used Current Contents to develop his journal list. The forms asked the faculty to rate the journal or database based on its importance to 1.) Research, or 2.) Teaching. The last question asked how often the journal was read or database used. That meant there were three questions for each journal title or database.

Frank also interviewed faculty. The shortest interview was a half hour the longest was an hour and a half. The department chair and Frank sent a letter to all faculty in the department requesting 45 minutes from the faculty for the interviews. The interview questions were:

- Describe your current major research interests.
- How do you use the library and its resources for your research?
- What types of student assignments do you give that are library research related?
- What types of library research assignments do you give graduate students who are working on research with you?
- Do you use ILL or other document delivery services? If so which ones?
- Do you use library reference services? In person? Phone? E-Mail?
- How well prepared do you think masters and doctoral students are for library research?
- How would you characterize your experience with the library? (Do you feel you've had a good or bad experience with the library?)
- How could we help you more? Perhaps think of a service offered at another library at a university you've been at that was especially valuable.
- Are there any books, journals, or databases you feel we should have?

His research findings include:

- Faculty search few databases
- Many faculty search no databases
- They work in an information rich environment from their point of view
- They work in an information poor environment from Frank's point of view

- They often use surrogates to find information
- Many faculty have a tacit rather than explicit understanding of the information world
- It is an extremely challenging task to define an instructional program which will meet such divergent needs
- Most faculty read no more than a dozen to two dozen journals on a regular basis
- Journals and databases are much more important for research than for teaching.
- Some of the most information literate faculty were beginning to say, "I don't read journals, I read articles."

He reported that he had a very good response from faculty on this problem. He said most faculty use databases only on a monthly or quarterly basis and therefore they remain at a novice level. His handout included a detailed bibliography.

(Prepared by Liz Mengel, Resource Services Librarian, Science and Engineering, Johns Hopkins University)

Session 2541 – Collection Issues Forum

Tuesday, June 18, 2002, 2:30 – 4:15 pm

Moderator: Linda Martinez, Duke University

Connect Your Resources, Save Time, Save Money: Connecting Library Electronic Resources to Reduce Research Time
Richard Bernier, Rose-Hulman Institute of Technology, Terre Haute, IN

Mr. Bernier spoke about the problem of redundant searching when trying to move from a citation in an index to finding the electronic journal. With solutions such as Cross Ref and SFX being expensive, Mr. Bernier discussed other possibilities of facilitating links. Using ProQuest and Ebsco databases as examples, Mr. Bernier suggested (1) linking these databases to the OPAC and (2) adding local holdings into the databases.

The link to OPAC feature (dynamic approach) is the most desirable method since the only journal holdings records that need to be updated are the OPAC records. Adding records to the local holdings requires each record be added to the database individually and these records need to be maintained in addition to their records in the OPAC. This method may be desirable for libraries that have incompatibility issues between their OPAC and the database.

To create these external links requires access to the local administrator of the database. Consulting the online documentation and vendor technical support services are excellent sources of help in learning to do this.

Are Engineers Ready to Live Without Print Journals? A Report on the University of California Collection Management Initiative Experiment
Christy Hightower, University of California at Santa Cruz
Karen Andrews, University of California at Davis

Ms Andrews and Ms Hightower reported on a research project currently under way at several of the University of California (UC) libraries. The Collection Management Initiative (CMI) is a research project designed to collect data on patron use and behavior when electronic only journals are available. How are patrons reacting? Are there genuine needs for print? Can the print habit be overcome? More details can be found at http://www.ucop.edu/cmi.

UC libraries have been maintaining a dual print plus electronic environment. However, with competing demands for funding, pressures on shelf space and the declining use of print, this is increasingly difficult to maintain and justify.

The research team identified 285 titles (78 in PSE) for which publishers provide usage data to be included in the study. For each title, there was a control campus and an experimental campus. The control campus made no changes; the experimental campus removed the print volumes from the shelf. Use was tabulated for all titles, whether print or electronic. Patrons who requested print be brought back at the experimental campuses were asked for the reasons. For PSE titles, it was hypothesized that electronic only journals would be sufficient for research and teaching and that one print copy for archival purposes would be adequate.

After 6 months of the one year project, these observations have been made:

- the number of requests for print is very low
- few complaints about print being removed were received
- the level of print use was not an indicator of potential complaints
- digital use at experimental campuses was greater than at control campuses
- the hypothesis for PSE titles is confirmed so far.

Costs: If print were cancelled for several large publishers, the UC systems would save about $2 million/year, or about $200,000 for a small campus and about $400,000 for a large one. It would also reduce staff costs, and save shelf space.

A print archive is still needed to provide the unique features of print versions and a consortial, shared archive will suffice.

The future: Digital articles are not good for browsing, serendipity, or comparing articles side-by-side. Also certain categories of users are better served by print.

We need to think about adding value to digital publications. This could include adding 'Amazon-like' features of reader reviews and opinions, collaborative notes, listings of other articles this reader read, and a 'Discuss' button to foster communication among those interested in the same article.

For the cyperpublishing future, we need to think dynamic, interactive, participatory and three-dimensional.

Converting and Creating Digital Collections at Caltech
Kimberly Douglas Sherman Fairchild Library, California Institute of Technology, Pasadena, CA

Caltech has 900 undergraduates and 1100 graduate students, with 30% in engineering.

Ms. Douglas spoke about the process of converting and creating digital collections of Computer Science and Earthquake Engineering Research Lab Reports, as well as 110 papers from the Cavitation 2001 conference. Ms Douglas discussed the planning, submission procedures, benefits, challenges and next steps in this process.

The planning included defining the attributes of the repository. It was decided that it would be compliant with the Open Archives Initiative (OAI) and use the free E-prints platform developed at the University of Southampton in England. Submission procedures include an author permission for stating that submissions are "royalty-free non-exclusive" and permanent. Approval for a submission resides with the relevant research group.

The benefits to participating campus departments are greater visibility; relief from archival concerns for these documents as they become part of a permanent and stable database; cost-effective distribution system; and compliance with national standards. It was a chance for librarians to be entrepreneurial in bringing a unique body of literature into the digital environment, as well as create a tool for reference and subject personnel to use with faculty and students. The documents themselves also become more visible as metadata are harvested and made available to websearch engines such as Google, Yahoo, etc. Compliance with the OAI protocol and registration of the repository with the OAI also means that the metadata of the repository contents is available to new OAI compliant data services such as DP9 and ARC.

The challenges in this project include understanding and explaining the benefits of institution-sponsored archives; addressing copyright issues; document format clean-up and preparation; realizing that digital repositories will not be complete, and making the submission process straightforward for authors while also maintaining appropriate control.

In the future, Ms Douglas sees more digital collections, such as Caltech theses; adding more formats, making the bibliographies SFX aware; and making preparations for document migration.

Ms Douglas referenced the following article "Speaking IT, and Staying a Librarian" by Martha K. Heyman, Information Outlook, April 2001, pp 34-42. There's more information on this project at http://library.caltech.edu/digital/default.htm

(Prepared by Jean McKenzie, University of California, Berkeley)

Session #3541 - "National Science Digital Library"

Wednesday June 19, 2002

Moderator: John Saylor, Cornell University, Engineering and Computer Science Library
Speakers: Muniram Budhu, University of Arizona
Michael Freeston, University of California, Santa Barbara
Lee Zia, National Science Foundation

"The National Science Digital Library (NSDL) is under construction with funding from the National Science Foundation. The NSDL will eventually offer, via the Internet, high-quality materials and innovative services for teaching, learning and research in science, mathematics, engineering and technology. Scheduled for release Fall 2002, it is likely to be the largest, most heterogeneous digital library yet built." – *from the moderator's summary*

All three speakers at this rather challenging session emphasized the great potential of the NSDL. A thoroughly organized, multidisciplinary digital library of informational and educational resources of this scope has never been attempted before. Dr. Budhu illustrated an example of a digital collection that will be included in the NSDL. Dr. Freeston discussed design and access issues in creating NSDL resources and introduced us to the concept of the "Digital Earth" and geo-referenced information. Dr. Zia gave an overview of the development of the NSDL project from its inception in the mid-1990s to the preparations being made for launching the NSDL later this year.

Muniram Budhu – "An NSDL Collection: Geotechnical, Rock and Water Resources Engineering (GROW)"

Creating the GROW collection is the first phase of assembling the National Civil Engineering Resources

Library, which will be a part of the NSDL. Dr. Budhu began his presentation by explaining the context of civil engineering, geotechnical, rock, and water resource engineering. He defined civil engineering as "creative, economical design and construction." The civil engineering disciplines represented in GROW were chosen because the faculty collaborating in its construction were specialists in those areas. GROW is intended to be a collection of dynamic learning objects that can be used in an "anytime/anywhere" online learning environment by students at different levels. The NSDL will act as the infrastructure for linking collections like GROW together.

GROW is an interdisciplinary effort – civil engineers, librarians, computer systems specialists, and information specialists have all had a hand in its creation. Central to the mission of GROW is collecting and creating quality content. The content in GROW is arranged in a structured hierarchy of learning objects – elements, learning units, modules and themes. Important guiding principles for selecting content for inclusion in GROW are peer-review, customization, and open-standards-based information architecture. GROW will integrate in the NSDL by interfacing with the NSDL portal and by providing metadata.

Dr. Budhu gave a brief demonstration of GROW at the end of his presentation. The example shown, which demonstrated how to prepare an analysis of a soil sample, was highly interactive and employed a multimedia presentation. Dr. Budhu concluded by asking the following questions: will faculty, students, engineers and the public use the resources in GROW? How will the resources be sustained beyond NSF funding?

Michael Freeston – "Information Integration in the NSDL – Designing Digital Libraries for Access and Usefulness"

Central to Dr. Freeston's presentation was the idea that the World Wide Web will become as important to the advancement of human civilization as language, writing, and printing were in the past. Dr. Freeston defined the WWW in conceptual terms as the ability to share a common repository of knowledge. But in reality there are two Webs – the ephemeral and the persistent. Digital libraries will be the foundation of the future global knowledge infrastructure of the persistent Web, and it is up to librarians to decide and filter what to keep on the persistent Web in digital libraries.

The infrastructure of the persistent Web is foreseen as four-tiered. At the top are digital libraries and archives associated with services such as filtering, classification and indexing. Below digital libraries are portals and subject gateways such as the NSDL. Below them are personal libraries and collections – user-centered services. At the bottom of the envisioned infrastructure exist user workspaces, visualization systems, virtual labs, and virtual libraries. This four-tiered structure, dependent on networked computing technology, continues to create challenges for computer science to address. The old issues of interoperability and security haven't been solved and will continue to pose problems.

Digital libraries are potentially powerful tools for education, as Dr. Budhu showed us. Dr. Freeston expanded upon this idea by envisioning digital libraries as virtual learning environments. The structure of the educational experience should reflect the structure of concept space specifying the domain of interest: in plain English, this means teaching by *concept* rather than by *example*. The science of artificial intelligence has a formal ontology of concepts, but concept space navigation is also based on things like thesauri, description and classification from our own field.

Dr. Freeston concluded by describing the Alexandria Digital Earth Prototype (ADEPT), a project that he has coordinated. ADEPT is a geo-referenced digital library. Information is associated, through gazetteer-type data, with a physical location on the Earth's surface. Document sets can be queried by geo-reference. ADEPT is scheduled to be demonstrated in a course this fall, and should serve as an example of a virtual learning environment arising from a digital library collection.

Lee Zia – "Introducing the NSDL: NSF's Comprehensive National Science, Mathematics, Engineering and Technology Education Digital Library"

Dr. Zia gave an overview of the development of the NSDL project from the point of view of the funding agency, the National Science Foundation. The idea of creating a large, multidisciplinary digital science library was initially an outgrowth of the Digital Library Initiative (DLI), which began in 1994. Over time, the NSF began to put more emphasis on using digital library collections in undergraduate education. The NSDL program was formally launched in 2000, and the digital library itself is scheduled to be operational by the end of fall 2002.

The vision of the NSDL project is to connect users, content, tools, learning environments and resources. As Dr. Zia put it, "the network is the library." Core integration of the technology behind the NSDL is complete. Ongoing projects include developing collections and services and targeted research initiatives. Current domains to be included in the NSDL include various disciplines in engineering, life sciences, geosciences, mathematics, chemistry, materials science, anthropology, and computer science – a diverse and multidisciplinary array of content areas. These target disciplines were not expressly chosen; rather, they were

included based on proposals received, and there remain gaps in disciplines where proposals have not been submitted.

Dr. Zia concluded by outlining some challenges facing the NSDL. A resource like the NSDL will undoubtedly require new kinds of cooperation and collaboration between librarians and teaching and research faculty, and consequently faculty will gain a new knowledge (and hopefully new appreciation) of what librarians do. Since the NSDL is initially focusing on undergraduate educational resources, what are its future implications for K-12 and graduate programs? How does the NSDL fit into the grander scheme of the production, publication, and dissemination of scholarly information? NSDL plans to work with organizations such as ARL, SPARC, and CNI in attempting to create institutional repositories and digital archives of scholarly information.

LINKS

- NSDL home page (under construction): http://www.nsdl.org
- NSDL communications portal: http://comm.nsdlib.org
- NSF project page for the NSDL: http://www.ehr.nsf.gov/EHR/DUE/programs/nsdl/
- Information about the speakers: http://reuleaux.cornell.edu/jms/nsdl/montreal2002.html
- Power Point Presentations: http://dli.grainger.uiuc.edu/idli/asee02/index.htm

(Prepared by Roman Koshykar, Binghamton University, Science Library)