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Message from the 2023 Division Chair

*Dr. Jenny Retherford, P.E. (T.N.),
University of Tennessee at Knoxville*



Civil Engineering Division Family, Please know you hold a special place in my heart. I appreciated the opportunity to serve as the 2023 Annual Conference Program Chair, and am grateful to follow the positive and supportive leadership of our Division as I move into the Division Chair position this year. If you don't know, our Division is well-structured, managed with integrity, and seeks to continually evolve the valuable education we offer our civil engineering students.

I've found my participation in the division to be rewarding and relevant to my roles in my home institution and I hope you find the same collegial support within our ranks. Through Tonya Nilsson's leadership and Dave Saftner's innovative thoughts, we look to refine our Division by-laws this year to improve efficiency in the leadership board responsibilities. I look forward to Dave's design of the 2024 Portland Annual Conference program as I'm sure we'll see excellent scholarship presented by our community of contributors. Ultimately, we cannot be a successful division without the efforts from our membership. Continue to excel in engineering education! The realms of Civil Engineering and related fields need our quality instruction! Plan to join me and other friends in Portland next June!

Message from the 2023 Program Chair

Dr. Dave Saftner, University of Minnesota Duluth



Civil Engineering Division,

I am really looking forward to working with the best Division this year as your Program Chair! Thank you for all your efforts to make the CE program so great year in and year out. The 2023 Annual Conference in Baltimore, Maryland was another great example. I took a lot away from the outstanding sessions and I clearly have big shoes to fill following Jenny. (Thankfully, I get to benefit from her advice while I try to follow such a great conference program.) I can't wait to see you and learn from your submissions to the 2024 Annual Conference in Portland, Oregon. Please submit your technical papers sharing your work in engineering education research, don't forget about our case study and works-in-progress options. The Civil Engineering Division's published technical content

Civil Engineering Division
Message from Division Chair and Program Chair

and, especially, exceptional members have helped my career in numerous ways. If you're a regular at the Annual Conference, I look forward to seeing you again in Portland and continuing to learn from you. If you're new to the Division or it's been a while since you attended a Conference, please join us in June and experience all our Division can do for you. I'm looking forward to working with you, please let me know if there's anything I can do to help. See you in Portland!

2024 ASEE Annual Conference

Civil Engineering Division Call for Papers

Call for Papers

The **CIVIL ENGINEERING (CE) DIVISION** seeks papers for presentation at the 2024 ASEE Annual Conference and Exposition to be held in Portland, Oregon, June 23-26, 2024. At any time, contact our Program Chair (David Saftner, dsaftner@d.umn.edu) with questions.

Major Takeaways:

1. The CE Division seeks papers supporting our five Standing Committees: ASCE, Effective Teaching, Professional Practice, Instructional Technology, and Educational Policy.
2. The CE Division is excited to offer engaging and active sessions. Authors are encouraged to review the details included herein to recognize some unique sessions being planned for the upcoming conference.
3. Work-in-progress and case study papers are accepted in our Division, but **should be labeled in the paper's title** so review strategies can be adjusted accordingly.

Author Information

Paper submission is a two-step process: (1) Abstract submission, review, and acceptance; followed by (2) Paper submission, review, and acceptance. The submission and review process is double blind; please do not include names of authors or institutions before the final submission.

Abstracts are limited to 500 words and should provide a clear statement of the objectives of the work, relevance to the civil engineering community, assessment methods used, and major findings. Authors of accepted abstracts will be invited to prepare full papers for peer review. The CE Division invites papers on topics proposed by the Division's Standing Committees.

Papers should contain a research question and content contributing to the advancement of engineering education in the civil engineering discipline. All

work should clearly demonstrate scholarly effort including details such as relevant background or purpose, applied literature, a deliberate research plan, collection of information or supporting data, and conclusions aligned with the developed research question. Evidence-based reports should build upon existing reference materials, clearly demonstrate new outcomes or findings, be supported by appropriate assessment techniques, and provide evidence aligned with the research question posed. Work-in-progress (WIP) reports should include comprehensive background and literature reviews, methodology for the research question identified, significance of the work to the civil engineering discipline, and results or anticipated results for the work. Case studies are also accepted by the Division and work sharing scholarly evidence of engagement or pedagogical techniques, but without a research method or assessment strategy, are welcomed.

Please include "Work-In-Progress" or "(WIP)" in your paper's title to improve the quality of review for work with limited or no assessment data.

Include "Case Study" in your paper's title for papers without assessment plans, but with relevant scholarly information and detailed summaries of outcomes or observations.

ASCE Liaison Committee

Chairs: Leslie Nolen (lnolen@asce.org), Scott Hamilton (shamilton@ycp.edu), Aaron Hill (aaron.hill@westpoint.edu)

Resilience: Education of students and professional approaches

This session will explore several of the important issues that are addressed (or should be addressed) by ASCE. Authors are not required to be representatives of an ASCE organizational unit. Topics might include, but are not limited to, the following:

- Intersection between justice, equity, diversity, and inclusion (JEDI) and the new ABET CE Program Criteria. How to incorporate JEDI into the engineering curriculum?

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Civil Engineering Division Call for Papers

- How to incorporate sustainability, risk, and resilience into the engineering curriculum?
- How to incorporate professional ethics into the engineering curriculum?
- Best practices for both domestic and international approaches for JEDI in light of the new ABET CE Program Criteria.

Innovations in the curriculum

This session will explore several of the important issues that are addressed (or should be addressed) by ASCE. Authors are not required to be representatives of an ASCE organizational unit. Topics might include, but are not limited to, the following:

- Update on actions recommended by the 2019 Educational Summit
- Using artificial intelligence and ChatGPT in practice and in education
- How to increase the “cool” quotient of civil engineering and increase enrollments
- Impact of ACSE’s Future World Vision in our classrooms.
- How do we take full advantage of the academic benefits of student competitions?

Faculty development following the pandemic

This session will explore several of the important issues that are addressed (or should be addressed) by ASCE. Authors are not required to be representatives of an ASCE organizational unit. Topics might include, but are not limited to, the following:

- Changes to the ASCE Excellence in Civil Engineering Education (ExCEED) Teaching Workshop (ETW) following the external review. What was the goal of the changes and what has been accomplished?
- Comparison of in-person and remote ETW?

Committee on Educational Policy

Chair: Manish Roy (manish.roy@ucon.edu)

Co-Chairs: Gary Jordan (gary.jordan@rose-hulman.edu), Tonya Nilsson (tnilsson@scu.edu)

Context counts: Civil engineering as a socio-technical endeavor

Students must learn to develop designs and make ethical judgments that consider public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors, as recently highlighted in ABET Outcomes 2 and 4. Papers in this session would describe efforts to incorporate this into curriculums and might address doing so while navigating current institutional and/or political landscapes.

Achieving the balance: How do we develop engineers who can define the problem when we only ask them to solve the problems?

ASCE and ABET focus on global, societal, and environmental impacts, encouraging the development of well rounded civil engineering students who can think beyond traditional problem solving. This session is looking for papers focused on combining the following in our curriculum:

- theory and practice
- engineering technology vs. engineering
- socially aware engineers

Equipping today’s faculty to prepare tomorrow’s engineers

This session explores efforts to help faculty incorporate “why” in addition to “how” in the context of teaching students engineering problem solving and design.

Committee on Effective Teaching

Chairs: Anthony Battistini (anthony.battistini@angelo.edu), Jose Capa Salinas (jccapasal@purdue.edu), Anuja Kamat (kamata@wit.edu), Monica Palomo (mpalomo@cpp.edu),

Co-Chairs: Carmen Grayson (cgrayson@pvcc.edu), Jim Hanson (hanson@rose-hulman.edu), Haritha Malladi (malladi@udel.edu), Rhonda Young (youngr1@gonzaga.edu)

Pioneering trails through the curriculum

Weaving professional skills through the curriculum is becoming popular but still has significant challenges: changing instructors, faculty buy0in, academic freedom, and assessment, for example. What

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has crashed and burned? What has worked well? Share what you have learned, the good and the bad.

A Bigfoot forward: Never been seen before innovations in classroom engagement

This session is searching for unique demonstrations of teaching effectiveness and student engagement. Examples may include: new ways to engage students, innovative teaching methods, fostering student-faculty interactions, peer-to-peer learning, and service-based learning. Papers should include details on implementation, assessment methods, and evaluation of effectiveness.

Biking together to incorporate social connectedness in the civil engineering curriculum to meet ABET criteria

This session invites paper related to unconventional methods and curriculum implementation to meet ABET criteria in topics related to innovation, socioeconomic and cultural awareness, global impact, sustainability, and JEDI.

Innovation pioneers: Best teaching and assessment practice in unconventional classroom settings

This session invites papers that share best teaching practices and effectively evaluate assessment practices related to emotional intelligence, resilience, sense of belonging, intersectionality, training in unconventional settings, AI, and unique topics in unconventional classrooms settings. Together we can make the unconventional a common place.

Committee on Instructional Technology

Chair: Ann Sychterz (asychter@illinois.edu)

Co-Chair: Jacob Henschen (jhensche@illinois.edu)

Trailblazing technologies in the CE curriculum

This session will include emerging technologies in the CE curriculum which include but are not limited to: AI, VR/AR, additive manufacturing, auto-grading systems, alternative assignments (videos, podcasts, etc.), preferred note-taking strategies, and image generation.

Swoosh: Ushering in a new age of faculty-student communication

The pandemic forced students and faculty to learn and adopt new methods to communicate. Topics in the session will include new methods students use to communicate between each other and with their faculty. Likewise, this session will explore how faculty have adopted new communication and classroom management systems.

Reviewer Information

The Civil Engineering Division seeks papers supporting the scholarly progression of engineering education in the civil engineering realm. Scholarship is encouraged in the development of research and theory as well as case studies and applications of new pedagogical approaches to civil engineering courses. Please provide review feedback based on the type of conference paper provided. Some guidance is as follows:

Research & Theoretical Topics

Papers containing research questions and data collection should be reviewed considerate of the quality of alignment between the research question, existing literature, methodology, results, and conclusions. Review comments improving the agreement between the research question, results, and conclusions drawn will be valuable to the learning community.

Works in Progress

Works in progress (WIP) reports can be valuable resources for distributing advanced literature studies and preliminary results from work initiated. The division recognizes these papers as valid to the development of quality pedagogical work and as a tool for faculty to seek collaborators for the work.

Reviewers are encouraged to provide feedback to ensure the papers have sufficient literature and background information, are pursuing a defined methodology with valid approaches, and are seeking to address specified teaching or learning questions relevant to the Division. Reviewers should confirm the following traits:

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1. The paper presents a comprehensive literature review supporting a research question or theme.
2. The paper defines deliberate objectives and presents an aligned methodology.
3. The paper presents work in progress and initial findings relevant to the objectives.

Case Studies

Case studies should provide useful information for members of the division. Papers should be encouraged to include sufficient background and literature information to support the work achieved by the author(s). Papers should include some narrative discussing outcomes of the work with little bias or subjectivity.

Reviewers are encouraged to offer feedback to ensure the information presented in the final paper provides an objective summary of the work performed by the author(s) so a reader could implement the methods and obtain similar results. Reviewers should confirm the following traits:

1. The paper presents literature supporting the case study performed.
2. The paper describes the methods used to create the case study.
3. The paper provides a summary of observed outcomes aligned with the goals and methods of the work.

Closing Remarks:

The Civil Engineering Division requires podium and poster presenters to publish their papers in the ASEE conference proceedings. Additionally, the papers and presentations are expected to contain assessment methods and results, unless otherwise noted in the session description.

Please include the phrase “Work-In-Progress”/“WIP” or “Case Study in the title of papers to improve the review process and session planning. The Division sees value in these contributions to scholarship and is excited to learn from a variety of engineering educators. The rigorous review process needs to adjust to these different scholarship types

and the titles improve the effectiveness and efficiency for our reviewers and conference planners.

Review of Draft and Final papers will be performed considerate of these traits:

- All papers submitted at the Draft phase should be in final form. Authors should not leave significant content unfinished at this review stage.
- The WIP and case study papers should clearly articulate the relevance to scholarship within the CE Division. Backgrounds and literature reviews should be included in the work. **Please limit lengths of these types of papers to 5 pages (not including references) and write concisely.**
- All papers should include appropriate citations and bibliographies demonstrating the clear historical status and thereby developing the value of the work contained in the paper.
- Work should demonstrate appropriate engineering processes and research strategies. Assessment plans should be clearly defined and objective conclusions expressed. Biased or subjective content should be avoided.

Anticipated Timeline (visit the ASEE Conference website for precise dates):

- Abstract Submission Due – October 31st, 2023
- Draft Paper Due – January 31st, 2024
- Revised Paper Due – March 21st, 2024

Contact Information:

For additional information, please contact:

**CE Division 2023-24
Division Chair**
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**CE Division 2023-24
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Civil Engineering
University of Minnesota Duluth
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2023 ASCE Annual Conference

Civil Engineering Division Award Winners



ASCE JCEE Outstanding Associate Editor Award

Florzaliza Bornasal, Ph.D., St. Martin's University

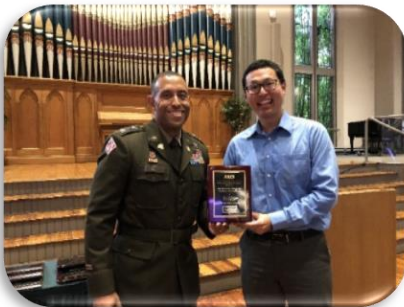
The *Journal of Civil Engineering Education* presents issues of broad professional interest and diverse views of engineering education, and professional practice. Topics include engineering education at all levels, professional practice issues, ethics, and history/heritage. Old title is the Journal of Professional Issues in Engineering Education and Practice.



ASCE JCEE Best Technical Paper Award

Joel Sloan, Lauren Scharff

"Student Self-Assessment: Relationships between Accuracy, Engagement, Perceived Value, and Performance."



ASCE ExCEED New Faculty Teaching Award

Gerald Wang, Ph.D., A.M. ASCE, Carnegie Mellon University

The award was established by ASCE's Project ExCEED and the Committee on Faculty development to recognize and reward outstanding new faculty. Nominees are judged based on a Letter of Endorsement from their current Department Chair/Dean, Curriculum Vitae, and Teaching Portfolio.



ASCE ExCEED Thomas A. Lenox Leadership Award

Jerome Hajar, Ph.D., P.E., F. SET, F. ASCE, Northeastern University
Sam Easterling, Ph.D., P.E., F. SEI, Dist. M. ASCE, Iowa State University

The award honors an ASCE member who has shown exceptional leadership and dedication to educational activities within the organization and is presented at the American Society for Engineering Education Annual Conference.

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Civil Engineering Division Award Winners



ASEE CED Emerging Leader Fellow Award

Gary Jordan, Ph.D., MBA, United States Military Academy

The Emerging Leader Fellow Award is awarded to a member of the Division who has been a member of the division for no longer than five years and aspires to a leadership position. The purpose of the award is to recruit and support promising members of the division to participate in and learn more about Division leadership activities.



ASEE CED Stephen J. Ressler Best Paper Award

Matthew Swenty and Brian Swenty. "A Comparison of Licensed Engineers' Conduct Requirements, the ASCE Code of Ethics, and EAC-ABET Civil Engineering Accreditation Criteria."

The Stephen J. Ressler Best Paper Award is given for the best paper on a topic in civil engineering education, presented at the ASEE annual conference and published in the Proceedings in the year prior to the award. Each co-author is awarded an engraved plaque and one complimentary ticket to all CE Division social events at the ASEE annual conference at which the award is presented.



ASEE CED Glen L. Martin Practitioner Service Award

Elizabeth Bialek, P.E., M. ASCE, East Bay MUD

The Glen L. Martin Practitioner Service Award is awarded to an engineering practitioner for distinguished service to or support of civil engineering education. While the recipient can be a former faculty member, the distinguished service must occur over a period of time when the recipient served as an engineering practitioner in a position not normally held by an engineering educator.



ASEE CED George K. Wadlin Distinguished Service Award

Sean St. Clair, Ph.D., P.E., M. ASEE, Oregon Institute of Technology

The George K. Wadlin Distinguished Service Award is given to a member of the Division for outstanding service in support of civil engineering education and the Civil Engineering Division of ASEE. The recipient is awarded an engraved plaque and a complimentary ticket to all CE Division social events at the ASEE annual conference.

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Civil Engineering Division Award Winners



ASEE CED Gerald R. Seeley New Faculty Best Paper Award *MAJ Brett M. Rocha, United States Military Academy,* **“Say Yes to the Stress: Escape Rooms in Civil Engineering Class-rooms.”**

The Gerald R. Seeley Award is awarded to a civil engineering faculty member with five or fewer years of teaching experience. The basis for selection is the quality of a paper submitted for presentation in a CE Division session at the ASEE Annual Conference. The award consists of a \$500 reimbursement for conference registration. The recipient receives an ASEE certificate and is invited to attend CE Division events.

ASCE JCEE Best Cast Study Award

Santos Sanchez-Cambronero, Jose A. Lozano-Galant, Francisco J. Castilla, Elisa Poveda, Alvaro Galan, Rocio Porras, Inmaculada Gallego and Raul Lopez-Moya

“Introducing High School Students into the Multidisciplinary World of Bridge Construction Using Project-Based Learning.”

Congratulations to all our award winners!

Civil Engineering Division Officers 2022 - 2023



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2022 ASCE Annual Conference

Session Summaries

Monday, 6/26/2023

M506 – Committee on Professional Practice Presents: Topics in the Academic-Industry Zone



Moderators: Dr. Shinae Jang P.E. and Dr. Manish Roy

Teaching Climate Change in an Introductory Civil Engineering Course [view paper]

Dr. Yufeng Hu (Western Michigan University), Elise DeCamp (Western Michigan University), and Dr. Osama Abudayyeh (Western Michigan University)

How Academia and Industry Can Partner to Prepare Future Civil Engineers for Success [view paper]

Mr. Bradley Aldrich P.E., F.NSPE, F.ASCE (American Society of Civil Engineers), Dr. Kleio Avriithi, P.E. (Mercer University), and Ms. Jennifer Hofmann (American Society of Civil Engineers)

Ungraded Classrooms: A Pattern for Learning in Engineering Modeled after Expert Practitioners [view paper]

Dr. Bret N. Lingwall, P.E. (South Dakota School of Mines and Technology) and Dr. Andrea E. Surovek, P.E. (South Dakota School of Mines and Technology)

Student-to-Industry Interaction in a Civil Engineering Field Course: Benefits for Education and Leadership [view paper]

Dr. Brad Wambeke (United States Air Force Academy), Col. Joel Sloan (United States Air Force Academy), Lt. Col. Timothy E. Frank (United States Air Force Academy), and Daphne DePorres (United States Air Force Academy)

M506B – ASCE Liaison Committee Presents: All Things ASCE



Moderators: Dr. Scott R. Hamilton P.E. and Ms. Leslie Nolen

Future World Vision Integrated into a First-Year Civil Engineering Course [view paper]

Dr. Angela R. Bielefeldt (University of Colorado, Boulder)

Fostering Infrastructure Equity through Leveraging Envision Rating System among Civil Engineering and Construction Students [view paper]

Miss Rubaya Rahat (Florida International University) and Mr. Mohamed Elzomor, P.E. (Florida International University)

Preparing the Future Civil Engineer: ASCE's Proposed Revision of the ABET Civil Engineering Program Criteria – Implementation Tools [view paper]

Dr. David A. Dzombak, P.E. (Carnegie Mellon University), Wayne R. Bergstrom, Dr. Jay A. Puckett, P.E. (University of Nebraska, Lincoln), Dr. Stephen J. Ressler, P.E. (United States Military Academy, West Point), and Ms. Leslie Nolen, C.A.E. (American Society of Civil Engineers)

A Study of EAC-ABET Civil Engineering Accreditation Curriculum Requirements and Exemption Provisions of State Licensure Laws and Rules [view paper]

Dr. Matthew K. Swenty (Virginia Military Institute) and Dr. Brian J. Swenty, P.E. (University of Evansville)

Does an ABET EAC Civil Engineering Degree Prepare Structural Engineers for Practice? [view paper]

Dr. Matthew K. Swenty (Virginia Military Institute) and Dr. Benjamin Z. Dymond (University of Minnesota Duluth)

2022 ASEE Annual Conference

Session Summaries

Tuesday, 6/27/2022

T206A. Committee on Education Policy Presents: Holistic Program Topics



Moderators: Dr. Kevin Francis McMullen and Major William Graves P.E.

Why Students Select the Civil Engineering Major [view paper]

William Graves (United States Military Academy, West Point), Thomas James Matarazzo (United States Military Academy, West Point), Dr. Brock E. Barry, P.E. (United States Military Academy, West Point), Elizabeth Bristow, and Dr. Mark Evans (United States Military Academy, West Point)

Bowling Alone and Leaving Students Behind: Placing ASEE Civil Engineering Division Membership Trends in Context [view paper]

Dr. Andrea L Welker, P.E. (The College of New Jersey) and Ms. Leslie Nolen (American Society of Civil Engineers)

Building Awareness of Inclusivity through Scalable Hands-On Activities. [view paper]

Dr. Margaret A. Hunter (Hofstra University), Dr. Lynn A. Albers (Hofstra University), and Salvador Rojas-Murillo (Hofstra University)

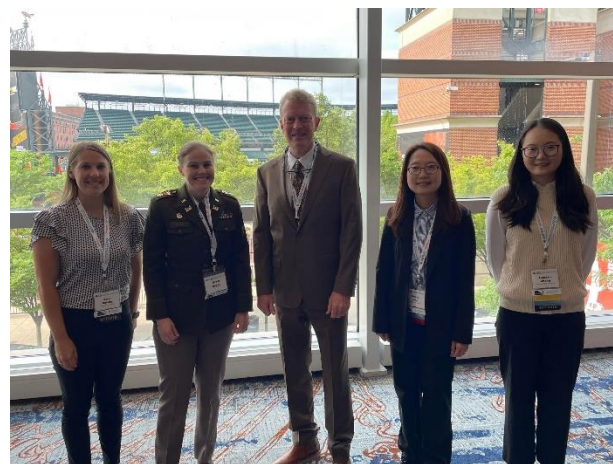
Incorporating Teamwork Elements into a Course to Improve Learning Outcomes [view paper]

Dr. Kevin Haas (Georgia Institute of Technology), Dr. Alexandra C. Muscalus (Woods Hole Oceanographic Institution), Dr. Ellen Zerbe (Georgia Institute of Technology), and Dr. Robert Benjamin Simon (Georgia Institute of Technology)

Enhancing Student Engagement and Skillsets towards Transportation Careers Using Digital Badge Program: A Case Study [view paper]

Dr. Venkatesh Pandey (North Carolina Agricultural and Technical State University), Dr. Maranda McBride (North Carolina A&T State University (CoE)), and Dr. Hyoshin Park

T206B. Committee on Effective Teaching Presents: Creativity



Moderators: Dr. James Ledlie Klosky P.E., Col. Jakob C Bruhl P.E., and Capt. Brett Rocha

Assessment of a Final Project of a Large Statics Course on Fostering Creativity and Inclusion [view paper]

Prof. Shinae Jang (University of Connecticut) and Christa Taylor (University of Connecticut)

Flipping the Classroom to Create a Student-Centered Learning Environment in Three Undergraduate Civil Engineering Courses [view paper]

Dr. Amie Baisley (University of Florida) and Prof. Keith D. Hjelmstad (Arizona State University, Polytechnic Campus)

Creativity's Role in Solving Ill-Structured Engineering Problems: Opinions of Student, Faculty and Practitioners [view paper]

Xiangxiu Zhang, Secil Akinci-Ceylan (Iowa State University of Science and Technology), Dr. Kristen Sara Cetin, P.E. (Michigan State University), Dr. Benjamin Ahn (Iowa State University of Science and Technology), Dr. Andrea E Surovek, P.E. (South Dakota School of Mines and Technology), and Kyle P. Kelly

2022 ASEE Annual Conference

Session Summaries

T206C. Committee on Education Policy Presents: Pillars of Our Curriculum



Moderators: Prof. Jacob Henschen and Ann C Sychterz

Investigating the Inclusion of Traffic Operations Concepts in Undergraduate Civil Engineering Curricula [view paper]

Dr. Rebeka Yocum (Oregon Institute of Technology) and Dr. Vikash V. Gayah (Pennsylvania State University)

Integration of Diversity, Equity, and Inclusion Topics into a First-Year Introduction to Civil Engineering Course [view paper]

Dr. Angela R. Bielefeldt (University of Colorado, Boulder)

Civil Engineering Curricula and Sustainability Education: An International Cross-Case Analysis of Alignments and Gaps [view paper]

Miss Laura Gutierrez-Bucheli (Monash University), Alan Reid (Monash University), Gillian Kidman (Monash University), and Prof. Julia Lamborn, P.E. (Monash University)

A Methodology for Converting an Engineering Program from Quarters to Semesters [view paper]

Dr. Allen C. Estes (California Polytechnic State University, San Luis Obispo), Prof. Brent Nuttall (California Polytechnic State University, San Luis Obispo), Mr. Craig Baltimore (California Polytechnic State University, San Luis Obispo), Dr. Peter Laursen (California Polytechnic State University, San Luis Obispo), Michael James Deigert, P.E. (California Polytechnic State University, San Luis Obispo), and Dr. Cole C. McDaniel (California Polytechnic State University, San Luis Obispo)

T306A. Committee on Educational Policy Presents: Pillars of Professional Development



Moderators: Col. Aaron T Hill Jr. P.E. and Dr. Gary A Jordan

Towards Developing a Modernized Wind Engineering Curricula [view paper]

Ms. Claudia Calle Müller (Florida International University), Patrizia Bethania Santaniello (Florida International University), Ioannis Zisis, Amal Elawady, and Mr. Mohamed Elzomor, P.E. (Florida International University)

Evaluating Students' Attitudes Towards Synchronous Remote Course Delivery: An Analysis of Engineering Programs during the COVID-19 Pandemic in the US and EU [view paper]

Dr. Zsuzsa Balogh (Metropolitan State University of Denver), Mrs. Zita Mangné Kardos (University of Pécs, Hungary, EU), and Mr. Tamas Juhasz (University of Pecs, Hungary, EU)

Equipping Our Students for Future Financial Success [view paper]

Dr. Scott R. Hamilton, P.E. (York College of Pennsylvania)

Learning Styles Impact on Ill-Structured Problem Solving Processes of Engineering Students, Faculty and Professionals [view paper]

Kyle P. Kelly (Michigan State University), Secil Akinci-Ceylan (Iowa State University), Xiangxiu Zhang, Dr. Kristen Sara Cetin, P.E. (Michigan State University), and Dr. Benjamin Ahn (Iowa State University of Science and Technology)

Applications of Teams and Stories: Augmenting the Development of Entrepreneurial Mindset in Engineers [view paper]

Dr. Ellen Zerbe (Georgia Institute of Technology), Dr. Adjo A. Amekudzi-Kennedy (Georgia Institute of Tech-

2022 ASEE Annual Conference

Session Summaries

nology), Dr. Kevin Haas (Georgia Institute of Technology), Dr. Robert Benjamin Simon (Georgia Institute of Technology), and Ms. Janece Shaffer

Data Science in the Civil Engineering Curriculum [view paper]

Dr. Ashraf Badir (Florida Gulf Coast University), Dr. Seneshaw Tsegaye (Florida Gulf Coast University), and Dr. Long Duy Nguyen, P.E. (Florida Gulf Coast University)

T306B. Committee on Effective Teaching Presents: Models, Models, & More Models



Moderators: Dr. Tonya Lynn Nilsson P.E. and Prof. James H. Hanson P.E.

Physical and Digital Models for Timber Design and Analysis Courses [view paper]

Paulina Robles (California Polytechnic State University, San Luis Obispo), Gabrielle Rose Favro (California Polytechnic State University, San Luis Obispo), Dr. Anahid Behrouzi (California Polytechnic State University, San Luis Obispo), and Abby Lentz

Utilization of Real-Life Hands-On Pedagogy to Motivate Undergraduate Students in Grasping Transportation Related Concepts [view paper]

Adebayo Iyanuoluwa Olude (Morgan State University), Dr. Oludare Adegbola Owolabi, P.E. (Morgan State University), Mr. Pelumi Olaitan Abiodun (Morgan State University), Hannah Abedoh (Morgan State University), Frank Efe, Dr. Petronella A James (Morgan State University), Dr. Celeste Chavis, P.E. (Morgan State University), Dr. Eazaz Sadeghvaziri (Morgan State University), Di Yang, Neda Bazayr Shourabi (Pennsylvania State University, Berks Campus), Dr. Mulugeta T. Dugda

(Morgan State University), Dr. Krishna Bista, and Dr. Jumoke 'Kemi' Ladeji-Osias (Morgan State University)

A Hands-On Concrete Laboratory Framework for Construction Management Education [view paper]

Dr. Philip Warren Plugge (Central Washington University)

Implementation of a Hands-On Timber Truss Design Project in Structural Analysis [view paper]

Dr. Kevin Francis McMullen (United States Military Academy), Mr. Adrian Biggerstaff, P.E. (Stanford University), Dr. Christopher H. Conley, Col. Jakob C. Bruhl, P.E. (United States Military Academy), Kevin Arnett, Paul Moody, Col. Aaron T. Hill Jr. (United States Military Academy), and Lynden Damon Crosbie

T406. Committee on Educational Policy Presents: Holistic Students



Moderated by Ms. Leslie Nolen and Dr. Scott R Hamilton P.E.

Say Yes to the Stress: Escape Rooms in Civil Engineering Classrooms [view paper]

Major Brett Rocha (United States Military Academy), Dr. Kevin Francis McMullen (United States Military Academy), and Capt. Michael Rocha (United States Military Academy)

In Their Own Words: The Community College Experience toward an Engineering Baccalaureate Degree [view paper]

Dr. Joan Z. Carter (Inver Hills Community College)

Investigating Undergraduate Researchers' Perceptions of Mentoring Relationships [view paper]

Dr. Simon Thomas Ghanat, P.E. (The Citadel), Stephanie Laughton (The Citadel), Dr. Nandan Hara Shetty (The Citadel), Dr. Dena Garner, M. Kristen Hefner (The

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Session Summaries

Citadel), Dr. Mostafa Batouli (The Citadel), Thad LeVasicek (The Citadel), and Todd Wittman

A Near-Peer Mentoring Framework for a Civil and Environmental Engineering Curriculum [view paper]
Marie Bond (University of Illinois, Urbana-Champaign), Prof. Ramez Hajj (University of Illinois, Urbana-Champaign), Prof. Jeffery R. Roesler (University of Illinois, Urbana-Champaign), Dr. Arthur R. Schmidt III (University of Illinois, Urbana-Champaign), and Prof. Jacob Henschen (University of Illinois, Urbana-Champaign)

Too Much Focus Leads to Success or Stress? [view paper]

Dr. Anuja Kamat (Wentworth Institute of Technology) and Dr. Tugba Arsava

T406B. Committee on Instructional Technology Presents: Gamers



Moderated by Dr. Tonya Lynn Nilsson P.E. and Dr. David A Saftner

Geotechnical Site Characterization in a Box: Bringing the Full Site Characterization Experience to the Classroom [view paper]

Dr. Timothy A. Wood (The Citadel) and Dr. Kweku Tekyi Brown P.E. (The Citadel)

Work InProgress: Infrastructure Live! An Electric Experience on a Single Mobile Chalkboard [view paper]

Lt. Col. Scott M. Katalenich, Ph.D. (United States Military Academy), Dr. James Ledlie Klosky, P.E. (United States Military Academy), Roderick Wilson, and Capt. Kevin Taylor Scruggs (United States Military Academy)

Game-based and Virtual Reality Sandboxes: Inclusive, Immersive, Accessible, and Affordable Learning Environments [view paper]

Mr. Damith Tennakoon (York University, Canada), Alessandro Salvatore Di Nunzio (York University, Canada), and Dr. Mojgan A. Jadidi, P.E. (York University, Canada)

Design and Application of an Open-Science Electrical Resistivity Meter to Make Geotechnical Laboratory Education More Relevant and Engaging [view paper]
Benjamin D. Goffin (University of Virginia) and Lindsay Ivey Burden

T506. Special Topic: Empowering the Next Generation of Engineers

Moderated by Dr. Allen C Estes P.E. and Ms. Beth Lin Hartmann P.E.

Mr. Ashraf Habibullah, Founder, President, and CEO of Computers and Structures, Inc., believes we are the key to empowering the next generation of engineers to lead, influence, and inspire a changing world.

Ashraf will initiate a conversation about social skills development in civil engineers. Dr. Al Estes and friends will moderate the session which will include a presentation by Mr. Habibullah followed by guided discussions related to professional skills and "people skills" development strategies for young professionals.

The session is intended to inspire change which can be implemented immediately by individuals in attendance with the genuine goal of encouraging and supporting the continued development of pedagogy related to holistic engineer training.

Wednesday 6/28/2022

W306A. Committee on Educational Policy Presents: Pillars of Our Classrooms



Moderated by: Col. Brad Wambeke P.E. and Dr. Joel Sloan P.E.

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Session Summaries

Impact of Project-Based Assignments on Students' Learning Experience in Inclusive Courses [view paper]

Dr. Mousumi Roy, P.E. (University of Connecticut), Dr. Sarira Motaref, P.E. (University of Connecticut), and Dr. Manish Roy (University of Connecticut)

Teaching Civil Engineering through Integrated Projects in GIS [view paper]

Dr. Kevin A. Waters, P.E. (Villanova University)

Service Learning Capstone Projects to Enhance Civil Engineering Education [view paper]

Dr. Xi Wang (Drexel University), Dr. Hans M. Tritico (University of Mount Union), Kathleen M. Short, and Vahraz Honary

Client-Focused Technical Writing through Laboratory Report Preparations in Geotechnical Engineering: A Case Study [view paper]

Dr. Nirmala Gnanapragasam (Seattle University)

W306B. Committee on Effective Teaching Presents: Teaching Mode Activ-ated



Moderators: Dr. Tonya Lynn Nilsson P.E. and Rebeka Yocum

Classroom Climate Analysis of Flipped Structural Classrooms with Active Learning: A Case Study [view paper]

Dr. Ryan L Solnosky, P.E. (Pennsylvania State University) and Thomas Gonzalez O'Halloran

Enriching Student Learning through Compelled Active Participation in a Coastal Resiliency Course [view paper]

Dr. Corinna Marie Fleischmann, P.E. (United States Coast Guard Academy), Cmdr. Brian Maggi, P.E. (United States Coast Guard Academy), and Prof. Hudson V. Jackson, P.E. (United States Coast Guard Academy)

Post-Pandemic Student Reception of Flipped Classrooms in Civil Engineering Education [view paper]

Dr. Bret N Lingwall, P.E. (South Dakota School of Mines and Technology) and Dr. Andrea E Surovek, P.E. (South Dakota School of Mines and Technology)

Lessons Learned from a Game-Based Learning Intervention in Civil Engineering [view paper]

Dr. Casper Harteveld (Northeastern University), Victoria Bennett (Rensselaer Polytechnic Institute), Dr.

Yevgeniya V. Zastavker (Olin College of Engineering), Dr. Usama El Shamy, P.E. (Southern Methodist University), Dr. Binod Tiwari (University of Michigan), Dr. Anirban De, P.E. (Manhattan College), Xenia Wirth, Kejun Wen (Jackson State University), Dr. David A Saftner (University of Minnesota Duluth), Prof. Beena Ajmera (Iowa State University), Scott Brandenburg (University of California, Los Angeles), Dr. Alison Rose Kennicutt (York College of Pennsylvania), Surya Sarat Chandra Congress, Anthony Tessari, Mehdi Omidvar, and Ashly Cabas

How to Develop Engaging Engineering Content for the Classroom and Online Videos (Mini-Class Demo) [view paper]

Dr. Anthony Battistini (Angelo State University)

Virtual or Face-To-Face Learning Mode: Is That the Question? [view paper]

Dr. Ghada M. Gad (California State Polytechnic University, Pomona), Dr. Monica Palomo (California State Polytechnic University, Pomona), and Dr. Wen Cheng, P.E. (California State Polytechnic University, Pomona)

W406. Committee on Effective Teaching Presents: Evaluation, Assessment, & Performance



Moderators: Dr. Andrea L Welker P.E. and Dr. Anuja Kamat

2022 ASEE Annual Conference

Session Summaries

Latest Improvements in Metacognitive-Informed, Dual-Submission Homework Methods [view paper]

Dr. Timothy Aaron Wood, P.E. (The Citadel) and Stephanie Laughton (The Citadel)

A Statistical Analysis Between Fundamentals of Engineering Examination Results, Grade Point Average, and Specific Course Performance [view paper]

Thomas James Matarazzo (United State Military Academy, West Point), Dr. Brock E. Barry, P.E. (United State Military Academy, West Point), Col. Jakob C Bruhl, P.E. (United State Military Academy, West Point), Dr. Mark Evans (United State Military Academy, West Point), William Graves, and Dr. Talal Salem (United State Military Academy, West Point)

Evaluating the Impact of Experiment-Centric Pedagogy on Civil Engineering Undergraduates' Motivation [view paper]

Mr. Pelumi Olaitan Abiodun (Morgan State University), Dr. Oludare Adegbola Owolabi, P.E. (Morgan State University), Dr. Steve Efe (Morgan State University), Dr. Mehdi Shokouhian (Morgan State University), Oyinkan-sola Aladeokin, Adebayo Iyanuoluwa Olude (Morgan State University), Neda Bazyar Shourabi (Pennsylvania State University, Berks Campus), Ms. Sotonye Ikiriko (Morgan State University), Dr. Krishna Bista (Morgan State University), Dr. Uttam Gaulee, Frank Efe, Dr. Md Mahmudur Rahman (Morgan State University), Hannah Abedoh (Morgan State University), and Dr. Jumoke 'Kemi' Ladeji-Osias (Morgan State University)

Implementation of a Retake Policy: Who Benefits? [view paper]

Dr. Jacqueline M. Jenkins (Cleveland State University) and Fred Hussein

Refining Instructional Modules for Engineering Lab Writing Using a Community of Practice Approach [view paper]

Dr. Charles Riley (Oregon Institute of Technology), Dr. Dave Kim (Washington State University, Vancouver), Dr. Ken Lulay, P.E. (University of Portland), Dr. John D. Lynch (Washington State University, Vancouver), and Dr. Sean St. Clair, P.E. (Oregon Institute of Technology)

W506. Committee on Educational Policy Presents: Pillars of Student Development



Moderators: **Dr. Anthony Battistini and Prof. James H. Hanson P.E.**

Teaching Students Skills to Foster Psychological Safety in a Team Environment [view paper]

Dr. Michelle Marincel Payne (Rose-Hulman Institute of Technology) and Prof. James H. Hanson, P.E. (Rose-Hulman Institute of Technology)

The Impact of Short Mindfulness Practices on Student Attention and Focus in Upper-Level Civil Engineering Design Class [view paper]

Dr. Priyantha Wijesinghe (University of Vermont) and Dr. Holly Ann Buckland Parker (University of Vermont)

Integration of Public Policy into Civil Engineering Undergraduate Curricula: Review of Civil Engineering Body of Knowledge and Course Application [view paper]

Dr. Michelle Oswald Beiler (Bucknell University)

Earlier Access to Cutting-Edge Research Experience for Undergraduate STEM Education at Jackson State University [view paper]

Dr. Kejun Wen (Jackson State University) and Na Li (Jackson State University)

**Thank you very much
for your contribution!**

Historian's Report

Important Notes

Division Trivia

After many years of organizing and administering the Civil Engineering Division Trivia, the Division Executive Committee approved a request to eliminate the trivia and to replace it with a historical focus on past Division Chairs or groups of Chairs.

Past Division Chair Highlight

The 2023 Past Division Chair Highlight focused on Dr. Mardith A. Baenziger, Chair 1978-88. Dr. Baenziger was the first female chair of the Civil Engineering Division. A one-page document detailing Dr. Baenziger's accomplishments was prepared and distributed to the Division Membership.

Civil Engineering Division's Historical Files

The Historian maintains many Division documents (agendas, minutes, treasurer reports, and past newsletters). These files are fairly complete for the period from 1975 to the present. There are no documents on file for any date prior to 1975. The Historian also maintains a database of Division Officers and award winners between 1975 and the present – available upon request.

The entire volume of historical documents were scanned in 2021 and filed in the Division's cloud-based storage. That material is updated annually. This material is available for Division members to review upon request. An attempt is made each year to update the Civil Engineering Division page of the ASEE website the latest information.

Brock E. Barry, P.E. Ph.D., F. ASCE
The Historian (2020 -)
Professor and Director of Civil Engineering
United States Military Academy
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Historian's Report

Highlighted Division Chair

Civil Engineering Division of ASEE

2023 Highlighted Division Chair – Dr. Mardith Baenziger, PE



Dr. Mardith (Mardy) Baenziger, PE was Chair of the American Society for Engineering Education (ASEE), Civil Engineering Division from 1987 to 1988. Mardy was born in Ames, Iowa, was raised in Iowa City, and graduated from Iowa City High School in 1963. She obtained a Bachelor of Science in Architectural Engineering in 1968 and master's degree in Nuclear Engineering in 1969 from Iowa State University (ISU). From 1970 to 1975 she worked as an engineer for a consulting engineering firm in Akron, Ohio focusing on commercial, institutional, and light industrial structures. She earned her master's degree and Doctoral Degree in Structural Engineering at University of Wisconsin – Madison in 1978 and 1981, respectively. Throughout her time at the University of Wisconsin, Mardy worked as a teaching assistant. While working on her Doctoral Degree, Mardy commuted three hours a day to reach campus and supported two infant children.

Upon completion of her PhD, Mardy returned to ISU as an Assistant Professor in the Department of Civil Engineering. She taught numerous courses in structural engineering and earned tenure in 1986. Her research interests included structural dynamics, computer methods of analysis and design, and computer graphics. She is credited with the development of ISU's capstone senior design course that focuses on real projects. Mardy retired from ISU in 2007.

Mardy was recognized with numerous honors including the 1985 ISU Faculty Award for Excellence in Teaching, Research, and Service, the 1986 National Defense Fellowship, and the 1991 Iowa Governor's Award for Science Education, as well as membership in Tau Beta Pi, Sigma Xi, Sigma Tau Delta, and Chi Epsilon.

Mardy was the first-ever female recipient of the National Defense Fellowship. At the time she earned tenure at ISU, she was one of only three tenured females in the College of Engineering.

Mardy was also the first female Chair of the ASEE, Civil Engineering Division. Since her time as the Chair, the Civil Engineering Division has seen three additional female Division Chairs. Dr. Mardith (Mardy) Baenziger, PE, passed away on September 9, 2019.

Resources:

December 2019 – Memorial Resolutions, Iowa State University, American Society for Engineering Education, Civil Engineering Division, Division Chairs, 1935-1993, [\[link\]](#)

Historian's Report

Past Conferences

Year	Annual Meeting	Chair
2023-2024	Portland, OR	Jennifer Retherford
2022-2023	Baltimore, MD	Tonya Nilsson
2021-2022	Minneapolis, MN	Matthew Lovell
2020-2021	Long Beach, CA (Virtual)	Steve Burian
2019-2020	Montreal, CA (Virtual)	C. J. Riley
2018-2019	Tampa, FL	Andrea Welker
2017-2018	Salt Lake City, UT	Sean St. Clair
2016-2017	Columbus, OH	Brock Barry
2015-2016	New Orleans, LA	Kevin Hall
2014-2015	Seattle, WA	Yusuf Mehta
2013-2014	Indianapolis, IN	Matthew Roberts
2012-2013	Atlanta, GA	M. Asghar Bhatti
2011-2012	San Antonio, TX	Shashi Nambisan
2010-2011	Vancouver, BC, CAN	Kevin Sutterer
2009-2010	Louisville, KY	Norm Dennis
2008-2009	Austin, TX	Dennis Fallon
2007-2008	Pittsburgh, PA	Ron Welch
2006-2007	Honolulu, HI	Kristen Sanford Bernhardt
2005-2006	Chicago, IL	Jim Hanson
2004-2005	Portland, OR	Wilf Nixon
2003-2004	Salt Lake City, UT	Vince Drnevich
2002-2003	Nashville, TN	Steve Ressler
2001-2002	Montreal, Quebec, CAN	J. P. Mohsen
2000-2001	Albuquerque, NM	Sam Clemence
1999-2000	St. Louis, MO	Jim Nau
1998-1999	Charlotte, NC	Alan Prasuhn
1997-1998	Seattle, WA	Tom Lenox
1996-1997	Milwaukee, WI	Howard Dunn
1995-1996	Washington, DC	William Kelly

Historian's Report

Past Conferences

Year	Annual Meeting	Chair
1994-1995	Anaheim, CA	Tom Mulinazzi
1993-1994	Edmonton, Alberta, CAN	Bob Henry
1992-1993	University of Illinois at Urbana-Champaign, IL	Fred Beaufait
1991-1992	Toledo, OH	Edward Reitz
1990-1991	New Orleans, LA	M. Dean Parsons
1989-1990	Toronto, Ontario, CAN	William Highter
1988-1989	Lincoln, NE	Noel Tolbert
1987-1988	Portland, OR	Mardith Thomas
1986-1987	Reno, NV	Gerald Seeley
1985-1986	Cincinnati, OH	Colby Ardis
1984-1985	Atlanta, GA	Roger Seals
1983-1984	Salt Lake City, UT	Ron Eck
1982-1983	Rochester Institute of Technology, Rochester, NY	Jim McDonough
1981-1982	Texas A&M University, College Station, TX	Marvin Criswell
1980-1981	University of Southern California, Los Angeles, CA	Gordon Batson
1979-1980	University of Massachusetts, Amherst, MA	Eugene Chesson
1978-1979	Louisiana State University, Baton Rouge, LA	Donald L. Bender
1977-1978	University of British Columbia, Vancouver, CAN	William J. Wilhelm