

AGENDA – ED Com Meeting – ASA #184 Chicago

(Wednesday, May 3, 2023 – 6:00-7:30pm EDT)

This will be a virtual online meeting via Zoom prior to the ASA 184 Chicago in-person meeting.

Registration and Link for the Zoom meeting: <https://psu.zoom.us/join/91095167823>

Meeting will be run by ED chair, Dan Russell (dar119@psu.edu)

Attendance: (will be gathered from Zoom registration and Zoom recording/snapshot.)

Approval of Minutes from Dec. 2022 ASA 183 Nashville meeting

Motion to approve minutes as posted –

Seconded –

Reflection on the passing of Uwe Hansen

Uwe Hansen passed away at the end of March, 2023. Uwe served as the chair of EDCOM from 2000-2006. Together with Tom Rossing, Uwe started the first “Take-5” sessions at the 1997 Penn State ASA meeting, and Uwe was also instrumental in starting the Hands-on demonstration sessions for middle school and high school students during ASA meetings. Uwe chaired the Musical Acoustics TC from 1990-1996, and he also served on several other committees including Medals and Awards, Tutorials, College of Fellows, Women in Acoustics, Prizes and Special Fellowships, and he chaired the inaugural Rossing Prize Selection Committee in 2006. Uwe received the ASA Distinguished Service Citation in 2011 for his contributions to the society.

JASA Special Issue on Education in Acoustics is online!

<https://asa.scitation.org/toc/jas/collection/10.1121/jas.2022.EIA2022.issue-1>

Reminder of ED special sessions for ASA #184 Chicago.

- **Tuesday, May 9**
 - ▶ **2aPAb – 9:45am-11:45am – Acoustics Demonstration Extravaganza (PA,ED,SA)**
 - ▶ 2 hours of demonstrations (sound sources, vibrational modes, “burning wire of death”, “song of the singing rod”, nonlinear oscillations of a membrane, Cochlea/Basilar membrane apparatus, acoustic rockets, acoustic filters, vocal tract models, speed of sound, fluid loading of a plate, rectangular waveguide)
 - ▶ **2pED– 1:00pm-4:35pm – Assessment of Acoustics Education**
 - ▶ 9 papers and a Panel Discussion
- **Wednesday, May 10**
 - ▶ **3aSP – 8:00am-12:00pm – My Favorite Signal Processing Homework Problems (SP,ED,PA)**
 - ▶ 12 papers
 - ▶ **3pED – 1:15pm-5:30pm – Education in Acoustics Rossing Prize Lecture**
 - **Dr. Kathleen Wage → DJ Prof: Reflections on Teaching**

In a short-lived career as a cartoonist for Acoustics Today [Summer 2016], I sketched DJ Prof, an acoustics professor who mixes multiple modes of instruction to engage and excite students. DJ Prof illustrates the concept of active learning, which Freeman et al. called the “preferred empirically validated teaching practice” [PNAS, 2014]. Numerous studies show that active learning courses improve student learning, increase retention rates, and reduce performance gaps in STEM for economically disadvantaged students and females in male-dominated classes. This lecture reflects on my evolution as DJ Prof using examples from acoustic signal processing courses. I will provide a brief overview of the literature on active learning, share a few favorites from my pedagogical playlist, and highlight open questions for the acoustics education community. The session will include interactive exercises. Please bring an open mind, a sense of humor, and a willingness to meet the people sitting near you.
- **Thursday, May 11**
 - ▶ **4aED – 8:00am-11:50am – When Doing it Right Goes Wrong (PA, AA, NS)**
 - ▶ 9 papers and a 30-minute Panel Discussion
- **Friday, May 11**
 - ▶ **5aED – 9:00am-11:55am – Resources for Teaching Waves in a Physics Class [Hybrid Session] (PA,EA,MU)**
 - ▶ 9 papers

ED special sessions for ASA #185 Sydney, Australia (December 4-8, 2023)

ASA 185 Sydney is a JOINT meeting with the Australian Acoustical Society and WESPAC.

⇒ Website for this meeting is active: <https://acoustics23sydney.org/>

Updates from Marion Burgess?

ED Special Sessions (joint with AAS and WESPAC)

- **Connections between Music and Math** – Andrea Calilhanna and (need additional organizer)
 - Exploring the connections between music, math, and psychoacoustics. Especially targeting younger school students (younger) – focusing on connections between music, math, psychoacoustics
- **Online Resources for Teaching Acoustics** – ~~Andy Morrison~~ (Dan Russell) Jack Dostal and Joe Wolfe?
 - Development of on-line based resources for both teachers and learners to explore acoustics concepts
- **Initiatives in Acoustics Education in the Asia Pacific Region** – Marion Burgess and ???
 - Acoustics education initiatives that take into consideration the regional diversity
 - ASA regional chapter East/Southeast Asia . . . outreach activities?
- **Distance Learning for Acoustics Professionals Across International Boundaries** – Marion Burgess and Dan Russell
 - Challenges in developing distance learning programs that are equally applicable and relevant for those learners in different countries with different approaches to building methods, environmental and workplace noise limits, etc.
- **Teaching Acoustics across Trans-Disciplinary areas** – Lucky Tsaish,
 - Designing content for short courses, micro-credentials, etc. to assist non-acoustics professionals engage with acoustic professionals/consultants and understand reports, etc.
 - Dave Woolworth (check what they are at Nashville). . . . Tony Hoover . . . [ASA Academy](#) Michael Vorlander

How many EDCOM members are planning to attend the Sydney meeting in-person?

Are there going to be hybrid sessions? What about remote (online) participation? **NO VIRTUAL OPTION**

ED special sessions for ASA #186 Ottawa, Canada (May 13-17, 2024)

- **Artistic vs Technical approaches to Acoustics** – Gordon Ramsey, Olivier Robin, and Andrea Calilhanna
 - Connection between physics & arts . . . connection between acoustics as an art vs math/physics
 - Invited session with panel discussion.
- **Using Math in Acoustics** – Jill Linz, Kurt Hoffman, Dan Russell . . .
 - Undergraduate focus? . . . teaching the math side of acoustics without the scary math.
- **Demonstrations Galore!** . . . – Olivier Robin . . .
 - Undergraduate focus? . . . teaching the math side of acoustics without the scary math.

Fall 2024 . . . Virtual ONLY

- **Undergraduate Poster Session . . . SURIEA (maybe Fall 2024)** – Keeta Jones, Dan Russell . . .
 - SURIEA – students, grads, instructors, mentors . . .
- **Session Title** – organizer . . .
 - description . . .

Updates from ED subcommittees

SMMfL (Students Meet Members for Lunch) – Martin Lawless, Chair

ED Outreach Subcommittee – Dan Russell, Gordon Ramsey, Kim Riegel, Kurt Hoffman, Brian Monson, Jill Linz, Andrea Calilhanna.

Sub-committee has not met since the Nashville meeting. Perhaps we can re-engage over the summer and fall of 2023 to prepare something for Ottawa in Spring 2024? Or more long-range planning for Spring 2025 in New Orleans.

Teaching Activity Kit 2.0 Subcommittee – Keeta Jones, Andrew Morrison, Kim Riegel, Dan Russell, Andrea Calilhanna, Ben Tucker, David Brown.

The 2023 Rossing Prize Selection Subcommittee:

Dan Russell (ED Com chair 2018-2024)

Dan Ludwigsen (appointed by ED Com chair – 2022-2025)

Barbara Shinn-Cunningham (selected by ASA president – 2021-2024)

Karen Helfer (selected by Chair of Prizes & Special Fellowships Chair – 2022-2025)

Brad Story (selected by Chair of Prizes & Special Fellowships Chair – 2022-2026)

Two (2) new nominations were received, along with four (4) carry-over nominations from 2022. Selection Committee will be meeting prior to the ED COM meeting for ASA 184 Chicago.

Reports from ASA Outreach and Education Coordinator (Keeta Jones)

Update for SURIEA 2023

- students
- mentors

BOOTHS and STEM Fairs for 2023

- SACNAS – October 2023
- NSBP – November 2023
- ISEF

Discussion Topic #1: Elevation of ED to a Technical Committee

During our ASA 183 Nashville EDCOM meeting, there was active and lively discussion concerning the administrative classification of the Education in Acoustics Committee. EDCOM is very different from most of the other administrative committees within the ASA organizational structure, and this has long been a point of frustration as to how EDCOM functions and how it relates to the other parts of ASA. We have more than 60 members, 35-45 of whom regularly attend EDCOM meetings. We currently discuss and deal with administrative issues, especially those involving outreach activities performed by or with the ASA Education and Outreach Coordinator, and we do submit budget requests for those outreach activities through the Administrative Council on Outreach. However, we also do many things which are more typical of the function of a Technical Committee:

- we organize and chair special sessions for ASA meetings (usually 2-4 special sessions at each meeting),
- we facilitate prizes for members and students (the Rossing Prize for Acoustics Education, and the Robert Young Award for Undergraduate Research),
- we coordinate activities with other Technical Committees to champion education in those technical areas,
- we have sponsored two Special Issues of JASA on Education, and
- our members actively engage in the improvement of teaching, mentoring, and the development of educational resources.
- The EDCOM chair is expected to attend meetings of the Technical Council.

The unique nature of EDCOM membership and functionality poses several challenges, some which result from our organizational structure as an admin committee, and others resulting from the many varied things we attempt to accomplish.

STATUS and UPDATES about this Issue . . .

During the ASA 183 Nashville meeting, EDCOM Chair (Dan Russell) made a presentation at the Technical Council meeting on Monday afternoon (Dec. 5). *PowerPoint slides were appended to the ASA 183 Nashville EDCOM minutes.* The presentation requested permission to begin exploring the possibility of splitting the current EDCOM functionality into two parts:

Outreach and Education Committee – a smaller committee (perhaps 6-10 members) that would fall under Administrative Council on Outreach, and which would focus on the administrative issues, the outreach activities that ASA is involved with (Booths at STEM fairs and professional conferences attended by under-represented minorities undergraduates and faculty), the development and distribution of the ASA Teaching Activity Kit, outreach events during ASA meetings, etc.

Education in Acoustics Technical Committee – elevating ED to a TC would allow for greater focus on acoustics education research, sessions on teaching pedagogy, mentoring of students, and the development of educational resources. An ED TC would also showcase the important role Acoustics Education plays in forwarding the ASA mission and purpose statement.

During the ASA 183 Nashville Technical Council meeting, there was positive response from TC chairs. The Technical Council appointed a sub-committee to explore this request (though the sub-committee has not yet met). However, there were many questions raised about the process and the rules for establishing a new TC. Current ASA rules require the following . . .

- A group wishing to establish a new Technical Committee must first create a Technical Interest Group for a three (3) years trial period.
- During that 3 year period, the TIG must convince 2% of the ASA membership to declare “ED” as their primary choice for the TC category on the ASA membership portal.
 - It is not clear how the 2% of the membership is determined (active members? or all members?). What is the number that equals 2% of the membership?
 - There are many ASA members who are involved with education (though the majority of ASA membership are not involved with an educational institution) but will enough of them be willing to select ED as their **primary** interest for 3 years?
 - Currently only the 1st choice for TC counts . . . but there might be a very large number of ASA members who would select ED as 2nd or 3rd choice . . . would that be taken into account? Or only 1st choice?
- This 3-year trial period was established for the creation of a **new** Technical Interest area that did not exist before. Since ED has existed since 1965 and has been partly operating effectively as a TC (especially sponsoring special sessions at ASA meetings) for at least 35-40 years, is it really necessary for ED to undergo a 3-year trial period as a Technical Interest Group?
- Could there be a fast-track method, or an exception?

There is ongoing discussion with the ASA president, vice-president, and Technical Council sub-committee.

Dan Russell’s term as ED COM chair ends in Spring 2024 . . . so this is a good time to start discussion . . .

OPEN DISCUSSION

name – comment

Discussion Item #2: Outreach Plans for 2024-2025

The next three ASA meetings are out-of-country:

- Fall 2023 – ASA 185 – Sydney, Australia
- Spring 2024 – ASA 186 – Ottawa, Ontario, Canada
 - *Note: Dan Russell's term as EDCOM chair ends with the Spring 2024 meeting.*
- Fall 2024 – ASA 187 – Virtual (online only)

So our next in-person meeting in the US is Spring 2025 for ASA 188 in New Orleans. What kind of outreach activities should ASA and Education be planning for 2024-2025 and beyond?

OPEN DISCUSSION

name – comment

Call to Adjourn:

Moved by:

Seconded by: