

2024 ALETHEIA SOCIETY UNCONFERENCE

Pacific Coast Research Conference

January 31, 2024

2024 Aletheia Society Unconference **Agenda**

- Special Education Research: Accomplishments and Limitations
- Rationale and Plans for a New Professional Society
 - \odot The Aletheia Society
 - Publishing and Research in Special Education (RiSE)
 - \odot Crowdsourcing and the Special Education Research Accelerator
 - \odot Professional Development and the Aletheia Society
 - ${\rm \circ}$ Professional Meetings and Aletheia Unconferences
- Today's Hackathons



2024 Aletheia Society Unconference Introductions

- Christina Taylor, Aletheia Executive Director
- Bill Therrien (President), Bryan Cook (Treasurer), Betsy Talbott (Secretary)



Special Education Research: Accomplishments and Limitations



We've Come A Long Way

- Thousands of highly skilled researchers in the **special education research community**, with more graduating each year
- Thousands of **peer-reviewed articles** published in scores of journals that span areas within special education each year
- Research used to inform and improve **policy and practice**
- An array of **conferences** at which researchers can disseminate their findings
- Professional organizations that include researchers
- Many millions of **dollars** is awarded annually to researchers to conduct highquality research in special education
- Heightened emphasis on experimental research has greatly expanded knowledge of what works

But There Is Still A Long Way To Go

- Most journals owned by publishers that make huge profits based on the (largely) unpaid work of scholars as authors, editors, and reviewers
- Most published research is behind **paywalls**, inaccessible to practitioners, families, and many scholars
- Materials needed to implement research-based practices and replicate studies seldom shared
- Publication bias and **questionable research practices** such as phacking, HARKing, and outcome-reporting bias appear to be not uncommon
- **Open reforms** seem appealing, but sharing data and code, preregistration and registered reports, and open reviews remain **rare** (Cook et al., 2023)



But There Is Still A Long Way To Go

- Research-to-practice gap still pervades
- We know a lot about what works, but have made little progress on what works for whom, in what settings, for what outcomes
- Conferences presentations primarily didactic, with few opportunities to explore issues specifically related to special education research
- Lack of professional organization by, of, and for special education researchers specifically
- Researchers work in relative isolation to answer specific questions, with funding awarded to a relatively small group of researchers



Rationale and Plans for a New Professional Society



The Aletheia Society

- Aletheia=Literally translated, 'un-concealment' or 'disclosure'. It refers to the process by which things reveal themselves, become known, or are brought into the light.
- A 503c non-profit organization of, by, and for special education researchers
- "Democratizing special education research, The Aletheia Society fosters inclusivity, amplifies diverse voices, and engages in critical inquiries for meaningful improvements in services for children with disabilities."
- We're just getting started, but want to share the directions we're heading





Democratizing research to improve teaching and learning

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Aletheia Society's goal is to promote rigor and openness in special education research and, in turn, improve services for children with or at an increased likelihood for disabilities.

Become a Member

Aletheia's Initial Focus Areas

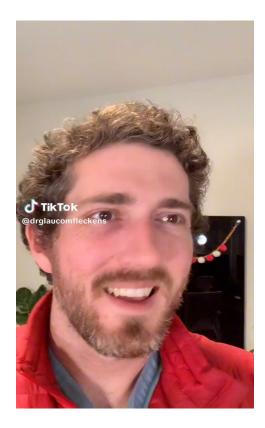
- Academic publishing
- Large-scale and systematic research collaborations
- Vetted, research-based professional development
- Productive, collaborative, research-focused conferences



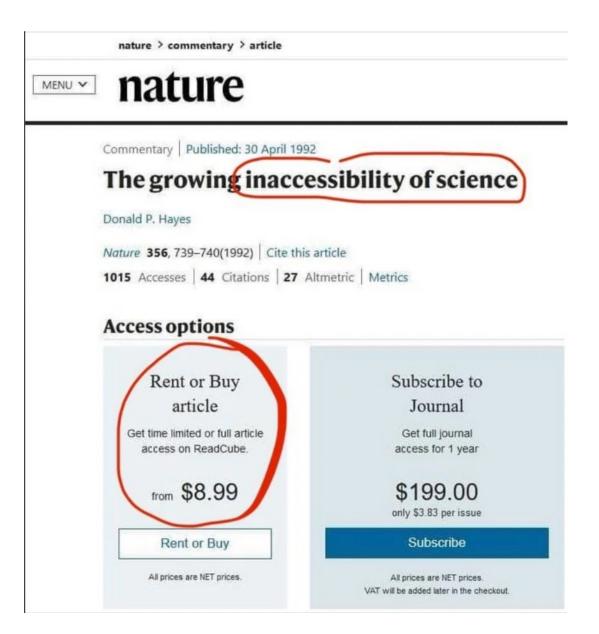
Academic Publishing and Research in Special Education (RiSE)

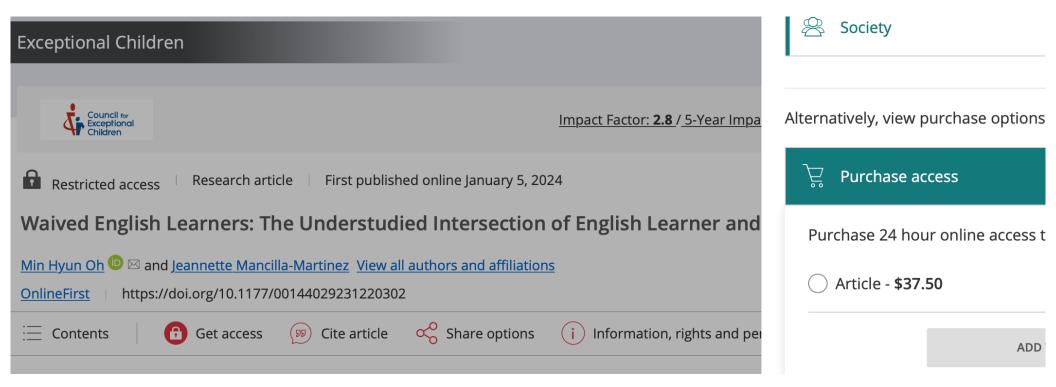


For-Profit Publishers









Paywalls

- **Only 23%** of a random sample of publications in special education journals freely accessible at Open Access Button (Cook et al., 2023)
 - Paper is, sadly, behind a paywall, see <u>here</u> for a post-print
- Limiting access to research is antithetical to Merton's norm of communism and **slows scientific progress**
- Inaccessibility of peer-reviewed, published research, syntheses, and "how-to" papers contributes to the research-to-practice (and-policy) gap
 - Practitioners can't base practice on research if they can't access the research!
- Non-trivial costs associated with publishing papers open access (~\$3,000/paper)



For-Profit Publishers

• Reliance on free labor

- Conducting the research and producing the papers
- Editorial process
 - Peer review
 - Editing
 - Copy-editing

• Big profits

- Larger profit margins than Google and Apple, ~40%!
- Elsevier made over \$3.35 billion a year; Sage \$1.5 billion annually (<u>Academic</u> <u>Publishing Statistics, 2023</u>)



Big Money Can Lead To Big Corruption

Joelving, F., 2024

• Bribery attempts

- Publish or perish results in intense pressure
- Paper mills (likely to accelerate with AI) generate \$millions
- Documented cases of bribes up to \$20,000 or more to editors for accepting papers
- Special issues published open access in for-profit journals highly vulnerable to paper mills
- Conflict between profit motives and ethical responsibility
 - Industry slow to respond to fraud
 - Limited follow up on reported fraudulent practices



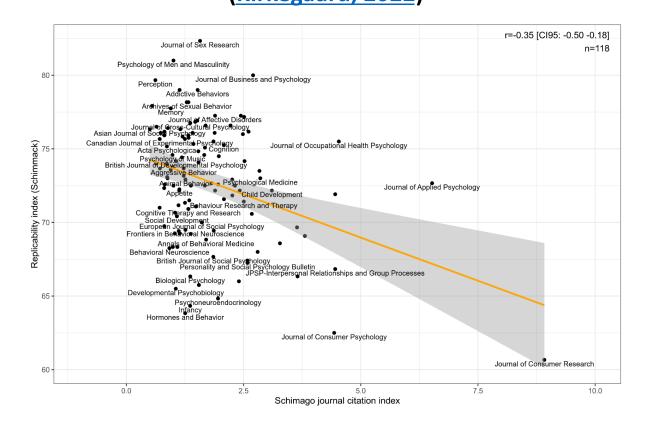
But for-profit journals ensure quality, right?

Impact Factors (Kirkegaard, 2022)

- Weak Link to Quality: Limited correlation between impact factors and research quality
- Bias in High-Impact Journals: Higher impact factors often linked to overestimated study effects
- Methodological Flaws: Top journals don't always equate to better methodology or reliability
- Replicability Issues: High impact factors don't guarantee replicability in studies
- **Negative Correlations Found**: Some studies show a negative relationship between impact factors and scientific quality
- Retractions: > 10,000 published articles retracted in 2023, ~2/3 for misconduct (<u>Oransky et al., 2024</u>)



What about the importance of Impact Factors? (Kirkegaard, 2022)





Paradigm Shift: Costs

• Who should bear the cost of publishing and maintaining archives?

- Traditional library subscription
- Publish and read agreements
- Article Processing Charges (APCs)
 - Many publishers are exploring this option
 - May be cost prohibitive, especially for fields like special education
 - Researchers from smaller institutions and lower-income countries may be priced out of publishing in top-tier journals



APCs: A Cautionary Tale

Pettit, 2023

- Wiley removed the Editor from the *Journal of Political Philosophy* without explanation
- Coincided with a call to publish more articles in the journal
- As APCs become prevalent, editors may face undue pressure to prioritize quantity to ensure journals' financial viability



Diamond Open-Access Journals

- We are huge fans of **self-archiving/green OA** (posting pre- and postprints)
- Another option is to replace for-profit journals with journals run by and for scholars, often with support from university libraries
- Diamond (or platinum) OA journals make all publications freely accessible on the internet at no charge to authors



Journal of Special Education Preparation

ANNOUNCEMENTS

SUBMIT

AUTHOR GUIDELINES

ABOUT -



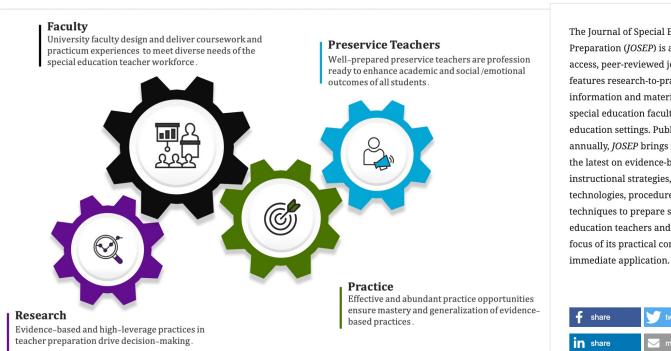
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Q SEARCH



The Journal of Special Education Preparation (JOSEP) is an openaccess, peer-reviewed journal that features research-to-practice information and materials for special education faculty in higher education settings. Published biannually, JOSEP brings its readers the latest on evidence-based instructional strategies, technologies, procedures, and techniques to prepare special education teachers and leaders. The focus of its practical content is on

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Single Case in the Social Sciences



Announcements Submissions Policies - About -

About the Journal

The open access, peer-reviewed journal *Single Case in the Social Sciences (SCSS)* publishes original experimental single-case studies, systematic reviews, and methods articles biannually to expand knowledge across applied behavior analysis, counseling, education, psychology, social work, and related fields <u>with no associated publishing fees</u>. Operating under a Creative Commons license and aligned with open science guidelines, the journal provides a specialized outlet for rigorous single-case research with transparent reporting. As an educational resource and forum for open science practices, *SCSS* is independently published through the <u>University of Oklahoma Libraries</u> and supported by reviewers, sponsors, and an editorial team dedicated to disseminating quality work for the advancement of single case research.

Journal of Special Education Apprenticeship

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The Journal of Special Education Apprenticeship

Article Submission Manuscripts submitted to JOSEA must be original, scientifically accurate, and adhere to APA stylistic guidelines. Manuscripts are accepted electronically to Dr. Anna Osipova and Dr. Jemma Kim at TheJOSEAsubmission@gmail.com.

The mission of the Journal of Special Education Apprenticeship (JOSEA) is to publish quality graduate student and early career faculty research and foster research-based practices for children and youth with exceptionalities. The practitioner column aims to present a diverse and practical range of interventions, strategies, and practices in a format that is accessible for practitioners working with children with exceptionalities.

Research in Special Education (RiSE)

- A soon-to-launch diamond open-access of, by, and for special education researchers
 - \circ Everything will be open at no cost to authors
 - \odot With support from UVA library
- Will recognize and support **open practices**
- Can engage in **innovative practices**
 - Anonymously publishing peer reviews
 - \circ "Pay" reviewers
 - \odot Mentor early career researchers in review process
- One special series on open practice underway, another on addressing unique issues in special education research in development
- Will be forming an editorial board and accepting submissions very soon



Crowdsourcing and the Special Education Research Accelerator



Traditional Research

- "Small science" (Uhlmann et al., 2019) conceptualized and conducted in relative isolation
- Tends to be broad but shallow (Makel et al., 2019)
- Explores lots of different questions
- Researchers rewarded for novel findings



Traditional Research

- Funding awarded to relatively small group of researchers
 - Between 2013 and 2018, NCSER has awarded 38 RCT grants to only 22 institutions and organizations, with 61% of those awards (*n*=23) going to just 8 institutions
 Inefficient use of skills in our research community
- **Inefficient**: Answers questions one at a time and difficult to synthesize findings meaningfully across studies

• Differences in samples, outcome, intervention elements

• Limited replications, transparency, and sharing (Cook et al., 2023a, b)

 Replication rate remains ~0.5%, data seldom shared and most authors who indicate data available on request did not share



Traditional Research

Limited diversity and generalizability

- Lack of diversity in study samples that determine evidence-based practices (<u>Sinclair et al., 2018</u>)
- \odot Scarce evidence of what works for who
- IES funded Goal-3 and Goal-4 RCTs are disproportionately conducted in large schools and school districts in urban and suburban areas in coastal regions (<u>Tipton et al., 2021</u>)



Crowdsourcing

- "Crowdsourcing flips research planning from 'what is the best we can do with the resources we have to investigate our question?' to 'what is the best way to investigate our question, so that we can decide what resources to recruit?'" (Uhlmann et al., 2019, p. 713)
 - \odot Big-team science
- Can crowdsource research questions, study plans, data collection, data analysis



Crowdsourcing

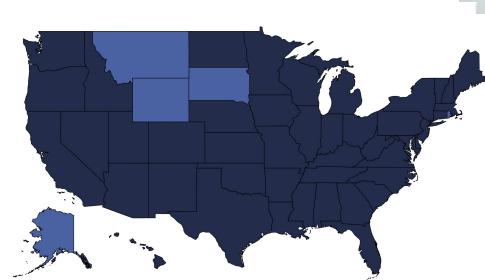
- Horizontal distribution of research ownership, resources, and expertise
- Emphasis on conducting fewer, larger studies
 - \odot Facilitates systematic replication, transparency, and sharing
 - \odot Including conceptual replications to examine effect heterogeneity
- Democratizing research
 - \odot Involving many and diverse researchers and participants
- Facilitates **investigation of effect heterogeneity** and identifying boundaries of effectiveness rather than main effects



Special Education Research Accelerator



Newsroom - About SERA - Studies - Partner Login Q





Welcome to SERA!

The Special Education Research Accelerator (SERA) is a platform for conducting crowdsourced studies related to special education.

Learn more



Special Education Research Accelerator

- Modeled after the <u>Psychological Science Accelerator</u>
 2468 researchers from 73 countries
- SERA has ~370 research partners across 46 US states and districts

 <u>Become a research partner</u>!
- Development and piloting supported by 2 unsolicited awards from IES
 - \odot Pilot RCT involving 8 research partners
 - Ongoing piloting of development of integrated research plan to systematically examine generalization boundaries of interventions
- Currently conducting an NSF-funded project to examine science instruction for elementary students with LD with 21 (and growing) research partners



Special Education Research Accelerator

- Exciting possibilities
 - Design and conduct accelerate systematically designed series of conceptual replications to deeply examine effects of an intervention in years rather than decades
 - Conduct different types of research (e.g., group experiments, single-case designs, observational studies, assessment evaluations, qualitative?; funded and unfunded)
 - Diversify and democratize involvement in large-scale research to inform practice
 - Address critical questions in the field as determined by special education community



Professional Development: Addressing the Research-to-Practice Gap



Teacher Perspectives on PD (Schwartz, 2023)

- Viewed as crucial for teaching and learning
- Effectiveness and accessibility varies
- Commonly **lacks relevance** to specific teaching areas and local school contexts; goals often vague
- Prefer practical, directly applicable PD, tailored to their needs
- Indicate a need for more PD focused on supporting students with disabilities



Who Provides PD?

- School district staff/ teacher unions
- Subject specific professional associations
- Education companies and publishers
- Government agencies (e.g., certification or required PD for licensure)
- Non-profits



PD Quality

- Most (80%) PD does not fully meet ESSA criteria for high quality
 - \circ Sustained
 - \circ Intensive
 - $\circ\, \text{Collaborative}$
 - $_{\odot}\,\text{Job}$ embedded
 - $\circ\, \textbf{Data-driven}$
 - $_{\odot}\,\text{Classroom}$ focused



Harnessing Researchers to Improve PD

Expertise in evidence-based practices

- Deep understanding of the latest research and best practices in special education
- \circ Equipped to provide education that is rooted in proven methods and strategies

$_{\odot}$ Understand state and local contexts

 $_{\odot}$ Awareness of specific challenges and needs within local school systems $_{\odot}$ Ability to tailor PD to address these unique local educational environments

O Underutilized in PD

 Despite their expertise, special education researchers often have limited roles in mainstream PD



Aletheia's Approach to PD in Special Education

Crowdsource the PD Model

- Engaging a wide range of experts to ensure the PD model is evidencebased and comprehensive
- Develop specific PD modules as a group and/ or individually
 - Ensure content up-to-date, relevant and address research to practice gap
- Implement a robust quality assurance process to maintain high quality
- Outreach to education community
 - Actively advertise and promote PD to schools, districts and educational organizations
 - Manage the business side of PD



Next Steps

- Major focus starting summer 2024
- Chaired by Drs. Miriam Ortiz and Tammy Ellis- Robinson
- Develop PD model and infrastructure

 Hold PD specific Unconference, working groups
 Will be actively recruiting interested members soon







Unconferences



Traditional Conferences

- What is your favorite, most exciting part of conferences?
- Didactic, with presenter talking at audiences
- Few opportunities for collaboration, despite being a rare time when researchers gather
- Expensive
- Themes typically determined by organization, limited research content



Unconferences (Budd et al., 2015)

- "Unconventional conferences"
- Unconferences are participant-oriented meetings with informal and flexible programs that emphasize collaborative work
- Can involve different formats, but minimize lecturestyle presentations and emphasize engagement and collaboration

We're partial to hackathons

 Help break down traditional barriers, expand professional networks, and foster ongoing collaborations

oCan be conducted online (maximize efficiency)



OPINION OPEN ACCESS

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The Future of Conferences Is Unconferences: Exploring a Decentralized Network of Regional Meetups

Authors: 🖉 Soya Park, 🖉 Eun-Jeong Kang, 🧟 Karen Joy, 🖉 Rosanna Bellini, 🗶 Jérémie Lumbroso, 👰 Danaë Metaxa,

Andrés Monroy-Hernández Authors Info & Claims

Unconference as a pedagogical tool for 'decolonising' teaching and curricula

+ Tools

<u>Figueira, Carla</u> and <u>Persaud, Roxanne</u>. 2023. 'Unconference as a pedagogical tool for 'decolonising' teaching and curricula'. In: *ENCATC* (Finland 11 - 13 October 2023. [Conference or Workshop Item] (Forthcoming)

Times Higher Education

Making an inclusive 'unconference'

Many people in minority communities within our universities do not have enough opportunities to be platformed or validated, or to share their lived expertise within our institutions. An 'unconference' could cultivate these voices for positive impact

Aletheia Unconferences

- This is our first one!
- But we envision
 - Unconferences specific to different areas of special education to foster collaborative work identifying and addressing key issues in that field
 - An annual Aletheia Unconference specifically related to issues related to special education research and managing/engaging the Aletheia Society

 \circ Online, in person, or hybrid



Today



Aletheia Society: Unconferences



Aletheia Society: Unconferences Today's Unconference: Hackathons

- What are hackathons?
 - $\circ \textbf{Participant driven}$
 - Harness collective creativity and expertise
 - Emphasizes interactive, spontaneous discussion over formal presentations
 - $_{\odot}$ Centers on actions
 - Writing articles, grants, white papers, formulating research agendas, etc...
 - \circ Tangible results
 - Projects designed for real world impact



Aletheia Society: Unconferences Six Hackathons

- Data-Based Decision Making with Discrepant Results

 Betsy Talbott
- Moving from Awareness to Action: Advancing the Evidence Base for Diversity, Equity, Inclusion, and Accessibility in Special Education

 Endia Lindo
- Planning Unfunded Crowdsourced Studies Using SERA
 O Bryan Cook
- Research in Special Education (RiSE): The Journal • Allison Lombardi



Aletheia Society: Unconferences Six Hackathons

Research-to-Practice Hackathon

 \circ Liz Stevens

• Empowering Early Career Scholars: A Hackathon on Open Science Involvement within the Aletheia Society

 \circ Lindsey Mirielli



Aletheia Society: Unconferences

Hackathons: Values and Expectations

• Collaboration

• Work together to share knowledge, ideas and experiences for the collective benefit

• Respect

 Treat other with kindness, consideration, and professionalism. Respect diverse viewpoints and experiences.

• Inclusivity

 Ensure everyone has a voice. Be mindful not to dominate conversations and encourage participation from all attendees

• Engagement

 \circ Be present and involved. If you are in the room, your contributions are valuable and expected.

• Positive Impact

 \circ Strive to have a positive impact on others and the event as a whole.



Aletheia Society: Unconferences Hackathons: Timeline

- Morning: Identify the area(s) of focus and product(s)
 Reconvene to share and problem solve
- Afternoon: Start working together
- End of afternoon: Plan for finishing work after Unconference • Reconvene to share progress
- After Unconference: Finish and disseminate/use product • Group may expand or contract



Aletheia Society: Unconferences

- Thanks for coming!
- We need your expertise and energy in Aletheia
 - Governing committees for Aletheia, *RiSE*, SERA, PD, and Unconferences
 - \odot Additional workgroups and committees
 - o RiSE editorial board and authors
- Google sheet to express interest (no commitment)
- Membership
 - Coming soon, we don't want to start taking any money
 - Goals of affordable dues, reduced rates for doc students, active involvement of members

