

# Education in Acoustics Committee

## MINUTES – EDCOM Meeting – ASA #186 Ottawa

(Tuesday, May 7<sup>th</sup>, 2024 – 6:00-7:30pm EDT -- Zoom)

The “final” meeting of the **ASA Administrative Committee on Education in Acoustics** was held online via Zoom on Tuesday, May 7, 2024 prior to the ASA 186 Ottawa in-person meeting.

Link to Recording of the meeting: [https://psu.mediaspace.kaltura.com/media/t/1\\_8jyt6cd9](https://psu.mediaspace.kaltura.com/media/t/1_8jyt6cd9)

Meeting was be run by outgoing EDCOM chair, Dan Russell ([dar119@psu.edu](mailto:dar119@psu.edu))

Meeting called to order at 6:03pm EST.

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

*Benjamin Tucker, Dan Russell, Gordon Ramsey, Martin Lawless, Jack Dostal, Andrew Morrison, Jim DeGrandis, Andrea Calilhanna, Stan Dosso, Bob Celmer, Jill Linz, Marion Burgess, Laura Ruhala, Richard Ruhala, Chris Jasinski, Andy Piacsek, Noah Parker, Olivier Robin, Rand Worland, Kimberly Riegel, William Murphy, Lucky Tsaih, Brian Monson, Adam Svec, Steven Garrett, Keeta Jones, Julianna Simon, Subha Maruvada, Adrian KC Lee, Ron Kumon, Tracianne Neilsen, Vic Sparrow,*

### Approval of Minutes from Fall 2023 ASA 185 Sydney meeting

Motion to approve minutes as posted – *Bob Celmer*                      Seconded – *Ben Tucker*

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## STATUS UPDATE: Technical Specialty Group for Education

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Email (4/11/2024) to Dan R. from current ASA president (Stan Dosso) has confirmed the following:

- The new **Technical Specialty Group (TSG) in Education in Acoustics (ED)** and the new **Administrative Committee on Outreach and Education** will come into being immediately *following* the Ottawa ASA meeting. For the Ottawa meeting the existing Administrative Committee on Education in Acoustics is still in force. Hence the ED TSG is not scheduled to meet in-person in Ottawa.
- The option to select ED will be added to the Membership Portal shortly after the Ottawa Meeting.
- Chairs have agreed to serve for the new TSG and Administrative Committee, although they must be approved by the Executive Council at the Ottawa Meeting before they become official at the end of the Meeting. But with that understanding, I can let you know they are (pending EC approval):
  - **Kim Riegel** – chair of the Technical Specialty Group on Education in Acoustics (ED).
  - Membership of the new ED TSG is initially appointed by the Executive Council and will be confirmed after the Ottawa Meeting. Current membership of EDCOM was adjusted (to evenly spread members across 3 year rotations) and some former EDCOM members who have not participated in any EDCOM meetings during the last 6 years have been purged.
  - **Traci Neilsen** – chair of the Administrative Committee on Outreach and Education
  - Membership for the new Administrative Committee on Outreach and Education is under consideration and will be finalized by/before the Ottawa Meeting.

### Questions:

**Laura R:** what is 2%?

**Andy P:** 120 members

**Stan Dosso:** TSG already approved. EC Friday meeting approving chair and membership. Great that ED only needs to be 1 of 3 choices. CS had to pick top choice (2%)

## ED Special Sessions at ASA 186 Ottawa – May 13-17, 2024

- **Tuesday, May 14**
  - **2pED – 1:00pm-4:40pm – A Potpourri of Classical and Unusual Materials and Demonstrations**
    - 12 papers. Very well attended.
- **Wednesday, May 15**
  - **3aED – 8:30am-11:10am – Artistic and Technical Approaches to Acoustics**
    - 6 papers + Panel Discussion
  - **3pED – 1:00pm-2:00pm – Rossing Prize Lecture – Scott Sommerfeldt**
- **Thursday, May 16**
  - **4pED – 1:00PM-4:30PM – Teaching Acoustics With (or Without) Math**
    - 11 papers – 40-50 people in room for almost all talks.

## ED Special Sessions the ASA 187 VIRTUAL – November 18-22, 2024

	M	T	W	Th	F
AM (10:00 am – 12:00 pm EST)	Administrative meetings	TC-led activities (1)	TC-led activities (3)	TC-led activities (4)	Administrative meetings
PM (3:00 pm - 5:00 pm EST)		All-society: opening / kick-off	TC-led activities (2)	All-society: plenary, keynote	

- This schedule was adjusted after receipt of abstracts and the TPOM scheduling meeting
- **1aED1 (Tuesday 11/19 – 10am-11am) – Webinar: Teaching and Learning Acoustics with Jupyter Notebooks: Coding in Acoustics Lessons – Dr. Matthew Wright** – Professional Fellow (Education) University of Southampton (and ISVR)
- **1pED (Tuesday 11/19 – 3:00pm-5:00pm) – What’s That Sound? (Sounds of My Research)**
  - Lightning Round Session (5 minutes each)
  - 2 contributed talks followed by impromptu contributions from attendees
- **2aED1 (Wednesday 11/20 – 10am-11am) – Virtual Demonstration Session: “Tones, Tines, and Tings” – David Cotton** (Cardinal Newman College)
- **3aED (Thursday 11/21 – 10:00am-12:00noon) – Student 5 minute Elevator Pitch**
  - Lightning Round Session (5 minutes each)
  - 4 contributed talks followed by impromptu contributions from attendees
- **3pED (Thursday 11/21 – 3:00pm-5:00pm) – Where Do You Get Your Inspiration?**
  - Lightning Round Session (5 minutes each)
  - 4 contributed talks followed by impromptu contributions from attendees

NOTE: contributions to this virtual meeting were very sparse.

## Proposed ED Special Sessions for upcoming ASA meetings

### ICA/ASA 188 New Orleans – [joint with ICA] . . . (May 19-23, 2025)

- **Acoustics Education Research for Newbies: The Science of Teaching and Learning** – Kim Reigel, Dan Russell
  - Education research is a well-established field of scholarly activity. This session will focus on the application of education research methods to acoustics education. One goal of this session is to help faculty learn how to initiate research in acoustics education in their programs and courses. Talks could cover how to implement proper assessment of pedagogical changes; the effectiveness of educational tools ;evaluation of programs, teaching practices, and student learning; IRB approvals, metrics for assessment, and funding sources
- **Acoustics Around the World – Part 1: Education Programs at Universities** – Likun Zhang, Lucky Tsaih, Dan Russell
  - Highlighting university programs (at the baccalaureate and/or graduate level) with a significant focus on Acoustics, or which offer degrees in Acoustics. Talks in this session should focus on the educational aspects of Acoustics, including courses, degree programs, educational facilities, curriculum development, enrollment trends, alumni success. If possible, a specific focus on any unique or cultural aspects of Acoustics education for students in those programs.
- **“That’s Not Physics? (Yes It Is!)”** – (co-sponsor with PA) – Steve Garrett, Dan Russell (?)
  - Focus on the dwindling role occupied by acoustics within university physics departments across the U.S. and the implications for education and research in acoustics.

### ASJ / ASA 189 Honolulu, Hawaii [Joint with ASJ] . . . (December 1-5, 2025)

1. Each special session needs an ASA/ASJ co-organizer
  2. ASJ has two new technical Committees (*Sound Design and Acoustics in Sports*)
- **Demonstration Session** – Takayuki Arai,
    - The joint ASJ/ASA meeting happens every 10 years – and there is usually a BIG demonstration session
    - Keeta** – ASA has not done an outreach session in foreign countries (too \$\$ to ship demo equipment). Last Honolulu meeting had a “build your own headphone” special session as an outreach activity. We would need to rely on local ASA members in Japan.
    - Dan** – as a TSG,ED will have access to \$1500 and additional \$5000 to help ship equipment
    - Takayuki** – did hands-on outreach for 20 high school students.
    - Takayuki** – would like to have a large demonstration session
  - **Hands-on outreach session** – Takayuki Arai and Keeta Jones,
    - Description ?
  - **Acoustics Programs Around the World – Part 2: Research Programs at Universities** – Lukin Zhang, KC Lee, Jao Luis Ealo Cuello, Dan Russell
    - This session will highlight university programs (at the baccalaureate and/or graduate level) with a significant focus on research on Acoustics topics involving faculty and students in those university programs. Talks in this session should focus on the research projects and programs in Acoustics that are part of degree programs for undergraduate and/or graduate students. If possible, a specific focus on any unique or cultural aspects of Acoustics research conducted by students in those programs and grad programs
  - **Citizen Science Projects – getting the public involved** – Kim Riegel,
    - Getting people (public) involved in participating in science (public health and hearing protection)
    - NASA solar eclipse recording the sounds you heard
    - Sonic people in NYU
    - Andy P** – probably could get a lot of co-sponsors
  - **Impacts and Concerns for AI tools for acoustics education** – Andrea Calilhanna
    - If used correctly? But what are the dangers?
    - Controversial? Lots of aspects? Discussion session to follow
    - Actually use AI for teaching and learning . . .
    - **Impacts of AI tools on acoustics education and instruction . . .**
    - Using ChatGPT (perhaps real-time?) as an educational tool . . . starting point (first draft) of a paper that students then edit, helping to write homework problems, developing rubrics, writing code (debug).
    - Andrea C** – combine with computational acoustics – follow up after AI and human listening session for Virtual meeting? Education technology . . . what is the listening component in educational technology . . . how is AI being used in music education? – AI cannot think critically, culturally, limitations to what AI can do . . .
    - Laura R** – would we get enough contributed papers for this?
    - Bob C** – have Chat GPT write an “invited paper”

## ASA 190 Philadelphia [USA Semiquincentennial – 250<sup>th</sup>] . . . (May 11-15, 2026)

- Session – ??,
  - Description

**NOTE:** There is significant interest (see “New Business” below) to organize and host an in-person workshop on acoustics for High School (and middle school?) physics & science teachers in the Philadelphia area on the Friday-Saturday following the Philadelphia meeting.

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## Updates from ED subcommittees

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

For SMMfL, we had a total of 97 students and 68 members sign up, with all TCs represented. The program was able to automatically match 90 of these students. Starting next meeting, I will add TSG Education to the list of TC choices as well.

I'll be working on matching the remaining 7 students this week, so if there is anyone in the meeting that didn't sign up to volunteer, but still would like to participate, please let me know!

### **2024 Rossing Prize in Acoustics Education – Selection Subcommittee:**

No new nominations were received for the 2024 Rossing Prize, but there were two (2) carry-over nominations from 2023 and 2022 (2) additional carry-over nominations from 2022 that are still under consideration.

The selection committee collaborated via email to discuss these 4 nominations prior to the ASA 186 Ottawa meeting and selected a winner of the 2024 Rossing Prize. The name of the winner will be revealed after the Executive Council has approved the selection following the Fall 2024 Virtual meeting.

Because the Fall 2024 meeting (when the Rossing Prize Lecture is supposed to be delivered) is a virtual meeting only, with no “traditional” sessions, the 2024 prize lecture will be delivered at the Spring 2025 ASA 187 meeting in New Orleans.

Moving forward, the membership of the Rossing Prize Selection Committee is:

- Kim Riegel**, Chair – [Farmingdale State College] (ED TSG chair 2024-2027)
- Dan Ludwigsen** – [Kettering University] (appointed by EDCOM chair – 2022-2025)
- Kathleen Wage** – [George Mason Univ.] (selected by ASA president – 2024-2027)
- Karen Helfer** – [UMass Amherst] (selected by Chair of Prizes & Special Fellowships – 2022-2025)
- Brad Story** – [Univ. Arizona] (selected by Chair of Prizes & Special Fellowships – 2022-2026)

### **2024 Robert Young Award for Undergraduate Research Subcommittee:**

New Applications will be due in September.

### **Education in Acoustics Book Reading Club:**

In January several acoustics educators started reading and discussing *How Teaching Happens — Seminal Works in Teaching and Teaching Effectiveness and What They Mean in Practice*, by Paul Kirschner, Carl Hendrick, & Jim Heal. This small group (usually 4-5 EDCOM members) meets Friday afternoons over Zoom to discuss 2 chapters from the book each week. We've had some very lively and encouraging and productive discussions about teaching, learning, and education in general.

## Reports from ASA Outreach and Education Coordinator (Keeta Jones)

**Keeta had to leave the Zoom meeting before we got to this part of our meeting . . . so I have no report to share . . .**

**NOTE:** after the ASA 186 Ottawa Meeting, the ASA Outreach and Education Coordinator (Keeta Jones) will be working directly with the new Administrative Committee on Outreach and Education (ACOE) and all funds requests will be submitted from ACOE through the Outreach Administrative Council to the Executive Council instead of going through EDCOM. The chair of this new Administrative Committee on Outreach has been appointed (pending final approval by the Executive Council) but the committee membership has not been established as of the writing of this agenda. The new chair of ED TSG should automatically be a member of this new administrative committee, and there should be a couple of ED members appointed to this new committee. So, the two groups will still be communicating and working together after ED becomes a Technical Specialty Group.

**Teaching Activity Kit 2.0 Subcommittee**

Nothing happened with the Teacher Activity Kits during 2023 . . . final plans for content of the Kits are still on hold pending new sources and a new company to handle assembly . . . and Keeta has been very heavily involved with SURIEA (which takes a lot of time) . . . but the Kits will moved up to a priority for 2024.

**NOTE:** After the ASA 186 Ottawa meeting, all future activities regarding the Teaching Activity Kit will move out of EDCOM into the new ASA Administrative Committee on Outreach and Education.

**Tracianne Neilsen:** College of Fellows has some momentum to help push some initiatives on outreach. Want to restart outreach activities to local area schools/students at aSA meetings. Teaching Kits.

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## NEW Business (Discussion Topics)

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**Discussion Topic #1: Next Steps for ED TSG**

At the conclusion of this ASA 186 Ottawa meeting, Education in Acoustics officially becomes a Technical Specialty Group – with a new chair (**Kim Riegel**) . . . what do we want to do?

**OPEN DISCUSSION**

**Kim** – so many good directions we could go . . .

Book Club . . . acoustics educators reading a book about teaching/learning and encouraging each other

Find ways to harness the power of our group (lots of great educators)

Repository – place to share our tools, lesson plans . . . share what works/doesn't

Scholarly approaches to teaching

Teaching for the first time . . . teaching a new class for the first time

Addressing the pipeline ecosystem issues . . . where are the leaks . . . levers we can push . . .

**Andrew M.** – repository . . . linked to from EDCOM website (explore sound).

**Martin** – teaching for the first time . . . member engagement (ASEE workshop) – workshop for new faculty

**Acoustics new faculty workshop?**

**Andrea C** – high school teachers . . .

**Discussion Item #2: Outreach Plans for 2025**

The next two in-person ASA meetings are:

- Spring 2025 – ASA 188 – New Orleans, LA
- Spring 2026 – ASA 190 – Philadelphia, PA

What kinds of outreach activities or special Education opportunities do we want to plan for?

**OPEN DISCUSSION**

**Kim** – connections to Philly schools

**Gordon** – workshop for teachers at the Philadelphia meeting

**Traci** – outreach to students

**Andrea C** – interested in. helping with this

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**Kim R** – unmute and give round of applause to Dan for 6 great years of leadership as EDCOM chair.

**Call to Adjourn:**

Moved by: Bill Murphy

Seconded by: Jack Dostal.

Meeting adjourned 7:31pm

