American Society for Engineering Education



Engineering Libraries Division Newsletter



September 2018

Message from the Chair

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ELD is a division of the American Society for Engineering Education. Its mission is "to promote and strengthen the role of the library as an integral part of engineering education."

Willie Baer

Greetings ELD-ers,

With Fall Semester in full swing, our campus is alive again with students. As the summer fades, I can't help but remember the wonderful annual conference we had in Salt Lake City this past June.

I want to thank all of you who helped make the conference in Salt Lake City such a huge success. So many of you stepped up, adding to the conference in your own way. I want to thank the session moderators: Susan Boyd, Julia Gelfand, Emily Hart, Laura Mosher, Sarah Parker, Judith Pasek, Michelle Spence, and Patricia Watkins. They coordinated with the presenters and kept the sessions on schedule.

The conference started off with the Fundamentals of

Engineering Librarianship workshop. Although it was created with new(ish) engineering librarians in mind, the presenters (Mel DeSart, Kevin Drees, Kari Kozak, and Tom Volkening) orchestrated a session that benefited all who attended. Even those of us with grey hair learned a few things. It was only fitting that our conference ended with another workshop, Advice for Mid-Career Librarians. Our panel of Anne Rauh, Michael White, Mel DeSart, and Amy Van Epps meted out wisdom gained from their years of experience. A lively Q&A followed.

I want to thank the Publications Committee for reviewing and adding constructive criticism to each paper. Lead by Scott Curtis, the committee provided an invaluable service. We had a huge number of excellent papers this year. We had five technical sessions in addition to the poster session. Thank you to all of you who were willing to share your research. Your presentations were informative and inspiring. That goes for the Lightning Talks session as well. We have a wealth of knowledge in our division.

Once again our sponsors were gracious in support of the meals and events that enable us to mingle and network. The ELD Development Committee has done wonderful work the past several years in cultivating relationships with our sponsors who donated not only to our events, but also to travel stipends. They include (in alphabetical order) ACS, AIAA, ASCE, ASME, ASTM International, AWS, Begell House, Elsevier, ICE, IEEE, IET, IOPP, Morgan & Claypool, SAE, SPIE, and Techstreet. We value their partnership.

On a more personal note I want to thank my Program Committee: Amy Buhler, Larry Thompson, Sarah Parker, and Lisha Li. I also want to thank Bruce Neville for being there throughout the year with great advice.

Message from the Chair (Continued...)

Julie Cook, this year's Program Chair, is already starting to organize next year's conference. Please provide as much support to her as you did to me. Be generous with your abstracts and the Tampa conference will be a great success as well. I hope to see you there!

Willie Baer



Are you submitting an abstract for the 2019 ASEE Conference in Tampa or another conference? Or to a journal? Need help sorting through your ideas for a paper? Want to improve your chances of having your manuscript accepted for publication? Try the **FRIENDLY PAPER REVIEW SERVICE** Your paper will be reviewed according to new review process guidelines. You will receive comments and suggestions for improving your paper. Contact Kevin Drees at kevin.drees@okstate.edu

Brought to you by the **ELD Mentoring Committee**

Conference Report, Salt Lake City, UT 2018

Kristen MacCartney

Newsletter Chair

Sunday, June 24

The 51st ASEE Engineering Libraries Division program started with a workshop on "The Fundamentals of Engineering Librarianship." Kevin Drees (Oklahoma State University), Mel DeSart (University of Washington), Kari Kozak (University of Iowa), and Tom Volkening (Michigan State University) shared strategies on outreach, instruction, collection management, and vendor relations. ASTM sponsored the workshop.

As in the past, we only note presenting authors (if known).

Michelle Spence (University of Toronto) moderated the first technical session (4), sponsored by ACS.

- Dr. Joseph Holles and Larry Schmidt (University of Wyoming) discussed <u>"Graduate Research Data Management Course Content: Teaching the Data Management Plan (DMP)</u>" and their results educating graduate students on both a funding DMP, and a more involved project DMP.
- Drs. Jacob Preston Moore and Thomas Reinsfelder (Pennsylvania State University, Mont Alto) presented <u>"Work In Progress: A Snapshot of OER Adoption in Engineering Mechanics Courses."</u>
- Dr. Holles and Mr. Schmidt also shared <u>"Teaching Research Data Management: It Takes a Team to Do It Right!"</u> regarding the need for collaboration among librarians, research faculty, and information technologists to create effective RDM courses and services.
- Jamie Niehof, Leena Lalwani, and Paul Grochowski, all from the University of Michigan, covered the challenge of <u>"Long-term Preservation of Deprecated Media: How Can Libraries Provide Information from Today's CD-ROMs in the Future?"</u>

Patricia A. Watkins (Embry-Riddle Aeronautical University, Prescott) moderated technical session 2; IOPP was the sponsor.

- Dr. William Tsai and Amber Janssen (California State University, Maritime Academy) spoke about <u>"Reinforcing Information Fluency: Instruction Collaboration in a Senior Capstone Laboratory Course.</u>" Their study showed that inclass instruction did not significantly alter the quality of information used in students' work, but assignment specific research guides did.
- Qing Li (IEEE) followed with a presentation on "<u>Innovative Uses of Social Media in Information Literacy Education</u>, <u>Library Outreach</u>, and <u>User Engagement</u>: <u>An International Perspective</u>." Qing discussed advantages/challenges of different platforms in developing lasting user engagement</u>, as well as an "Escape Room" game in the Peking University library that regularly draws 1,000 participants.
- Brianna B. Buljung (Colorado School of Mines) showed how "<u>Using a Flipped Lesson to Improve Information Literacy</u> <u>Outcomes in a First-year Design Class</u>" worked in her institution.
- Closing the session, Prof. Virginia Charter (Oklahoma State University) presented "<u>Understanding the Significance of</u> <u>Integrating Codes and Standards into the Learning Environment.</u>"

The Division Mixer was great fun! Sally Fell and Keith Hayes of Elsevier helped staff the ELD booth (see photo, next page), while the rest of the Division frolicked.

Later, the group gathered for food, brew, and bonding at Squatters Pub. This well-attended ELD Social was sponsored by SPIE and organized by Mel DeSart (University of Washington).

Monday, June 25

Many thanks to moderator Sarah Parker (University of British Columbia) for organizing two tiers of Lightning Talks: division members and vendors, with some overlap. SAE sponsored this session.

- Prof. Christiane Beyer and Hema Ramachandran (California State University Long Beach) discussed how they kick started interest in STEAM with "Launch of 3D Printing Lab at California State University-Long Beach Library (CSULB)."
- Eric Schares (Iowa State University), in "Adding Electronics Kits to the Library's Circulating Collection," took advantage of Sparkfun holiday sales, and now offers Arduino, Raspberry Pi, Makey Makey kits, etc. for students to check out.
- Lisa Ngo (University of California, Berkeley) conducted a study on the "Impact of a Discovery Service on Science and Engineering Resources." showing they had a "statistically significant" positive impact on usage of "big 4" commercial vendors and a negative impact on some society publishers.
- "Promoting the University of Michigan's New Institutional Repository Deep Blue Data with Comics, Cakes, and Chocolates," by Elaine Meyer (University of Michigan Dearborn) shared novel ways to promote the University's repository.
- Aleshia Huber (Binghamton University) discussed how she developed an exhibit *Hidden Messages: Steganography, Cryptology and Digital Watermarking* in "Designing Educational Exhibits in a Science Library."



Division Mixer: Najwa Hanel, (USC), Keith Hayes and Sally Fell (Elsevier).

- Paul Grochowski (University of Michigan) spoke of missteps and success along the way to creating basic series level records, with students' help, in "How We Wrangled One Million Microfiche."
- "Teaching to Innovation" is of interest to all engineering librarians, and Andy Shimp (Yale University) shared the challenge of getting invited to the Yale Entrepreneurship Bazaar and the popular <u>guide</u> developed on that topic.
- Tina Qin's (Vanderbilt University) lightning talk, "Explore e-Science Librarianship with Engineering Faculty" included coverage of Overleaf, Tableau Public, data management, and more.
- Patricia Watkins (Embry-Riddle Aeronautical University) "New Partnerships: Librarian Engagement and Beyond" emphasized the shift from "transactions with faculty and students" to building more enduring relationships.
- In "New Partnerships | Investigating the Information Habits of Practicing Engineers and University Students," Laura Turner (Caterpillar, Inc.) talked about working with Purdue University to develop more industry-ready graduates.
- Susan Boyd (Santa Clara University) discussed "The How-to of 'Biased' Information: Teaching Engineering Students about Knowledge Creation and the Scholarly Conversation." She cited "How Fossil Fuels Save Lives by Turning Point USA" as the start of a discussion on biased versus factual sources.
- Michelle Spence and Benjamin Walsh (University of Toronto) shared the "Escape the Library!" program they developed, using a Star Wars theme, to teach students fundamental library skills and knowledge.
- Shelby Hallman and Alex Carroll (North Carolina State University) presented "Supporting Undergraduate Engineering Researchers," a talk about enhancing students' success with entrepreneurship and specialized hands-on workshops.
- Marina Zhang (University of Iowa) advised targeting incoming students with example-rich workshops and boot camps in "Introducing Systematic Reviews to Engineering Graduate Students

Monday, June 25

- "STEM Graduate Student Outreach A Pilot Event Series" by Emily Hart (Syracuse University) suggested collaborating with the engineering department and graduate student organizations for programming/promotion, including "Speed Dating the Research Experts."
- Helping integrate industry-appropriate soft skills into the curriculum was the core of Debbie Morrow's (Grand Valley State University) presentation, "Talk Technical To Me: Learning Written & Oral Communication in a Real-Work Context."
- Jill Powell (Cornell University) shared <u>steps</u> to making 300 theses available in "Copyright, Digitizing Theses, and Lessons Learned."
- Amy Van Epps (Harvard University) closed the session with "Library or Event Space?: Balancing Competing Needs for Space" and talked of the different events hosted at the library, including game nights, poster sessions, guest speakers, slime-making, etc.

This year, ELD sponsors did a lightning round as well, covering a new feature, product, or service of interest to the community. Presenters were: Natalie Yubeta (ACS); Carolyn Valliere (ASCE); Jessica Darczuk (ASME); George Zajdel (ASTM); Michael Walsh (AWS); Meghan Rohrmann (Begell House); Rachel Zillig (ICE); Emily Csernica (IEEE); Chris Suhrcke (Inspec); John LaFave (SAE); Will Goodman (SPIE); Skip DeWall (Techstreet), and Joel Claypool, who memorialized Karen Hunter (1945-2018), a highly respected leader in the publishing industry.

In the afternoon, ELD members could attend the co-sponsored panel session: "Impacts of Sexual Harassment in Academic Science, Engineering, and Medicine," and the 2018 Interdivisional Town Hall Meeting, "Who's in the Driver's Seat of Engineering Education?"

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That evening it was off to Cucina Toscana Italian restaurant for the ELD Welcome Banquet, organized by Bernadette Ewen (Rose-Hulman Institute of Technology) and sponsored by IEEE. These dinners are practical – they reduce expenses for attendees – but their purpose is to carry the session conversations beyond the conference center, and enable new members to find a home in the ELD community. Whether the venue is casual or elegant, the networking is convival.

Tuesday, June 26

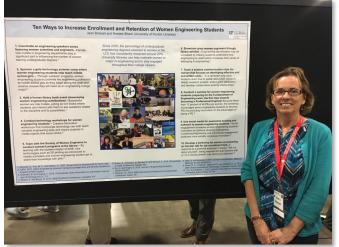
Notes for the ELD Business Meeting and breakfast begin on page 9. This yearly event, sponsored in 2018 by Elsevier, IEEE, and Morgan and Claypool, included an update and Q&A by our PIC IV Chair Dr. Teri Reed.



Bernadette Ewen (Rose-Hulman) and Larry Thompson (VaTech)

Awards worth mentioning here included ELD Best Paper Award to Elizabeth Berman (Tufts University) for "<u>An Explora-</u> tory Sequential Mixed Methods Approach to Understanding Researchers' Data Management Practices at UVM: Integrated Findings to Develop Research Data Services."



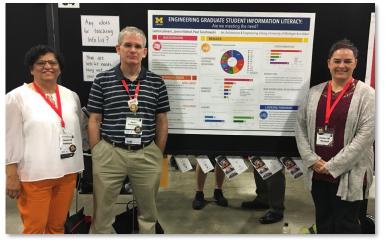


<u>"Ten Ways Academic Libraries Can Help their Depart-</u> <u>ments Increase Retention of Women Engineering</u> <u>Students,</u>" Jean Bossart (University of Florida)

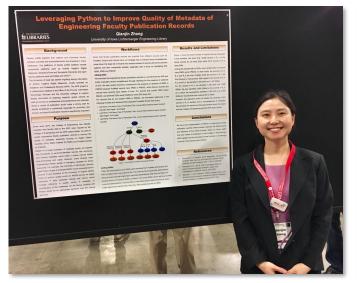
This year's <u>Homer I. Bernhardt Distinguished Service Award</u> went to Alice Trussell of Kansas State University. At left, Alice accepts a plaque from George Zajdel of ASTM, which sponsors the Bernhardt Award.

See page 8 for more on these two accolades, and also, the PIC III Best Paper Award for "<u>The Theatre of Humanitarian</u> <u>Engineering.</u>" Included among the authors is ELD member Laura Robinson of Worcester Polytechnic Institute.

The ELD Poster Session, moderated by Susan Boyd (Santa Clara University) followed in the exhibit hall. Four posters were presented.



"<u>Engineering Graduate Student Information Literacy: Are We</u> <u>Meeting the Need?</u>" Leena Lalwani, Jamie Niehof, and Paul Grochowski (University of Michigan)



"<u>Leveraging Python to Improve Quality of Metadata of</u> <u>Engineering Faculty Publication Records</u>" Qianjin Zhang (University of Iowa)



<u>"Making All the Gears Drive the Machine: New Library Collections and Services for Starting a Mechanical Engineering</u> <u>Program</u>" Kelly Peterson-Fairchild and John Burns (Dixie State University)

Laura Mosher (United States Military Academy) moderated technical session 3; Begell House sponsored.

- Daniela Solomon (Case Western Reserve University) presented <u>"Applicability of Evidence-based Acquisition Model to</u> <u>Collection Development in Engineering Subjects"</u> showing how the implementation of an EBA model benefited access, understanding of user needs, and library efficiency.
- <u>"Is It Worth It? Implementation of Electronic Lab Notebook Software Among the STEM Community at an American University in the UAE</u>" by Amani Magid (New York University, Abu Dhabi) demonstrated "failed" experiments can be useful in lessons learned/contacts made.
- David Hubbard (Texas A&M University) tackled the increasing difficulty of locating bulk chemical pricing and strategies to overcome this issue, in <u>"Chemical Pricing Information for Student Design Projects and Cost Engineering:</u> <u>Challenges and Opportunities.</u>"
- Daniel Christe and Dr. Christopher Michael Sales (Drexel University) discussed workshops created around the theme "expose, explore, experience, express" for primary school students in <u>"Empowering Underrepresented</u> <u>Groups to Excel in STEM Through Research Sprints."</u>

The ELD community gathered later that evening for a taste of Spanish cuisine at Finca. This Annual Banquet, organized by John Napp (University of Toledo), was sponsored by Elsevier. During the event, the community recognizes the work of the conference committee members, and there was the traditional eulogy and "awarding of the tee" to the retiring chair, Bruce Neville, by his successor Willie Baer.

Wednesday, June 27

Technical session 1 moderator Emily Hart (Syracuse University) got the ball rolling promptly at 8:00am. IEEE and AWS sponsored breakfast, while ICE was the session sponsor.



Continued on next page...

- Sylvia George-Williams (Southern Methodist University) spoke about creating a new mindset by collaborating with an engaged faculty member to build an interdisciplinary approach to teaching GIS, in <u>"Beyond Our Horizon: Reaching Out to Engineering Faculty to Teach Spatial Literacy."</u>
- Crystal L. Renfro (Kennesaw State University) addressed a dilemma faced by many in the room, that is, <u>"How to Be a</u> <u>Subject Specialist When You Aren't: Engineering Librarianship for the Non-engineer."</u>
- "<u>Project Shhh! A Library Design Contest for Engineering Students</u>," presented by Dr. Matthew Frenkel (New York University) detailed getting students involved in library research and resources through a practical competition that attracted more than engineering students.
- Chelsea Leachman (Washington State University) addressed the challenges of interdisciplinary teaching "to help students solve increasingly sophisticated problems" in <u>"Engineering Information for Non-engineers: A Case Study in Interdisciplinary Application of the ACRL Framework.</u>"

Judith Pasek moderated technical session 5, sponsored by Techstreet and the last of the conference. AWS and ASCE sponsored lunch.

- It's worth reading <u>"Assessment of Library Instruction for Freshmen Engineering Students</u>" by Jeff McAdams and Dr. Rebecca Croxton (University of North Carolina, Charlotte) for its counterintuitive (small sample) results regarding library intervention in research and student outcomes.
- In <u>"Effective Methods of Engineering Information Literacy: Initial Steps of a Systematic Literature Review and Observations About the Literature,</u>" Amy Van Epps (Harvard University) and Nastasha Johnson (Purdue University) discussed pitfalls of conducting the review and lessons learned.
- Kari Kozak (University of Iowa) created a novel video series to give students agency in their information literacy adventure, detailed in "Detecting Information Literacy: Choose Your Own Adventure Video Series."
- Amy Buhler and Jean Bossart (University of Florida) closed out this final session with "<u>Enhancing Student Learning</u> <u>Outcomes: A Library and Writing Center Partnership,</u>" an attempt to elevate the communication skills of engineering majors by "emphasizing the literacy skills employed in professional decision-making."

The last open session of the day was a second workshop, Advice for Mid-Career Librarians, sponsored by AIAA. Julia Gelfand (University of California, Irvine) moderated a panel of seasoned pros, including Mel DeSart (University of Washington), Anne Rauh (Syracuse University), Michael White (Queen's University), and Amy Van Epps (Harvard University). Key takeaways: find mentor(s) and not necessarily at your home school, especially if you want to move into management, or move among institutions. Taking leadership roles in ELD is effective and a recognized way to gain management experience, and build a network (and don't ignore vendors, who have exhaustive exposure to the personalities of different institutions.) Oft repeated phrases: "Don't be afraid of change" and "don't stay where you're stymied."

The notes of the ELD Extended Executive Committee begin on page 13, and can give insights into issues with the 2018 conference and preliminary plans for the coming year.



The ASEE ELD 2018 Homer I. Bernhardt Distinguished Service Award goes to Alice Trussell of Kansas State University, Manhattan, Kansas. An accomplished librarian and exemplary role model, Alice has served as a research librarian and liaison to science, engineering, and geology during her career, including as the Director of the Fielder Engineering Library at KSU from 2001-2015. Alice has worn many hats within ASEE, from moderator for technical sessions to trickier formats like "Get Acquainted" (now Lightning Talks) and professional issues wrap-ups. Most ELD members know Alice for her decade-long leadership as ELD Awards Committee Chair, reviewing each year the impressive research and contributions of her peers. This year, "It's quite an experience seeing your own accomplishments through another's lens," she says, reflecting on Bernhardt award comments such as "Her dedicated work ethic, collaborative experiences, and deep level of involvement on all levels of the professional librarian's spectrum - local, state, national, international – [make her] an inspiration to all of us."

Alice strongly encourages service beyond a librarian's local community, and her commitments have included committee involvements with IATUL and TRAIL, as well as regularly publishing and presenting. "Getting involved with ELD offers all sorts of professional advantages, including tapping into the knowledge of highly experienced colleagues, and identifying potential co-authors."

"While the ELD listservs are a valuable connection to the membership, I can't emphasize enough how important the annual conference is to building a community that can potentially advance your career. The engineering librarians in ELD, and the vendors, too, are happy to share best practices and lessons learned. If you want to get involved, you can present, moderate, jump on a committee, and each year it seems there are more scholarships and travel grants to help defray the cost of attendance." She adds, "The social aspects of ELD, the true collegiality of the group, make building relationships easy – whether it's chatting between sessions, walking together to dinner venues, or taking advantage of the CueBalls* outings started years ago by Mel (DeSart). It's the people that make the annual conference such a great place to be."

*Completely Unofficial Early-Birds And Leftovers Line-up Squad

The **ASEE ELD 2017 Best Publication Award** goes to **Elizabeth A. Berman** for her 2017 Journal of eScience Librarianship article "<u>An Exploratory Sequential Mixed Methods Approach to Understanding Researchers' Data Management Practices at UVM: Integrated Findings to Develop Research Data Services</u>." This article was rated as top quality by most members of the Awards committee in all areas of review, including scholarship, evidence of thorough research, documentation, and critical evaluation. In addition, this is a well designed and very well written research paper that reports the needs analysis study at the University of Vermont, which clearly finds and articulates multiple needs and expectations that have been encountered by librarians who have considered or started working with data services. While not surprising, Berman points out that the growth of library supported research data services requires "engaging with administration and faculty researchers about the role libraries can play in data management, as well as the need for collaboration with more 'visible' stakeholders on campus". While the research is specific to UVM, and explicitly states there is no one size fits all solution for data services, there are many points that resonate across a variety of campuses, both large research institutions and smaller colleges.

Elizabeth is Assistant Director for Research and Instruction at the Tisch Library, Tufts University.

Leena Lalwani, Jamie Niehof, and Paul Grochowski of the University of Michigan received this year's **ELD Best Poster Award** for "Engineering Graduate Student Information Literacy: Are We Meeting the Need?" (see photo, page 13). Their research quantified prior anecdotal evidence of a need for improved library research skills, comprehensive literature searches, citation and data management, and assistance finding and securing funding, for graduate students in school and their future careers.

Business Meeting

ASEE Annual Conference, Marriott at City Creek, Salon D Salt Lake City, UT Wednesday, June 27, 2018

The meeting was called to order by Division Chair Bruce Neville who welcomed ELD members to the annual business meeting. He thanked all of the 2018 ELD sponsors for their support of ELD.

Minutes of the 2017 Business meeting were referenced on the website and in the newsletter. John Teleha moved and Tom Volkening seconded that the minutes be approved. The motion passed.

Bruce introduced Teri Reed, PIC IV Chair, who presented her report and responded to comments and questions from ELD members:

Teri will become the Vice President of the Professional Interest Councils (PICs) this upcoming year and she will sit on the ASEE Board of Directors.

ASEE has placed \$350K into reserves, meeting their fiscal year goal. They had depleted their reserves in 2015 and have been trying to replenish them. The goal is to have 25% operating expenses in reserves, so they are a long way away from that goal. ASEE's credit rating has improved, so that they can borrow money again if necessary. Joe Dillon, the new CFO, has been amazing at improving the organization's financial health.

2018 Conference attendance is 3,000, as of Sunday, plus walk-in attendees. The final count will probably be below that of the Columbus conference (2017). A great effort was spent successfully passing the society code of ethics. The committee is developing processes and PICs will be updating their bylaws to reflect the code, hopefully within the next year.

Teri urged the membership to nominate candidates for the division awards. She referred everyone to read the awards webpage for more information. She also urged everyone to pick up a 125th ASEE Anniversary pin at the table in the exhibit hall. Teri asked for members' input on the online conference locater tool and the mobile conference application. Response was positive.

Teri is on a task force to investigate membership numbers as individual membership is dropping at a rate of about 400 members/year. Institutional membership in dropping among COETs but not COEs. She sent a spreadsheet of PIC membership data to Bruce, and can follow up with anyone who wants more specifics. PIC IV includes one-third of the entire organization.

Q&A WITH TERI

- Can ASEE reduce the conference registration fee from \$700? Teri said she will take this to the organization for discussion.
- Suggestion that the previously increased registration fees had been used to fill the gap for ASEE's financial woes, but that now that the organization is on better footing, perhaps the fee can be lowered. Teri responded that ASEE is spending funds to improve the offerings of food and beverage at the conference, but she will take the concern back to the organization for discussion.
- Question about realigning the PICs so that PIC IV doesn't appear to have the 'left-over' divisions. Teri responded that PIC IV is the biggest and strongest of the five PICs and that it has growth, whereas the other PICs do not. She said they are looking at gaps where people are having difficulty publishing and also looking to possibly add divisions.
- Comment about having conference programming on Sunday. It is especially a challenge for ELD as the dates overlap with the ALA Conference.
- Comment about free and fast wi-fi being available throughout the venue. Teri said that the wi-fi is capped at 2MB and that they are continuing to pursue better wi-fi service for upcoming conferences.
- Question about the discrepancy regarding language on the monolith copyright transfer form and the language on the paper website. This should be clarified.
- Question and comment regarding permissions for papers prior to 2016, can they be put into an institutional repository? This is needed to spread research as much as possible. There is conflicting information regarding this issue from ASEE.

Business Meeting (Continued...)

- Comment about the paper proposal deadline being too early and thus a deterrent for submissions. Teri said the PICs work with Patti Greenawalt to organize the conference so they do have some input.
- Comment regarding conference room size not being sufficient for some programs. Teri emphasized that members need to use the 'ticketed events' button which determines the room size. They are sometimes changing rooms up until the last minute to better accommodate attendees.
- Comment about the list of division tickets when the numbers are different than what appears in the online session locater. Apparently it depends on when the list was pulled from the system.
- Question about obtaining a digital image file of the ASEE anniversary logo. Teri will send this to ELD.
- Question stating that the procedure instructions on the ASEE awards website is not clear. Teri informed us that ASEE has a new staff person responsible for the awards (Sylvie) and the she is in the process of restructuring and updating the site.

OFFICER/CHAIR/TASK FORCE REPORTS AND UPDATES

Division Chair, Bruce Neville: Bruce attended the PIC IV meeting on Sunday. There are 213 members in ELD. We have the highest attendance to the conference per capita. There were 3 diversity papers from PIC IV, including several that didn't have a division in which to present. There are a number of roundtables convening Tuesday afternoon that may be the start of new divisions. The meeting code of conduct became official for the first time at this conference. Free daycare was provided by ASEE and they hope to continue this at future conferences. ASEE has instituted a process for faster bylaws approval. Michael White asked if Bruce had any information about the data that ASEE is losing 400 members/year. Bruce only has division numbers, not for the Society as a whole. He said that PIC IV membership numbers are down slightly.

Program Chair, Willie Baer: Willie reminded everyone that four ELD posters were being presented Wednesday afternoon. Willie asked that members please send any program ideas for 2019 to Julie Cook.

Director, John Napp: Reminded everyone of the banquet logistics.

Secretary/Treasurer: Julie Cook: No updates to the report published in the newsletter.

Accreditation & Standards Committee Chair, David Hubbard: No updates.

Archivist, Zac Painter: Not present. Bruce mentioned the proposal to digitize the archives that will be discussed at the EEC meeting on Wednesday.

Awards Committee Chair, Amy Van Epps: The awards committee wasn't present at the conference so she needed two people to help with poster evaluation.

Development Committee Chair, Amy Buhler: Amy thanked all ELD sponsors and reminded everyone to communicate their appreciation as they see sponsors in the exhibit hall.

Electronic Discussion Lists Chairs, Mel DeSart & Craig Beard: No updates.

Membership Committee Chair, Dave Schmitt: Not present.

Membership Directory, Bernadette Ewen: Bernadette requested that all members check and update their information on the copy of the directory circulating at the meeting.

Mentoring Committee Chair, Kevin Drees: No updates.

Newsletter Committee Chair, Kristen MacCartney: Kristen offered thanks to her editorial board, Paul Grochowski and David Hubbard, and to the new members joining the committee.

Publications Committee Chair, Scott Curtis: Not present. Bruce announced that Kevin Drees and Lisa Ngo will be co-chairing this committee going forward, as Scott's term has ended.

Business Meeting (Continued...)

Scholarly Communications Committee Chair, Daniela Solomon: Daniela presented the Google Scholar group profile that the committee created for ELD. There were some issues developing the group profile, for example not all the papers are listed for each author. She is not sure if they are showing up automatically or not. She wants to increase visibility of the profile. Currently it is 5th in search results for "engineering libraries division". Daniela encouraged members to add their publications into the ELD profile.

Webmaster and Web Committee Chair, Kari Kozak: No updates.

NEW BUSINESS

Awards Committee, Amy Van Epps: Amy asked for comments regarding the Best Publication award and input on the evaluation of publications written on the topic of data science. She said the awards criteria were written with a broad view so they don't address specific topics. This year half of the award nominations were about data management topics. They were written by librarians but not in the library literature so how should they be evaluated? The committee prefers that it should continue its focus on the content of the publication and its relevancy to engineering librarianship and education regardless of the author's division affiliation.

Amy also said that the committee is struggling with how to weight the differences between published papers and monographs. Books had been added to the Best Publication category, perhaps they should be in a separate category than papers.

Mentoring Committee, Kevin Drees: Kevin proposed that a new section called "member expertise" be added to each member's listings in the directory. Previously there was a page on the website for this information but it was seriously outdated and wasn't transitioned to the new site. Apparently, it used to be included in the directory at some time in the past. The mentoring committee would use this information to match mentors/mentees. It adds additional work for the directory editor (Bernadette) who said it may be worth it if there is a clear value to the membership. Someone asked how this differs from the section called "Research Interests" that is already include in the directory and suggested adding an asterisk to items in the list of interests could indicate expertise in that area. There was also a suggestion that an expertise document should be maintained by the Mentoring Committee if they will be the primary users of the list. Kevin will discuss further with the Mentoring Committee.

AWARDS AND RECOGNITIONS

Membership Term Awards: Jean Bossart presented these on behalf the Membership Committee.

- Lifetime Membership Award, 50 Years: Russell Powell
- 10 Years: Amy Buhler, Teresa Calcagno, Phil Flynn, Doug McGee, George Zajdel
- 15 Years: Patricia Mason, Stephen Stich
- 20 Years: Jay Bhatt, Julia Gelfand, Robert Houdek, Bruce Neville
- 25 Years: Kevin Drees, Catherine Lawton, Larry Thompson,
- 30 Years: Norma Godavari, Jill Powell
- 35 Years: Dr. Vladimir T. Borovansky, Thomas Conkling

ELD Best Publication Award: Elizabeth Berman

Homer I. Bernhardt Award: Alice Trussell

Business Meeting (Continued...)

Travel Stipends: Larry Thompson named the current awardees and chose the Morgan & Claypool 2019 awardees.

2018 Awardees:

- Morgan & Claypool Stipend Awardees: Kelly Peterson-Fairchild, Kari Kozak, Lisa Ngo, Anne Rauh
- Elsevier Stipend Awardee: John Burns

IEEE Stipend Awardees: Emily Ferrier, Kelly Durkin Ruth

2019 Morgan & Claypool Stipends Awardees: Larry randomly selected the winners. The first two receive stipends, the next twoare runners up:

- Chelsea Leachman
- Shelby Hallman
- Kevin Drees
- Larry Thompson

GENERAL ANNOUNCEMENTS

Natalie Rice asked for volunteer interview participants for a study at the University of Tennessee.

Deb Kegel was looking for the new member ribbons to distribute.

Mike White announced he had extra ELD anniversary buttons from last year to distribute.

Honora Eskridge invited everyone to attend the South Eastern Library boot camp.

Mel DeSart recognized all first time conference attendees.

The meeting was adjourned at 9:30 a.m.

Respectfully submitted, Julie Cook, Secretary/Treasurer

Extended Executive Committee Update

ASEE Annual Conference, Salt Palace Convention Center, Room 250A Salt Lake City, UT Wednesday June 27, 2018, 3:00-4:30pm

Present: Amy Buhler (Development), Amy Van Epps (Awards), Bernadette Ewen (Director, Membership Directory), Bruce Neville (Past Division Chair), Craig Beard (Nominating), Daniela Solomon (Scholarly Communication), David Hubbard (Secretary/Treasurer), Eric Schares (Member; Publications and Website Committees, Webmaster), Michelle Spence (Director), Julie Cook (Program Chair), Kari Kozak (Webmaster), Kevin Drees (Mentoring, Publications Committee), Kristen MacCartney (Newsletter), Mel DeSart (E-Lists), Willie Baer (Division Chair)

Willie called the meeting to order at 3:20pm. Willie asked if EEC members had read the 2017 ELD EEC minutes and if there was a motion to approve the minutes. Bruce made the motion and Amy V. seconded. The motion passed.

NEW BUSINESS

Digitization of Archives

EEC discussed digitizing the ELD archives stored at UMass Dartmouth. The cost is estimated to be \$5,000. It was suggested that we obtain one internal and one external vendor quote for the digitization. There was some discussion of who would host the digitized content, but no resolution. Zac Painter will be asked to investigate obtaining an outside quote in addition to the UMass Dartmouth quote. Regarding what is in the archive, it was noted that the UMass Dartmouth website has a finding aid. Bruce mentioned that ASEE wants us to be spending our BASS accounts. Assuming a cost of \$5,000 for digitization, this would leave at least \$5,000 in the BASS account. Amy V. mentioned that after the initial archival materials are scanned, ongoing costs for digitization of new materials would be minimal since most new materials are born digital. On a related note, it was mentioned that ASEE has a new guideline for each Division to maintain two years of operating expenses in reserve in the BASS account.

Bylaws Revision

Per ASEE, all divisions must now include any award involving money in their bylaws. The most recent ELD bylaws revision removed awards information, so that will need to be added back into the bylaws. Willie wants to form a Bylaws Task Force to make that revision. ELD should make it clear to ASEE that we only have one monetary award and the others are travel stipends.

Members of the Bylaws Task Force will include: Willie, Amy V., Craig, Bruce, and Mel. Willie asked that the Bylaws Task Force clarify the revisions needed for monetary awards, as well as review the bylaws overall for any other revisions that may be needed, then bring the proposed bylaws changes back to EEC prior to comment and vote by ELD members.

Getting New Members Involved

Willie proposed going through the ELD directory and website to check and update committee memberships. At the very least, each committee chair should be doing this after annual meetings. Willie asked that the chairs let him know if there are any open positions on their committees and he will put out a call for volunteers. Julie mentioned tenure limits on committee membership to provide more volunteer opportunities, but in the interest of time EEC decided not to explore the idea at the meeting. As a point of clarification, there are no limits to the size of committee membership. Willie asked committee chairs to make the aforementioned committee membership updates and to let him know of any committee openings by July 31, 2018. Willie will then put out a call for volunteers. The Publications Committee, under Scott Curtis, was one example of a committee that expanded in order to conduct the increasing amount of peer reviewing. Amy V. mentioned that other ASEE divisions open up the peer reviewing process to the entire division. There was no decision to change the peer reviewing process; though opening it up to the entire division is an option.

With respect to involving more ELD members, Kris mentioned that the committees could tell a compelling story that goes beyond just a description of the committee.

Willie reiterated letting him know about any open committee positions via email. Amy V. asked if the committee chairs could just send out the calls themselves since needs arise throughout the year. It was agreed that committee chairs will forward any openings to Willie for an initial call and committees are free to put out calls of their own as needed.

Extended Executive Committee Update (Continued...)

COMMITTEE REPORTS

Accreditation & Standards – David Hubbard (outgoing committee chair). Julie Arendt is the incoming committee chair. The committee has been discussing any needed changes to ELD's Information Competency Standards for Engineering in light of the new ABET EAC criteria. The committee may want to obtain ELD member feedback on the issue, maybe through a panel discussion next year. A poster presentation, like mentoring did a few years ago, was also mentioned as a way to obtain feedback.

Archives – Zac Painter (Chair) was not present. Zac initiated an email exchange prior to the annual meeting that led to the "Digitization of the Archives" discussion above.

Awards – Amy Van Epps discussed some of the questions the Awards Committee has regarding the Best Publication Award. More specifically, whether to include new forms of scholarship (e.g., E-science), the meaning of "publication," and whether author affiliation or publication content determined eligibility for the award. Amy V. discussed this issue with the ELD membership during the ELD Business Meeting and the conversation will continue. Two clarifying points were mentioned regarding the Best Publication Award: (1) awardees do not need to be ELD members, and (2) the publication can be an article or book.

Development – Amy Buhler reported that there were 16 sponsors supporting ELD activities at this year's annual meeting and 3 other organizations are interested in providing support in the future. Most vendors want to sponsor technical sessions, but there are more sponsors than ELD technical sessions resulting in co-sponsorship for each technical session. There was some discussion of exploring other sponsorship opportunities (e.g., co-branded ELD swag, monetary best poster award, more travel stipends, new member travel stipends in addition to needs based random drawings, first time attendees, etc.). We might consider raising sponsorship rates, especially if membership grows and event costs increase.

Amy B. stated that Elsevier wants to go back to direct pay for the banquet versus placing the money into the conference account. IEEE and SPIE are currently direct pay for the social events they sponsor. Amy B. said that it would make things easier and less complicated and several EEC members concurred based on their experience. One ramification that Amy B. mentioned is that the two complimentary tickets for each of the sponsors may become an issue. ELD may have to send Elsevier a check to cover cost of the complimentary tickets. A guest list and numbers would need to be given to Elsevier.

Listserv – Mel DeSart said there was nothing much to report. He will be updating the EEC email list by adding Julie Arendt (Accreditation & Standards Chair), Lisa Ngo (Publications Co-Chair), Michelle Spence (Director), and removing Craig Beard (Outgoing Past Chair), Scott Curtis (Outgoing Publications Chair), and John Napp (Outgoing Director).

Membership – Dave Schmidt was not present and his term ended in 2018. Willie will check to see if he is interested in being reappointed for another term. It was noted that appointments are the responsibility of the Executive Committee and not the EEC as a whole. Bruce said that Teri Reed (PIC IV Chair) reported that the 2018 ELD membership is 213. Divisions with membership below 200 are considered being borderline for dissolving. We are the smallest division in PIC IV. Amy V. mentioned that ASEE members often belong to more than one division. She thought we might be able recruit ELD members by encouraging members in related divisions to add ELD to their membership.

There was a question about the accuracy of the figure reported. There was some discussion about ELD members having trouble with their ELD membership being recognized when they renewed while registering for the conference. This happened to at least three members this year. Several EEC members mentioned that if you wait to join or renew until you register for the conference, the registration system will not recognize (or count) you as an ELD member. One cannot join or renew divisions when registering for the conference, it must be done after the conference and may result in ELD membership appearing lower than it actually is. Bruce stated that we need to get out of the yellow zone (i.e., ~ 200 members). We may need to remind members about this issue as registration nears in 2019. Kari will add something to the registering webpage about this issue. Amy B said she would ask all of our sponsors, as individuals, to consider joining ELD.

Membership Directory – Bernadette Ewen will wait to update the directory until after July 31, 2018, so the committees have time to update membership themselves.

Mentoring – Kevin Drees reported that the Sunday workshop, The Fundamentals of Engineering Librarianship, was well received. The Wednesday workshop, Advice for Mid-Career Librarians, went well too. There was additional discussion about the Peer Mentoring Expertise Profiles mentioned at the Annual Business Meeting, but based on feedback it

Extended Executive Committee Update (Continued...)

probably will not be pursued. Willie and a few other EEC members thought the ELD listservs serve a similar purpose that the Peer Mentoring Expertise Profiles would serve, though Mel didn't think someone new to the profession would feel comfortable asking for help on the listserv, (Kari) especially if their boss was also on the listserv. After some discussion, it was decided that the Mentoring Committee could post questions on the behalf of members if they were uncomfortable posting themselves.

Newsletter – Kristen MacCartney said she is having a "grand old time" and thanked everyone for helping and contributing over the last year to the Newsletter. All agreed that that the addition of conference pictures has improved the appearance and layout of the Newsletter.

Publications – Kevin Drees stated that he and Lisa Ngo are ready for the challenge.

Scholarly Communication – Daniela Solomon mentioned the ELD Google Scholar Profiles, which she had presented and discussed at the Annual Business Meeting. She said the committee was starting to write a best practices document to help ELD members increase visibility of their publications. Scholarly Communication is thinking about a panel discussion at next year's annual conference. Daniela will discuss the possibility of a panel with Julie. There are links to the ELD Google Scholar Profiles under Quick Links and at the footer of the ELD webpage.

Webmaster – Kari Kozak stated that the new ASEE-ELD website is up and the EEC (and their committee members) were "awesome" with providing assistance for the transition. Kari said there is a problem with the new website, which is hosted on WordPress, in that it can only handle up to 100 MB files. Kari was wondering if we could subscribe to a service such as DropBox so we could host larger files (mainly conference presentations). There was discussion regarding the use of an institutional repository and merits of just using DropBox. Bruce made a motion to subscribe to DropBox (\$99/ year), which was seconded by Amy B. The motion passed. Kari will follow-up on the DropBox subscription.

2019 ASEE ANNUAL MEETING

Julie Cook said she has received the ASEE packet for the 2019 ASEE Annual Meeting.

Regarding the 2019 ELD Programming Committee, it was suggested that Julie go out and ask ELD members to join the Programming Committee. The Programming Committee should include the two Directors and Development Chair. Amy V. suggested targeting ELD members with potential as future ELD officers. Amy V. mentioned that the members of the Planning Committee should appear on the front of the tri-fold. If not there, it should be captured and recognized somewhere (e.g., webpage).

The ELD moderator packet needs to be updated and shared. ASEE has a moderator packet, but it is too general for ELD to use. Julie will update and post the moderator packet to the ELD website. Amy V. stated that there is also a need for a Best Poster Award packet for the moderator and presenters, indicating that the award is based on the content of the poster and not the paper.

Willie said panels work well, but be sure to set them up early and then remove later if not needed since you don't know how many papers will be submitted to technical sessions.

It was suggested having dinner events at the same time is helpful and less confusing (e.g., 6:00pm for both the Welcome and Banquet). All agreed that was good idea, but adjustments might need to be made to accommodate a late exhibit opening (e.g., 6:00-7:30pm this year) or a special banquet venue (e.g., evening cruise).

Mel asked about the titles of the 2018 ELD technical sections. Willie said that it wasn't possible to group and title papers into various themes this year due to presenter schedules, as some presenters were not able to attend Sunday or Wednesday. Willie said that the numbers in the technical session titles could have been renumbered.

With respect to another Sunday workshop, several EEC members mentioned assessment and methods. Willie said there is an option for half and full day workshops on Sunday. The EEC thought such a workshop would be good, and half day (Sunday; 9am-Noon) most appropriate, David H. mentioned that the Educational Research and Methods Division (ERM) division might be interested in co-sponsoring or lending help, but Amy V. said they tend to be busy and may not be interested. Amy V. will try to identify an individual(s) to lead a workshop.

Extended Executive Committee Update (Continued...)

Discussion then turned to lightning talks and the possibility of adding a second session. Mel mentioned that some of the introductory content had been dropped from the lightening talk session due to time constraints (e.g., new member welcome). We might consider two lightning talk sessions back-to-back. It will give more time to mingle and other stuff. It was mentioned that vendors need to be sponsors to present, and the focus should be on training or engineering education. If there are two sessions, it was decided that two different individuals would moderate each session. There were 23 lightning talks submitted and 18 presented this year. Bruce said that a presenter didn't hear back about their lighting talk despite repeated attempts. Kari suggested that an online form could be created that goes directly to a DropBox, generate an email, and keep submissions in one place so things don't get lost or dropped. Kari will set up the submission using DropBox for the 2019 lightning talk submissions.

Initially, it was suggested that if there were two lightning talk sessions, one could be for librarians and another for vendor presenters, but later Kris suggested not splitting the sessions into vendor and librarian talks. There seemed to be general consensus to not divide into librarian/vendor presentations sessions (i.e., maintain a mix of librarian/vendor presentations in each session).

Julie said she will try to avoid having any technical sessions on Sunday.

Mel and Julie noted that there is no calendar overlap between ASEE and ALA annual conferences for the next two years, though there is overlap with SLA in 2019.

Bernadette mentioned communicating pricing options through consortia as a possible workshop, some thought maybe a panel or lightning talk might be better.

DIVERSITY ACTIVITIES

Bruce said there is an opportunity for ELD to appointment a delegate (ex-officio) to the ASEE Diversity Committee. Bruce recommended that we take that opportunity to appoint someone.

On a related note, Bruce asked if ELD needs to create its own Diversity Committee. The delegate appointed to the ASEE Diversity Committee could serve as the chair of that committee. Amy V. noted we would need to revise Bylaws to add the delegate to the EEC. Mel mentioned that it could be done as a working group.

Bruce mentioned that some papers involving diversity were submitted last year, but many did not fit into existing Divisions' missions, so could not be presented. This year, these papers were accepted under the ASEE Diversity Committee, but that will not be an option in the future. There were no ELD papers designated as diversity papers this year. For the PIC IV Meeting, Bruce learned that there may be additional divisions added to ASEE to accommodate underrepresented groups and accommodate related papers.

Willie asked if there was a motion to adjourn. Bruce made the motion to adjourn and Amy V. seconded the motion. The motion passed and the meeting adjourned at 5:03pm.

Respectfully submitted, David E. Hubbard, Secretary-Treasurer

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Call for Papers ASEE 2019

The Engineering Libraries Division (ELD) of the American Society for Engineering Education (ASEE) is seeking abstracts for consideration for presentation at the 2019 Annual Conference & Exposition in Tampa, Florida, June 16th to June 19th.

ELD accepts abstracts for full-length presentations and posters and welcomes abstracts from or joint presentations with members of other divisions. Topics of interest include, *but are not limited* to:

- Assessment
- Collaboration
- Collection Development
- Diversity
- Instruction
- Scholarly Communication
- Technology in Engineering Librarianship
- Marketing and Outreach Activities

Papers on inclusion are also always welcome; to qualify for the Society's Best Diversity Paper, diversity and inclusion must be the focus of the paper. In addition, suggestions/proposals for "Special Sessions," e.g., panel discussions, work-shops, and cross-divisional sessions are welcome.

Special Sessions: A proposal for a special session should include:

- description of the intended audience
- summary of the ideas to be explored and discussed
- outline of the session format, including strategies to engage those attending
- vision for the type of individuals who would present
- expected outcomes for the session

All paper submissions are publish-to-present. Papers submitted to technical sessions are peer-reviewed through the Engineering Libraries Division review process, and those accepted will appear in ASEE Proceedings.

ASEE Author Kit: Please make sure to follow the abstract and paper submission guidelines, available at the Society website: https://www.asee.org/conferences-and-events/conferences/annual-conference/2019/papers-management/for-authors/. The first step in proposing a paper is to submit an abstract (250-500 words) for approval into the ASEE paper management system between Tuesday, Sept. 4 and Monday, October 15, 2018.

Deadlines:

- Abstract Submission Opens: Tuesday, September 4, 2018
- Abstract Submission Closes: Monday, October 15, 2018
- Notification on Acceptance/Rejection of Abstracts: Monday, November 5, 2018

For questions regarding paper submission and review, and also suggestions for panels, workshops, or other non-traditional sessions or interdivisional sessions, please contact the 2019 ELD Program Chair, Julie Cook, at julesck@uw.edu

ELD Author Guidelines, revised August 2018

The following rubric/guidelines are adapted from the ASEE *Journal of Engineering Education* author guidelines, modified for differences found with the ASEE Conference Author's Kit and Draft Paper Evaluation Rubric.

ASEE Engineering Libraries Division - Author Guidelines

Abstract Preparation

The first step in becoming an author/presenter at the ASEE Annual Conference is the submission of an abstract for approval. Abstract Format Guidelines are set by ASEE in the ASEE Author's Kit for the current year's conference. An e xample of the Abstract Guidelines can be found in Appendix B of the ASEE 2019 Annual Conference Author's Kit at https://www.asee.org/documents/conferences/annual/2019/2019_Authors_Kit.pdf . All ASEE resources for authors: https://www.asee.org/conferences-and-events/conferences/annual-conference/2019/papers-management/for-authors

In order to better communicate your proposal, a structured abstract approach is recommended, similar to the structured abstract guidelines here (adapted from the Author Guidelines for the ASEE *Journal of Engineering Education*).

The format for a structured abstract would include the following elements, as noted:

- Background Briefly describe the context and motivation for the study
- Purpose/Hypothesis- Summarize the research question/proposition(s) addressed

• **Design/Method** - *For empirical studies*, provide an overview of the research design, methods of data collection, and analysis

• **Scope/Method** - *For research reviews or pedagogical innovations*, provide a description of the literature considered and the methods used in the review process

- Results Summarize the key findings
- Conclusions State the key conclusion(s) based on the findings

The author should label each part of the structured abstract with the appropriate subheading. Abstracts should have between 250-500 words (excluding the subheadings). This limit results in about 2 to 5 sentences per subheading. The parts do not need to be of equal length. A matter-of-fact, statement-oriented writing style is better suited for structured abstracts than an expository, conversational writing style.

General manuscript requirements

There is no set manuscript length.

For all papers, a review of literature directly relevant to the research problem or topic should be summarized. This review of literature helps the reader determine the originality and context of the findings reported in the paper and presentation.

Submitted manuscripts must not have been previously published nor have been submitted concurrently elsewhere for consideration for publication.

Types of manuscripts

Manuscripts should report original research that contributes significantly to the body of knowledge in the field of engineering education, or that supports engineering education through means such as information literacy instruction or library programming, services, marketing, or collections.

Quantitative, qualitative, and mixed methods research designs are accepted. Manuscripts that report the results of attempts to replicate significant empirical studies are welcome; see "The Role of Replication in Engineering Education Research" by Benson and Borrego in the October 2015 issue of the *Journal of Engineering Education*.

Manuscripts that detail curricular or pedagogical innovations are encouraged for the conference.

Manuscripts will generally fall into two categories: empirical investigations and research reviews/pedagogical innovations.

ELD Author Guidelines (Continued...)

Empirical investigations should state the questions addressed and their context relative to prior knowledge on the subject. The relevant theories should be presented, the research design decisions should be justified, and the research methods should be described in detail to permit an evaluation of their quality. The interpretation of the results must be supported by the data. The conclusions should explain the significance of the results for advancing engineering education research or practice.

Research reviews/pedagogical innovations should state the propositions addressed in the review and their context relative to the body of knowledge reviewed. A review might include a critical analysis, synthesis, or evaluation of previous research to provide new perspectives, a new knowledge structure, general conclusions or overarching principles, or new research directions. Reviews using systematic and meta-analytic approaches are encouraged, but not required. An explanation of the significance of the insights gained to advancing engineering education research or practice should be provided.

Review Criteria

Manuscripts will be reviewed according to the current Draft Paper Evaluation Rubric provided by ASEE for the Annual Conference. The 2019 rubric is available for review at https://www.asee.org/documents/conferences/annual/2016/Rubric.pdf. Check the ASEE Annual Conference website for the current rubric at: https://www.asee.org/conferences-and-events/conferences/annual-conference/2019/papers-management/for-authors

Authors are advised that, regardless of any unforeseen changes in the Conference rubric, an acceptable and high-quality draft manuscript will address these criteria implemented by the ASEE *Journal of Engineering Education* (JEE), which are in turn adapted from the *International Journal of Teaching and Learning in Higher Education* (http://isetl.org/ ijtlhe/criteria.cfm).

Empirical Articles

1. Focus: All empirical articles should report original research that extends the body of knowledge in the field of engineering education.

2. **Problem**: Does the manuscript clearly state and explain the problem or issue that is addressed by the research, the warrants for claims made, and the significance of the problem? Is the statement of the problem directly linked with and in alignment with the subsequent review of the literature?

3. **Literature**: Does the article identify, synthesize, and evaluate the relevant literature that led the author to propose the research? Is there a specific and persuasive explanation of how the present study will contribute to the literature as well as to practice or policy? What conceptual or theoretical framework informs the study?

4. **Methods and Analysis**: Does the manuscript present a well-developed, clearly articulated, and appropriate method or set of methods for the expressed problem, supporting literature, and research approach (e.g., qualitative or quantitative)? How detailed is the description of the context of the study? Are the data that are collected, regardless of form (e.g., interview transcripts, survey results), analyzed using appropriate procedures? Are the results of these analyses reported accurately and fully in the manuscript?

5. **Quality of Data and Findings**: Regardless of the method(s) used, the data should be of sufficient quality to address the hypothesis and/or research questions. In quantitative studies, are the sample size and demographics appropriate to the problem? In qualitative papers, were the data collected in a way to provide an in-depth understanding of the context? Are findings supported by data and results? Are findings sufficiently compelling to support publication?

6. **Conclusions**: Are the conclusions specific to the research questions or hypotheses posed? Are they supported by the data analysis? In addition, does the conclusion address both the original problem and the implications of the research findings? For quantitative studies, do the conclusions address the hypothesis? For qualitative papers, do the conclusions address the hypothesis? For qualitative papers, do the conclusions address the research question? Does the manuscript connect the findings to the conceptual framework that informs the study, discuss the limitations of the study, and describe the implications of the findings for further research or educational practice?

ELD Author Guidelines (Continued...)

7. **Clarity and Organization**: Is the manuscript organized in accordance with currently accepted formats for reporting qualitative, quantitative, or mixed methods research? (For guidance, see the *Publication Manual of the American Psychological Association*, sixth edition).

8. **Style and Mechanics**: Is the article written in an appropriate style? Is the article free from grammatical, punctuation, and spelling errors?

Note: citations and references will be accepted in any standard format. ASEE has not adopted a particular citation and reference standard.

In addition to these general criteria, specific criteria apply depending on the type of empirical article:

1. **Quantitative studies** will generally be hypothesis-driven. Is the hypothesis clearly articulated and are the methods appropriate to address the hypothesis? Are the sample and any controls appropriate? When scales, instruments, or tests are used, is there evidence of validity and reliability? Is the use of statistical tests explained clearly? Are decisions regarding the choice of statistical tests justified? Have assumptions for statistical tests been checked or verified? When appropriate, are effect sizes, confidence intervals, statistical power, and goodness of fit reported?

2. **Qualitative studies** do not have to be hypothesis-driven. Does the manuscript articulate the research questions that guide the study? Are the methods appropriate to answer the research questions? Additionally, is there justification for the cases or participants being studied? Are credibility and trustworthiness established? Are the analyses used appropriate? Does the methodology provide a deep, contextual understanding of the phenomenon being studied? Is the researcher's epistemological stance clearly articulated and reflected in the methodology?

3. For **mixed methods studies**, are the hypotheses or research questions clearly stated? Does the article delineate whether it uses a mixed or multiple methods approach? Does the article clearly describe the research strategy and the plan for integrating the different data sets? Finally, do the quantitative and qualitative components satisfy the criteria given above?

Research Reviews and Curricular/Pedagogical Innovations

1. Focus: Are the goals well stated and developed, and bear a clear relationship to engineering education?

2. **Topic**: Does the manuscript clearly state and explain the topic or issue that is addressed by the review? Is the statement of the topic delineated and distinguished from related topics, and directly linked with inclusion criteria described in the manuscript's methods section?

3. **Methods and Analysis**: Does the manuscript clearly describe how articles were identified for the review, and is the approach appropriate for the type of review? Are decisions such as inclusion criteria, databases used, and the number of qualifying articles documented? For a meta-analytic review, is a description of the statistical techniques used in the analysis included?

4. **Synthesis and Critique**: Does the manuscript sufficiently describe what is known about the topic? Does it advance knowledge and identify future directions of research? Is it a complete treatment of the topic?

Conclusions: Are the conclusions meaningful and the scholarly contributions supported by the literature review? Do the conclusions suggest further directions for research, areas that are missing from our current understanding, or implications for engineering education practice?

6. **Clarity and Organization**: Is the manuscript organized in accordance with currently accepted formats for literature reviews?

7. **Style and Mechanics**: Is the manuscript written in an appropriate style? Is the manuscript free from grammatical, punctuation, and spelling errors? *Note: citations and references will be accepted in any standard format. ASEE has not adopted a particular citation and reference standard.*

Submission

The mechanics of submission are governed by the Author's Kit published by ASEE for the Annual Conference. As an example, the 2019 Author's Kit document is located at https://www.asee.org/documents/conferences/annual/2019/2019_Authors_Kit.pdf.

Committee Reports

Accreditation

Julie Arendt, Chair

The Accreditation and Standards Committee (A&S) thanks David Hubbard for serving as the chair of the committee this past year.

A & S plans to create a map of connections between the new accreditation criteria ABET has for baccalaureate engineering programs and the topics we teach engineering students. The committee is welcoming new member-volunteers to join the committee this year to work on this project.

The Science & Technology (STS) section of the Association of College & Research Libraries (ACRL) is working on a document to connect the ACRL Information Literacy Framework to what science and technology students study and learn. STS will be in touch with the A & S committee as they complete drafts. Because STS is working on this map, A & S is planning to hold off on mapping connections between the ACRL Framework and engineering-specific information literacy.

A & S may want to address additional topics this year, as committee member time permits. One idea is to create a more accessible archive of librarians' experiences with ABET visits. Another is to develop a discussion within ELD of how to help students access information ethically after graduation -- when their access to library resources often is much lower than what they had as students.

Membership Directory

Bernadette Ewen, Chair

The ASEE ELD Directory of Members was last updated in August 2018. The directory is a great tool for networking. It lists contact information, research ID numbers, research interests, CV/Bio links, and the original ASEE ELD join date of each member. ELD members that wish to update their information listed in the directory or request the password for downloading the latest directory from <u>https://sites.asee.org/eld/member-directory/</u> should e-mail Bernadette at: <u>ewen@rose-hulman.edu</u>. Thank you to David Schmitt, Mel DeSart, and Kari Kozak, and all other members who provided me with updates for the directory.

Publications Committee

Kevin Drees, Co-Chair Lisa Ngo, Co-Chair

A huge thank you to Scott Curtis, who has ably and tirelessly chaired the Publications Committee since 2014! We look forward to continuing his excellent work.

An additional thank you goes to all the members who reviewed papers this past year. If you are interested in volunteering for the publications committee, please send us a message off-list (<u>lngo@berkeley.edu</u> or <u>kevin.drees@okstate.edu</u>). There will be a call for new members going out in October with more information about the committee and reviewer responsibilities.

Scholarly Communications Committee

As we announced during the 2018 ASEE conference, the ELD Google Scholar profile is up and running! Its web address is <u>https://scholar.google.com/citations?hl=en&user=QnIjSrEAAAAJ</u>.

We invite everyone to check it out for an amazing list of publications on engineering librarianship authored by the ELD members. Once there, you have the option to set an alert for new/related articles as well as citations.

We also encourage members to increase the visibility of their own publications by joining the ELD Google Scholar Profile. Send your personal Google Scholar profile link to <u>eld-p@u.washington.edu</u> and the SCC would be happy to add your publications to the ELD-GS profile. Please help us make this profile as comprehensive as possible!

The SCC is looking forward to hearing from all of you!

Spotlight on Members

Jay Bhatt, Liaison Librarian for Engineering at Drexel University, was named the 2017 Special Libraries Association Engineering Division's Engineering Librarian of the Year. According to SLA, "Jay is responsible for building library collections in engineering subject areas, as well as for outreach to faculty and students and teaching information and research skills to faculty and students in Engineering, Biomedical Engineering, and related subject areas. He provides individual and small group consultations to students, instructional sessions to specific classes, online research support in both face to face and distance learning programs, and workshops for specialized research areas. Jay is actively involved with the Engineering Libraries Division of ASEE, and he is a member of the Asian Chapter of the SLA, as well as the Engineering and the Science & Technology divisions. He experiments with innovative applications of emerging technologies to enhance information awareness among faculty and students. Jay has published and presented papers extensively in the area of information literacy for engineering students."





Laura Robinson is Librarian, Faculty Development and Research Support Lead, at Worcester Polytechnic Institute. Laura "assists with discovery and management of resources, navigating copyright and author's rights issues, deciding where to publish, assessing scholarly impact, and development of scholarly online profiles." At the 2018 ASEE Annual Conference she was among the authors receiving the PIC III Best Paper Award for <u>"The Theater of Humanitarian Engineering.</u>" which discusses using a role playing game to give students the opportunity "to reflect on economic, geographical, social, and philosophical issues while learning the technical skills they need to make informed decisions to address the needs of a rapidly expanding population."

In addition, Laura presented a poster at ASEE in the Engineering Design Graphics Division, on <u>"Visual Literacy in Mechanical Engineering Design:</u> <u>A Practical Approach to Assessment and Methods to Enhance Instruction</u>" and also co-authored an accepted paper <u>"Many Hands on the Elephant: How a</u> <u>Transdisciplinary Team Assesses an Integrative Course.</u>"

Welcome New Members

April Kelley is Public Services Librarian at the University of Pittsburgh at Johnstown - Owen Library, where she is the liaison to the Engineering, Nursing, and Education divisions on campus. "I teach information literacy skills to my liaison areas as well as general education classes such as Public Speaking and Composition. As part of a small staff, I also work at the Information Desk and manage our library's social media accounts, along with 'other duties as assigned." She has been in this position for just over two years, and previously worked for nearly ten years at George Mason University's Arlington Campus Library as a Reference, Research, and Instruction Specialist. April has a BA in history from Albright College, an MA in History and New Media from George Mason University, and an MLS from the University of Maryland. She says, "I still play the clarinet with my alumni marching band from my high school and we march in a parade at least once a year!"



Alfred Wallace writes, "I'm at Christian Brothers University, in Memphis TN, where I am the Instruction Librarian, and also Liaison to Engineering. I've just started this month. I primarily support undergraduate learning in the big four + packaging engineering." Alfred received his MLS from the University of Illinois at Urbana-Champaign, where he held a paraprofessional position at Funk ACES Library, which among other things served engineers in agriculture-related fields. "I also have graduate degrees and research experience in history, where I also taught. I have observed engineering practice and information habits close-up at home, where I was raised by a mechanical engineer and a computer scientist. When not at the office, I study popular culture, including board games, and ice cream production and consumption—often through first-hand experience."