



Education in Acoustics Committee

AGENDA – EDCOM Meeting – ASA #186 Ottawa

(Tuesday, May 7th, 2023 – 6:00-7:30pm EDT -- Zoom)

The “final” meeting of the **ASA Administrative Committee on Education in Acoustics** meeting will be held online via Zoom prior to the ASA 186 Ottawa in-person meeting.

Registration and Link for the **Zoom meeting**: <https://psu.zoom.us/j/94281256789>

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

Meeting called to order at _____ EST.

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

Approval of Minutes from Fall 2023 ASA 185 Sydney meeting

Motion to approve minutes as posted –

Seconded –

Corrections?

STATUS UPDATE: Technical Specialty Group for Education

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.

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
- **Wednesday, May 15**
 - **3aED – 8:30am-11:10am – Artistic and Technical Approaches to Acoustics**
 - 6 papers + Panel Discussion
 - **3aED – 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

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	

- **TSG-led ACTIVITY #1 – Media (books, blogs, videos, etc.) that inspired me to change my approach to teaching –**
 - LIGHTNING ROUND session
 - First hour: 9 five(5)-minute talks followed by 15 minutes of open discussion.
 - Second hour: 9 more five(5)-minute talks followed by 15 minutes of open discussion.
- **TSG-led ACTIVITY #2 – 5 minute Elevator Pitches (students only)**
 - For Students (all levels) . . . practice for sharing your research in a brief format:
 - 5 slides in 5 minutes (1 minute per slide)
 - Title/Author/Affiliation
 - Outline of the Research Project
 - Problem Description / Motivation
 - Proposed Approach / Alternative
 - Summary / Conclusion
 - <https://alert.northeastern.edu/diy-project/give-a-5-minute-presentation/>
- **TSG-led ACTIVITY #3 – Virtual Demonstration Session: “Tones, Tines, and Tings” – David Cotton**
 - Webinar by **David Cotton** (physics teacher from England – @Newmanphysics on Twitter/X) to present his “**Tones, Tines, and Tings**” demonstration show.
 - This would be a Zoom presentation of his demonstration show followed by Q&A and discussions
- **TSG-led ACTIVITY #4 – Listen Up! Sounds From My Research – (Students and Faculty/Industry)**
 - LIGHTNING Rounds – 5 minutes each
 - First hour – for STUDENTS ONLY (undergrad/grad, or even high school?) – 10-11 submissions
 - Second hour – for FACULTY / INDUSTRY ONLY – 10-11 submissions
 - Play the sound . . . briefly explain what causes it, how it relates to your research project, why that sound is relevant, what the sound reveals about the topic of study . . .
 - At the end of each hour we’ll have a couple of “Guess the Mystery Sounds”
- **TSG-led ACTIVITY #5 – Special Invited Speaker – Dr. Matthew Wright – Professional Fellow (Education) University of Southampton (and ISVR)**
 - 1-hour Webinar about “Teaching and Learning Acoustics with Jupyter Notebooks” – a talk about how Matthew uses the browser compatible documents (using code in Julia, Python, or R) that he uses to teach students how to program, and how to learn mathematical acoustics.
 - Matthew has created some amazing animations of acoustics phenomena using COMSOL.
 - The session would be comprised of a webinar presentation followed by Q&A and discussion.

Proposed ED Special Sessions for upcoming ASA meetings

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

These session plans need to be finalized by the end of the ASA 186 Ottawa meeting

- **Impacts and Concerns for AI tools for acoustics education – ???**
 - 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).
- **What is Education Research?** –Kim Reigel, Dan Russell
 - [description](#).
- **Acoustics Programs Around the World** – Lucky Tsaih, Dan Russell
 - [Overviews of undergrad and grad programs](#)
- **Workshop or Panel for presenting science to (an audience other than your peers)** – Andy Piacsek
 - For all attendees . . . how to present to non-scientists from various types of audiences
 - **Andy Piacsek** (Public Relations committee) . . . communication of science ideas
 - **John Buck** -- I just got a sci comm book called “Don’t be such a scientist” by Randy Olson, who is a marine biology prof who turned filmmaker. I haven’t read it yet, but wonder if he could be a keynote/invited speaker for such a session.
 - **David Brown** -- “Talk like an Acoustician” -- like in Steve Garret’s book
- **“That’s Not Physics? (Yes It Is!)”** – (co-sponsor with PA) – Steve Garrett, Dan Russell(?)
 - The removal/disappearance of acoustics as a topic taught and researched within Physics Departments.
 - Keynote address by Andrew Zangwill (physics professor at Georgia Tech – history of physics)
 - Several invited speakers – acousticians in academic physics departments (or who used to be?)

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

Preliminary session plans are required by the end of ASA 186 Ottawa

- **Demonstration Session** – Takayuki Arai,
 - [The joint ASJ/ASA meeting happens every 10 years – and there is usually a BIG demonstration session](#)
- **Session** – ??,
 - [Description](#)
- **Session** – ??,
 - [Description](#)

ASA 190 Philadelphia [USA Semiquincentennial – 250th] . . . (May 11-15, 2026)

- **Session** – ??,
 - [Description](#)
- **Session** – ??,
 - [Description](#)
- **Session** – ??,
 - [Description](#)

Updates from ED subcommittees

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

Update =>

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 three (3) additional carry-over nominations from 2022 that are still under consideration. The selection committee will be reviewing these 4 nominations prior to the ASA 186 Ottawa meeting in order to select a winner for the 2024 Rossing Prize. Since 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.

Current membership of the Rossing Prize Selection Committee is:

Dan Russell, Chair – [Penn State] (EDCOM chair 2018-2024)

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)

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.

Update from SURIEA 2023 and plans for SURIEA 2024

- students
- mentors

BOOTHS and STEM Fairs for 2023

- SACNAS –
- NSBP –
- ISEF

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.

NEW Business (Discussion Topics)

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

[name – comment](#)

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

[name – comment](#)

Call to Adjourn:

Moved by:

Meeting adjourned

Seconded by: