

Engineering Economy Division ivision

Fall 2022 Newsletter – Annual Conference

Welcome to the Fall 2022 issue of the newsletter for the Engineering Economy Division (EED) of the American Society for Engineering Education (ASEE).

In this issue, you will find information about the 2023 ASEE Annual Conference, our call for papers and special sessions, a recap of our 2022 Annual Conference activities, and information about how to become involved in our division.

If you have any questions, comments, or items for the upcoming Spring 2023 Newsletter, contact our newsletter editor, Robert Baffour at rbaffour@uga.edu

In This Issue

• 2022 Annual Conference recap and Announcements

• Information for the upcoming 2023 ASEE Annual Conference & Exposition to be held in Baltimore, Maryland, June 25-28, 2023.

• Call for Papers for the EED. ABSTRACT submission opens on October 3, 2022 and closes on October 31, 2022.

• Meeting Minutes from the Engineering Economy Division 2022 Annual Business Meeting.

A Message from the Chair

Hello Engineering Economy Division members. It was great to see many of you at the annual conference in Minneapolis.

EED welcomes you to join us at the 2023 ASEE Annual Conference and Exposition in Baltimore, Maryland! As we prepare for next year's conference, please start thinking about how you can contribute to the EED conference program. To ensure our members are engaged with the division, we are offering special sessions, awards, and travel sponsorships to support your conference travel. The special sessions offer an opportunity to present strategies in your classroom or curriculum elements in a shorter 3-to-5-page paper format. Please refer to the call for papers in this newsletter for details.

EED offers a Best Paper Award (\$1,000), New Engineering Economy Educator Award (\$1,000, for those teaching <5 years), and travel sponsorships (\$250-\$500). Submit an abstract by October 31 to be eligible. Please consider submitting an abstract and invite your colleagues to submit as well. I look forward to seeing you in Maryland, MD in June 2023!

> Visit us online! <u>https://sites.asee.org/eed/</u> Conference Paper Archive <u>https://sites.asee.org/eed/paper</u>

Officers

Chair

Ona Egbue University of South Carolina Upstate <u>egbueo@uscupstate.edu</u>

Program Chair

Katie Basinger University of Florida <u>katie.basinger@ufl.edu</u>

Program Co-Chair/Treasurer John Leonard Virginia Commonwealth University jdleonard@vcu.edu

Secretary/Newsletter Editor Robert Baffour University of Georgia <u>rbaffour@uga.edu</u>

Past Chair

Jim Burns Western Michigan University j.burns@wmich.edu

2022 Annual Conference Highlights

3 EED papers were placed into one technical session. Overall the annual conference saw 3042 attendees and 762 sessions.

Division Awards & Recognition

Best Paper Award: Lewis, N., & Eschenbach, T. (2022, August), *Annuities as a Good Course Example* Paper presented at 2022 ASEE Annual Conference & Exposition, Minneapolis, MN. https://strategy.asee.org/41329

New Engineering Economy Educator Sponsorship: Katie Basinger-Ellis University of Florida

National Engineering Economy Teaching Excellence Award (NEETEA): Jerome Lavelle, Wilson College of Textiles at North Carolina State University received the award.

Dr. Erick Jones (Former EED representative of the ASEE Commission on Diversity, Equity, and Inclusion has been named dean of the University of Nevada, Reno College of Engineering. <u>Dr. Erick Jones Named Dean of the College of Engineering</u> | <u>President's Messages | University of Nevada, Reno (unr.edu)</u>

Announcements

Visit us online to view all past award recipients and learn about our upcoming awards.

• <u>https://sites.asee.org/eed/awards/</u>

Got a question for an officer or anyone else in the division? Try the ASEE HUB!!!

<u>https://aseehub.asee.org/my-dashboard</u>

Did you know? We've got a journal dedicated to Engineering Economy! See:

• <u>https://www.tandfonline.com/toc/utee20/current</u>

Want to learn more about other ASEE interest groups and activities?

• <u>https://aseehub.asee.org/my-dashboard</u>

Faces and names - your EED Leadership Team

Ona Egbue Division Chair Katie Basinger-Ellis Program chair John Leonard Program Co-chair/Treasurer Jim Burns Past Chair

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The Engineering Economy Division (EED) of ASEE seeks papers for presentation at the 2023 ASEE Annual Conference and Exposition being held in Baltimore, Maryland, June 24-28, 2023.

We seek relevant abstract submissions for research-based, full and work-in-progress papers for our traditional **Technical Sessions** covering a broad spectrum of engineering economy topics including, but not limited to:

Economic analysis across engineering disciplines Integrating engineering economy research into the classroom International aspects of engineering economy education Diversity, equity, and inclusion in engineering economy education Innovative teaching methods for engineering economy **Case studies for the classroom** Course adaptations due to the COVID-19 pandemic

In addition to the **technical session**, we seek submissions for two **Special Sessions** designed to uncover and explore the state-of-the-art of engineering economy education by bringing together new and seasoned engineering economy educators in an engaging, low-risk, high-reward way:

Course Strategies for Engineering Economy Instruction

Interactive, panel-type session addressing effective strategies for teaching engineering economy. From large lecture halls, to online courses, to smaller traditional classrooms, the panel will use submitted papers to frame the discussion and draw insights about what really works in engineering economy education. This session is perfect for new educators, those just beginning to teach EE, anyone considering redesigning or updating their course, and experienced educators who have their course strategy for engineering economy down to a science.

Abstract format: Submit an abstract with the title "Course Strategy" followed by a descriptor (e.g., *Course Strategy: Managing High-Enrollment Online Courses*) and a bulleted outline of the elements requested in for the paper itself (see below). The abstract should be approximately 1 page.

Paper format: Submit a paper (3-5 pages) addressing the following elements: Instructional Environment (department, student audience, school size, etc.), Delivery Method (lecture, hybrid, online, etc.), Approach to Instruction and Technology (spreadsheets, case studies, tables/equations/calculators, etc.), Topics Covered, Assessment (grade elements, paper/online/mixed), Rationale for the approach, and Lessons Learned.

Conference Session format: Panel discussion with a dynamic, expert moderator. Contributed papers will drive the discussion topics and authors will have the opportunity to highlight key points and rationale behind their strategy. Paper contributors may be invited to be a member of the panel, and all in attendance will be included in the conversation.

Curriculum Elements for Innovative Teaching

Do you have a curriculum element that you want to share?

Include real-world scenarios in a case study? Use technology to improve group projects conducted remotely? Use online assessment for quizzes and tests? Have a technique for teaching financial risk using simulation?

This session will feature a collection of the very best in innovative teaching in engineering economy. You will have the opportunity to share your technique with everyone and then dive deeper with those who are most interested in learning more. The 2022 curriculum elements section calls for a focus on real-world case studies used in class. Consider including the case study, implementation plan, student feedback, and lessons learned.

Abstract format: Submit an abstract with the title "Curriculum Element" followed by a descriptor (e.g., *Case Studies from Current Events, Curriculum Element: Crafting Meaningful*) and a bulleted outline of the elements requested in for the paper itself (see below). The abstract should be approximately 1 page.

Paper format: Submit a paper (3-5 pages) addressing the following elements: Objectives, Content, Delivery, and Assessment. Include the complete curriculum element where relevant to help others emulate or adopt your technique.

Conference Session format: Rapid fire presentations (3-5 minutes) by all authors, then rotating breakout sessions to discuss detail of curriculum elements. Your curriculum element and supporting materials will also be featured on the division's website for maximum impact. If you would prefer to submit a full paper, please submit to the technical session above.

Authors of accepted abstracts will be invited to submit papers for peer review and inclusion in the conference proceedings. All accepted papers are eligible for the **EED Best Paper Award.** We encourage submissions from new educators who are eligible for our **\$1,000 New Engineering Economy Educator Award¹**. In addition, authors submitting to the special sessions may be eligible for a **\$250-500 Travel Sponsorship²** to help defray the cost of attending the conference.

If you have questions or would like additional information, contact the engineering economy Division Program Chair, Katie Basinger-Ellis at <u>katie.basinger@ufl.edu</u>, or Division Chair, Ona Egbue at <u>egbueo@uscupstate.edu</u>, or visit us on the web (<u>https://sites.asee.org/eed/</u>).

Submission details, paper management information and author's kit can be found at the links below.

Conference Website:	https://www.asee.org/annual-conference/2022
Paper Management:	https://www.asee.org/annual-conference/2022/paper-management/important-deadlines

Important Dates			
Abstract Submission Opens:	October 3, 2022	Revised Draft Paper Submission:	March 21, 2023
Abstract Submission Closes:	October 31, 2022	Accept/Reject Final Notification:	April 15, 2023
Accept/Reject Abstract Date:	November 21, 2022	Author Registration:	April 30, 2023
Draft Paper Submission:	January 31, 2023	Final Paper Submission:	April 30, 2023
Draft Revision Notification:	February 28, 2023	Attend the Conference:	June 25-28, 2023

¹ Eligibility includes students, instructors, or faculty teaching engineering economy less than 6 years. ² A limited number of awards are available.

³ As of 9/13/2022. Dates are subject to change.

Important Dates³

ASEE Engineering Economy Division Business Meeting Minutes: June 26, 2022; Minneapolis, IN; as part of the ASEE Annual Conference and Exposition Minutes Prepared by Jim Burns.

1. Welcome and Call to Order

The meeting was called to order by Division Chair Ona Egbue at 12:35 CDT.

2. Attendance

The following people were present:			
Ona Egbue	University of South Carolina Upstate		
Kate Abel	Stevens Institute of Technology		
Robert Baffour	University of Georgia		
Katie Basinger-Ellis	University of Florida		
Jim Burns	Western Michigan University		
Karen Bursic	University of Pittsburgh		
Katrina Donovan	South Dakota School of Mines & Technology		
Ted Eschenbach	TGE Consulting		
Nelson Granda	Western Carolina University		
Billy Gray	Tarleton State University		
Paula Jensen	Texas Tech & South Dakota School of Mines & Technology		
Kim Needy	University of Arkansas		
Tish Pohl	University of Arkansas		
Ed Pohl	University of Arkansas		
Chell Roberts	University of San Diego		
Raymond Smith	East Carolina University		
Eric Specking	University of Arkansas		

3. Approval of minutes from 2021

Minutes from 2021 meeting were unanimously approved.

2. PIC II Update – Chell Roberts, PIC II Chair

General updates:

- ASEE Conveyed an apology to members for the difficulties associated with the new Slayte platform. ASEE Will be taking action to address the issues.
- Conference statistics: 3042 attendees, 762 sessions.
 - ASEE Is taking action to ensure alignment of ASEE & Sponsors' values.
 - Why join ASEE? Need to appeal to new engineering educators.
 - EED Members offered suggestions:
 - Kate Abel suggested financial incentives to participate.
 - Kim Needy noted that support from Deans to allow early career faculty to participate is important.
- ASEE Open positions:
 - VP-Scholarship, JEE Editor
- ASEE establishing a user group to help with future software purchases.
- ASEE will issue a \$50 Incentive for membership or conference attendance in 2023, and an additional \$50 incentive for new members.

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- Ethics Committee resolved a case of aggressive behavior at the 2021 conference.
- CDEI 25 Papers submitted for best paper.
- ASEE Is looking to incorporate plans for instances when an officer cannot complete their term into the bylaws. A new Model Bylaws should be published soon.
- Task Force on Teaching Excellence is conducting surveys at this meeting to establish core competencies for certification of engineering educators.
- Financial report highlights:
 - Positives Debt free & positive cash flow. Negatives Institutional dues late, contracts down,
 - BASS account fees will be dropped in FY23 and ASEE is looking into a process for allowing cash advances from BASS accounts for event planning purposes.
- ASEE & PIC II Membership:
 - Nonacademic institutions & individuals driving a drop in membership. 2022 increase from free members.
 - \circ Low member divisions are those with less than 125 members. EED is not one of them.
 - Best papers for all PIC II divisions were announced.
 - PIC II Actual members. Report is wrong Division chair estimates 353 as of conference.
- EED Member questions & issues raised:
 - Kim Needy noted that the awards processes were very late this year, which was very inconvenient for the award winners.
 - Katie Bassinger-Ellis raised concern for privacy of division award winner information when processing financial awards. Katie also noted that ASEE could consider developing a certificate or something similar that would be valuable for tenure-track educators in order to incentivize participation.
 - Ted Eschenbach noted that the National Engineering Economy Teaching Excellence Award was endowed through a gift by Don Newnan, and suggested ASEE consider adding his name to the award.
 - Billy Gray inquired about a possible correlation between ASEE Annual and regional conference attendance.

4. Division Chair's Report - Ona Egbue

Thank you to officers.

Division Committees & efforts:

- Erick Jones is the ASEE CEDI representative and wishes to step down from the role.
- Jim Burns is the ASEE P-12 representative and is willing to continue in the role.
- New Engineering Economy Educator award was awarded this year.
- 2022 National Engineering Economy Teaching Excellence Award (NEETEA) was awarded this year on the usual biennial cycle.
- 2021 Grant Award was awarded this year.

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Membership:

	2017	2018	2019	2020	2021	2022
EED Papers	4	4	4	2	7	3
EED Membership	116	110	167	269	296	353**
PIC Members	4,451	4,204	4,231	4,187	5,096*	5,094
ASEE Members	11,660	10,253	9,996	9,503	9,425	9,447

*PIC reorganization

** As of 5/31/2022 (263 in FY22 Q2)

- ED Membership has increased over the past 5 years
- EED is 3rd largest division in PIC II out of 10 divisions

EED Bylaw changes:

- Proposed changes will be sent out to the division prior to the 2023 annual conference for members to consider. A vote on the proposed changes will be held at the next business meeting. Expected changes are:
 - Add criteria and basic procedures for awarding non-endowed awards such as the New Engineering Economy Educator Award.
 - Add description of officer duties.
 - Change statement on diversity, equity, and inclusion to better align with ASEE recommendations.

5. Program Chair's Report – Katie Bassinger-Ellis

Program Summary:

- 6 Abstracts submitted / 6 accepted / 3 withdrawn / 0 rejected / 0 transferred
- 3 Final papers submitted, placed into 1 technical session
 - Technical Session: Monday 6/27 3:30pm Room 102D (TODAY)

Best Paper Award: Neal Lewis and Ted Eschenbach, Annuities as a Good Course Example

New Engineering Economy Educator Sponsorship: Katie Basinger-Ellis University of Florida

Discussion:

- Overall paper numbers are down. Need to continue efforts to drive engagement.
 - Jim Burns noted EED's pre-COVID efforts to create conference sessions that allow for easy
 participation were based on ASEE's efforts to drive engagement by giving program chairs
 greater flexibility. Ted Eschenbach suggested using special topics relevant to the division and
 using session formats other than the traditional 10-15 minute presentation.
 - Issuing the call for papers and connecting with EED members in August before the semester begins should be a priority.
 - Kim Needy suggested using invited speakers to help drive interest in the division's activities. Inviting past Wellington Award winners could be a good strategy.

6. Treasurer Report – Katie Bassinger-Ellis

Financial Summary:

	222	422	122	115
	BASS	Local	Best Paper	NEETEA
		(Grant)		
Summary 9/30/2019	\$11,618	\$33,858	\$137,417	\$391,173
Summary 6/16/2020	\$12,318	\$33,858	\$126,582	\$362,518
Summary 6/30/2021	\$12,276	\$34,807	\$185,384	\$519,343
Summary 12/31/2021	\$8,575	\$34,728	\$153,181	\$432,618

Pending sources of change after 12/31/21 for BASS account:

- Expenses:
 - Best paper award (\$1000) + Plaque x 2 (\$66.33). Transfer in from account 122.
 - New Educator award (\$1,000) + Plaque (\$66.33)
 - Administration charges from ASEE, Business Meeting Lunch (Approx. \$500)
- Revenue: TEE Royalty (\$TBD), Dues (\$TBD), Interest (\$TBD).

Pending sources of change for Grant Award account:

• Expenses: Grant Award (\$1,000) + Plaque (\$80)

Notes & Discussion:

- NEETEA expenses will be \$10,000. The report for 3/31/2022 was not available due to a system change (IMPX) earlier this year. The NEETEA award transactions are handled by ASEE.
- BASS Account balance is low compared to previous years.
 - Because expenses associated with awards are frequently paid out of the BASS account to award recipients, EED will review past transactions to ensure funds were transferred into the BASS account from the associated award accounts.
- Market changes have impacted endowed accounts this year. A summary of changes are given in the table below.

Time Period	Result	Best Paper	NEETEA
		(122)	(115)
1/1/22 -3/31/22	Unrealized Loss	(\$12,809)	(\$34,160)
10/1/21 -12/31/21	Unrealized Loss	(\$12,105)	(\$32,282)
7/1/21 -9/30/21	Unrealized Loss	(\$2,268)	(\$6,048)
4/1/21 -6/30/21	Unrealized Gain	\$8,898	\$23,733

7. Newsletter Report – Ona Egbue

Fall 2020 newsletter sent to EED members on 10/10/2020:

• 2020-2021 Officers, 2020 Annual Conference highlights, Call for papers for 2021 Annual Conference, Special Session announcements, minutes from the 2020 Business Meeting.

Spring 2022 newsletter sent to EED members on 6/7/2022.

• Overview of EED activities at the 2022 Annual Conference, call for officers and member renewal, award announcements.

8. EED Officer Election – Ona Egbue

The original EED Treasurer stepped down during the past year and the role was filled by existing officers taking on additional duties. EED Officers proposed to freeze positions for next year, except for the Newsletter Editor who will advance to the Treasurer role and elect 1 new member. Additionally, the Treasurer will serve as Program Co-Chair for this year only. The proposal was unanimously approved by attendees.

Nominations were sought for the Newsletter Editor position. After discussion, Robert Baffour was nominated an unanimously approved as the new Newsletter Editor.

Jim Burns
Ona Egbue
Katie Basinger-Ellis
John Leonard
Robert Baffour

9. Committee Reports

Commission on Diversity, Equity and Inclusion (CDEI) Report:

- Erick Jones was not available to give the report this year. Erick has enjoyed serving the division as the CDEI representative but wishes to step down at this time.
- Nominations were sought for the Newsletter Editor position. After discussion Nelson Granda was nominated and unanimously approved as the CDEI representative.

Board of Directors Commission on P-12 Education:

- Jim Burns gave the P-12 report. Meeting is being held on Annual meeting Tuesday, June 28th at 9:00am (after the EED Business Meeting. Activity for this commission has been low this year. Jim will continue to serve as the EED representative for 2022-2023.
- Website is actively updated each month with a P-12 Spotlight:

https://sites.asee.org/p-12committee/

The following notes are from the subsequent P-12 meeting.

- P-12 Commission areas of focus:
 - Enhance and improve internal knowledge of and communication about P-12 engineering education within ASEE.
 - Support mutually beneficial partnerships, collaborations, and relationships between ASEE and other organizations.
- P-12 Commission leadership wishes to highlight that there is P-12 teacher professional development at each ASEE Annual Conference that serves schools local to the conference.
- New P-12 Engineering Offerings Map to serve as a resource for P-12 educators: <u>https://bit.ly/PCEEMAP</u> <u>https://bit.ly/PCEEMAPFORM</u>
- Endorsements:
 - o Teacher Professional Development <u>https://etpde.asee.org/</u>
 - New: ASEE Engineering Pre-College Activities and Curriculum Endorsement (EnPACE)
- Upcoming priorities: Develop P-12 Delegate Toolkit, Increase P-12 Teacher Recruiting, Boost ASEE's voice as P-12 Engineering Education Experts

National Engineering Economy Teaching Excellence Award (NEETEA):

- Jim Burns gave the NEETEA report.
- Nominations: 2 New, 4 from 2020 cycle (All applications from the previous cycle are automatically considered).
- Jerome Lavelle was chosen as the 2022 recipient. Congratulations, Jerome!
- Award presentation to be on Wednesday, June 29, 2022.
- 2022 & 2024 Committee Members:

2022 Committee	2024 Committee
Jim Burns (Officer, 2022 Committee Chair)	Katie Basinger (Officer, 2024 Committee Chair)
Katie Basinger (Officer, 2024 Committee Chair)	John Leonard (Officer, 2026 Committee Chair)
Bill Sullivan (previous winner, term ends 2022)	Wolter Fabrycky (previous winner, term ends 2024)
Wolter Fabrycky (previous winner, term ends 2024)	Jerome Lavelle (previous winner, term ends 2026)
Ed Pohl, Non-division representative for 2020 & 2024	Non-division representative -Open

Grant Award:

- Kate Abel gave the Grant Award report.
- 2021 Award: The Levelized Cost of Energy and Regulatory Uncertainty in Plant Lifetimes, by David C. Rode and Paul S. Fischbeck.
- Award Committee election:
 - o 3 Members rolling off: Hamid Parsei, Christy Bozic, Michael O'Connor.
 - Nominations were sought for new committee members. Raymond Smith, Paula Jensen, and Nelson Granda were nominated and unanimously approved by attendees.
 - o 2022 Grant Award Committee:

Raymond Smith, East Carolina University (2022-25) Paula Holmes Jensen, Texas Tech (2022-25) Nelson Granda, Western Carolina University (2022-25) Kate Abel, Stevens Institute of Technology (2021-24) Committee Chair Karen Bursic, Missouri University of Science and Technology (2021-24) Billy Gray, Tarleton State University (2021-24) Ted Eschenbach, TGE Consulting (2020-23) Erick Jones, University of Texas at Arlington (2020-23) Joe Wilck, William & Mary (2020-23)

Engineering Economist Report:

- Ona Egbue gave the report for Heather Nachtmann.
- Highlights
 - Top Downloaded Article : The socioeconomic feasibility of greening rail stations: a case study in Lisbon. Downloads-1,293
 - Top Cited Article: Non-equal-life asset replacement under evolving technology: A multi-cycle approach. Citations 10

0	2021 Downloads	20K
0	2021 Volume Year Publications	21
0	2021 Volume Year OA Publications	0
0	2020 Impact Factor	0.861
0	2020 CiteScore	1.5
0	Median Days Submission to First Decision	8
0	Median Days Acceptance to Online Publication	22
0	Acceptance Rate (%)	12%

• EED Representative to the editorial board: Christy Bozic's term is ending. Nominations sought for new representative. Tish Pohl was nominated and unanimously approved by members.

10. Announcements

- 2023 Annual Conference in Baltimore, MD on June 25-28, 2023.
- Joint EED/EMD/IED/SED Joint Banquet, Tuesday, June 28, 7:00-9:00pm, Hyatt Regency Lakeshore A banquet hall.