The NERA Researcher

NERA NORTHEASTERN EDUCATIONAL RESEARCH ASSOCIATION

Inside this issue

The President's Message

I hope you all enjoyed the holidays and had a great start to the New Year! The beginning of 2022 was by no means easy with the ongoing pandemic, new virus variant Omicron, and skyrocketing infected cases. We reached the new national record of over 1 million new infections in a single day in January. However, despite the great challenges, it is always darkest just before dawn. I am hopeful that the pandemic will be over soon, and we will have a better year in 2022. I hope you all will stay well, strong, and resilient, as we start to see the light at the end of the tunnel.

For myself, 2022 is an extraordinary year as I am honored and excited to serve as your NERA president. I am committed to promoting NERA's continued growth and success. I would first like to thank the 2021 President Steven Holtzman and Conference Team (Hank Johnson, Haifa Matos, Elisabeth Spratto, and Jonathan Steinberg). Thanks to your leadership and hard work, we had a very successful virtual conference. We received many positive comments and encouraging feedback, and for the first time after a decline in recent years, we had an increased number of attendees and a wider range of members. I also want to thank the current and outgoing Board of Directors, Committee Members, and Chairs. The success of NERA was not possible without your continued support and dedication. Finally, I would like to congratulate the 2021 NERA Award recipients (Jennifer Randall, Tia Fechter, Britany Kuslis, and Sophia Mitra) and thank you for your great contribution and outstanding work.

As we begin the new year, I am excited to welcome Bo Bashkov as President-Elect, Andrew Jones as our new Treasurer, Madison Holzman, Jade Caines Lee, and Hank Johnson as new Board Directors, and Sara Finney, Nikole Gregg, Salika Lawrence, Catherine O'Callaghan, and Thai Ong as new Committee Chairs. I thank you and all who continue to support NERA in one capacity or another. Lastly, I am especially pleased to introduce the new Member Advocacy Committee, chaired by Pamela Kaliski, to promote diversity, equity, and inclusion of NERA members. The committee will have representation from various members and advocate for all types of diversity that NERA members represent. Please reach out if you are interested in being one of the inaugural committee members for this important mission.

Looking ahead in 2022, we have more goals and objectives to achieve in the New Year:

The NERA Researcher

The NERA Researcher is the official newsletter of the Northeastern Educational Research Association.

Message from the Editors

Dear NERA Members,

I can't quite believe that it is already February, and we haven't been in touch since when? Another new year and we hope that you and your families and friends had a happy 2021 and are getting 2022 off to a good start despite still wearing masks and keeping social distance.

As we reflect on this past year, we first want to take the time to congratulate and thank our 2021 NERA President Steven Holtzman and his Conference Co-Chairs, Haifa, Hank, Jonathan, and Liz, for the great job celebrating our 52nd year of NERA with our second virtual conference. While we were again virtual, they provided very interesting keynote speakers, invited panels and symposia, a vast array of individual paper presentations, and Steven's thought-provoking Presidential address: *The Importance of Data Literacy and Student Data Footprints.* In addition, there were great social events such as Tabitha Bellamy's mixology class (not exactly Statistics 101) and Wesley Lopez's Battledecks Social (Research Design?), and the GSIC sessions. Thank you to all of you and our members for creating another great NERA conference.

Looking ahead to 2022, we welcome President Nina Deng and her great Conference Co-Chairs, Beth Perkins, Duy Pham, Frank Padellaro, Kate Nolan, and wish them great success bringing us all back to Trumbull, CT. We know they have been diligently working to organize an exceptional conference with lots of exciting events planned. You will receive emails with additional information about the conference in the coming weeks. Keep an eye out for the call for proposals in April and please consider submitting a proposal this year.

Finally, as mentioned in the last issue, this is Kate Nolan's final issue as Production Editor. We wish her great success in her new role, Conference Co-Chair. In addition, we welcome our new Production Editor, Michael Wolter from Pace University. If you have ideas for articles or topics you would like to see or have ever considered writing an article for the *NERA Researcher*, please contact us at theneraresearcher@nera-education.org.

Stay safe and well,
Barbara J. Helms, Kate Nolan, and Michael Wolter

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The First In-person Conference Post-pandemic

I want to thank all the members who completed the 2022 Conference Format Survey before the holidays. I am pleased to provide an update—during the January Board Meeting, the Board of Directors voted for an in-person conference in 2022. After more than two years of social distance, I am excited about the reunion and hope to see you in October at Trumbull, CT.
I want to introduce the 2022 Conference Team (Beth Perkins, Duy Pham, Frank Padellaro, Kate Nolan), working tirelessly to create an engaging and rewarding program around the conference theme "*Supporting Student Learning in a Dynamic Environment*." The pandemic has impacted students' learning and instructions in many ways. The field of education is hungry for research-based initiatives and solutions to support student learning and well-being in a dynamic environment through scientific knowledge, human power, and technology. The conference team has also worked actively with the hotel to review financial responsibilities, potential safety measures, and other logistics options. I am confident that the 2022 conference will be a wonderful experience with long-awaited networking and catching up, inspiring presentations on student learning and other educational topics, and, most importantly, the reunion of the NERA family.

Increased Yearlong Engagement

In addition to the annual conference, NERA is committed to providing activities and channels to increase the engagement of both new and veteran members throughout the year. NERA appointed a webinar coordinator (Alia Ammar) in 2021 and will continue to plan and host more webinars on the topics of interest to the members throughout the year. In addition, many Committees (Mentoring, Educator-as-Researcher, GSIC, etc.) will plan webinars and regular hangouts during the year. Lastly, the Board voted in January to look for a contractor to serve as the Social Media Coordinator. We expect this new position to take a more active role in increasing communication and providing timely and engaging information to the NERA members throughout the year.

Augmented Digital Resources

NERA must continue promoting professional information sharing in today's digital world. The NERA leadership will work with various committees on augmenting the digital resources on NERA's website, including consolidating existing resources, such as conference proceedings and webinars, as well as adding new resources that are identified as important to the members, such as job and internship announcements, regional news, member updates, publications, etc. Please reach out if you have any ideas or suggestions on this effort.

I am excited about these important initiatives and hopeful for more shared achievements in the coming year. Please feel free to contact me at nndeng@gmail.com to share your thoughts and comments. I look forward to seeing you all in future meetings in 2022.

Nina Deng
Your NERA President

Matthew Speno, Ed.D, NERA Board Director and GSIC Chair, had his doctoral degree from University of New England conferred on December 31, 2021. The title of his dissertation is *The Lived Experience of Rural CTE Teachers as Members of the Secondary Education Teaching Corps*. Matthew's transcendental phenomenological research concentrated on how rural secondary Career and Technical Education (CTE) described their teacher professional identity as high school teachers.

Duy Pham, one of the four NERA 2022 conference co-chairs, published *Examining Three Learning Progressions in Middle-school Mathematics for Formative Assessment* with other long-term NERA members including past-president Craig Wells (2012), and past conference co-chair Scott Monroe (2016), Caroline Wylie, and Malcolm Bauer in *Applied Measurement in Education, 34*(2), 107–121. The study was conducted to evaluate a set of three inter-connected learning progressions using testlet item response theory model to build formative assessment for middle-school mathematics on the topics of Equality and Variable, Functions and Linear Functions, and Proportional Reasoning. Using the model, the authors were able to support two out of the three progressions. The article can be accessed at this link https://www.tandfonline.com/doi/full/10.1080/08957347.2021.1890744.

Please consider submitting your professional accomplishments to The NERA Researcher for recognition! Submissions may be sent to theneraresearcher@nera-education.org.

2021 Presidential Address: The Importance of Data Literacy and Student Data Footprints

Steven Holtzman, Educational Testing Service

The past year has demonstrated the importance of data, particularly the correct use of data, both in our everyday lives and research. Although there is a great amount of uncertainty today, data-driven decisions can help provide clarity on answering many questions that arise. Since data are based on factual observations, an emphasis and understanding of the use of data are vital today, especially with the increasing concerns surrounding "truth decay" (RAND, 2018). This reinforces the importance of the theme of the 2021 NERA conference, *Using Data to Solve Education's Challenges*.

However, an increasing number of people have been casting doubts on data reliability. For this reason, beyond just using data, it is essential to ensure that the quantitative and/or qualitative data is considered to have been carefully collected, the appropriate analyses have been performed, and all results are correctly interpreted. There is an often-quoted book title, "How to Lie with Statistics," that people sometimes use to discount data. Contrary to this, a more appropriate lesson is to understand that data are valuable when used correctly, and the premises, assumptions, and caveats are considered when presented (Huff, 1954). Similarly, chemistry educator Andy Brunning published "A Rough Guide to Spotting Bad Science" (2015), listing twelve points people should consider when interpreting data. Two additional invaluable resources on this topic are "Pitfalls of Data Analysis (or How to Avoid Lies and Damned Lies)" (Helberg, 1995) and "How to Write an Efficient Research Report" (Livingston, 2012). Thus, it is critical for everyone not only to use data but to be informed consumers of it, as being data literate is vital to being a knowledgeable researcher, educator, student, or member of society.

Based on these resources, I highlight ten concepts that I think are vital to being data literate.

1. When possible, studies should utilize control groups to have results with which to compare the outcomes from treatment groups.

2. When studies compare two groups, analyses should be performed to ensure the two groups are comparable—that there are no other critical variables besides the variable being researched that are not being controlled for.

3. Samples used should be representative and not biased. Sample characteristics should represent the characteristics of the population. Appropriate sampling methods should also be used that will not add bias to the results.

4. Consideration should be made to ensure that all sample sizes are large enough for the analyses chosen. If the appropriate sample sizes cannot be collected, alternative methods (e.g., non-parametric, qualitative, etc.) should be considered.

5. Significance testing results should be interpreted carefully, especially with large samples. *P*-values are highly dependent on sample sizes, and small effects can often be statistically significant with large sample sizes. Thus, it is important to investigate whether statistically significant differences are practically significant, potentially using effect sizes.

6. Scaling the axes on graphs can highly impact the interpretation of results, particularly when irregular scales are presented. Many publications and manuscripts, even highly respectable venues, use irregular scales to highlight certain aspects of the data. Special attention should be paid to these cases to ensure interpretations are accurate.

7. Scaling the axes on graphs can highly impact the interpretation of results, even when consistent scales are presented. In these cases, it should be noted that the scale chosen can still impact the interpretation of the

results, and it is encouraged to consider how different scales might alter the messages in the graphs presented.'

8. The choice of presenting percentages or counts should be made carefully. In most cases, percentages are most appropriate for large samples and counts for small samples. It is also important to remember that similar arguments can be made using each, leading to very different results (highest percentage vs. highest count).

9. High correlations often do not represent a cause-and-effect relationship and should not be overinterpreted. It is critical to remember that correlation does not mean causation, and often, two unrelated things can have spurious correlations caused by other confounding variables.

10. There are many reasons why it is vital not to merely trust data presented at face value. These include but are not limited to sensationalized news headlines, misinterpreted results, conflicts of interest, and selective reporting of data.

In addition to helping ensure that we are knowledgeable members of society, being data literate can also aid in solving educational challenges. Over the past couple of years, there has been a large amount of additional data available due to pandemic-related changes in education. Given the shift to remote learning, there has been a dramatic increase in learning and assessment delivered via online platforms. With this change in delivery, there are a plethora of new types of data available that can be considered and analyzed to make important conclusions. These data can help researchers explore the data footprints that each student develops through their assessments, assignments, and school activities.

Prior to the recent influx of data, most educational data analyses were based on assessment and assignment scores and, occasionally, item-level responses and scores. Now, new data available can be used to explore a student's data footprint, including data collected from virtual assessments or assignments, such as timing data, click patterns, answer changes, tool usage, and automated scoring features and other student data, such as attendance, tardiness, health and behavioral indicators, student activities, lunch orders, and restroom check-ins. These invaluable data can predict a multitude of outcomes, including academic performance, writing ability, non-cognitive (social-emotional learning or SEL) skills, learning styles, measures of retention and success, and even crisis cases that may need to be flagged for potential intervention.

Many research studies have investigated potential use cases for data collected as part of student data footprints. Interactive computer-based science laboratory exercises have been used in many studies where researchers and educators can easily collect data on the steps students take during these activities (Moon et al., 2016; Gong, Jiang, & Arslan, 2021). Answer change behavior has been explored for GRE test-takers to see the potential impact on assessment scores (Liu et al., 2015). A recent research study used survival analyses to investigate the impact of automated scoring features from student writing samples on student retention in college (Burstein et al., 2021). In Mulholland and Quinn (2013), machine learning algorithms were used to predict suicidal cases of lyricists based on the lyrics from their songs. These studies portray only a few examples of the extensive research done with student data footprints.

Student data footprints often produce very large datasets that are often in the form of JSON or XML files. Data cleaning techniques can transform these data into vertical log files and, ultimately, horizontal files with student features. Once the data are cleaned, the resulting variables can be analyzed using principal components and factor analysis, cluster analysis, survival analysis, machine learning techniques, or various other methods based on the research question(s) being investigated.

Data from student data footprints can also be used to implement alternative scoring methods for assignments to measure different constructs. While a typical assignment would typically be scored based on accuracy to measure a single construct, looking at the additional data collected could help provide measures for a student's

ability to respond quickly, follow directions, inquisitiveness, or even signs of social-emotional issues. These scores could produce distinct measures for different purposes and could be used if these are reliable, valid, and fair for all subgroups (Educational Testing Service, 2014).

However, when using data from student data footprints, there are some important caveats to consider. The samples used should be representative regardless of the modeling techniques implemented, and all sample size minimums should be met. Adequate model fit should also be confirmed, and all resulting models should be cross validated on an independent dataset. Any empirical results found should be shared with a subject matter expert to make sure any decisions made are theoretically sound.

Although using student data footprints can help provide actionable results, it is important to consider the implications of the usage of student data footprints and how stakeholders will view them. Therefore, the introduction to the use of such data should be carefully explained to stakeholders to ensure it is seen as innovative rather than invasive. If the results will be used for high-stakes decisions, it is critical to ensure that the methodology is legally defensible. Utilizing the data for low-stakes decisions, such as mediation, interventions, or placing students into groups, might be more easily accepted.

Thus, ensuring that everyone is data literate is critical both to be informed members of society and to contribute to using data, such as student data footprints, to solve educational challenges. We will have to remember that data, particularly student data footprints, are powerful, however, only when used correctly, as "with great power comes great responsibility" (Spider-Man, 2002).

Note: The full video of the 2021 Presidential Address can be found at https://www.youtube.com/watch?v=18wooj8eoYo.

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2021 Conference Report and Highlights

As we reflect on the 2021 NERA conference, we can't help but think of how grateful we are for our NERA community. Thank you to everyone who attended the conference. We saw over 300 conference registrations this year from all over the nation. So many of you graciously shared your research and were met with great interest and stimulating conversations from conference attendees.

Despite the challenges presented by the pandemic, the 2021 NERA conference program included over 40 sessions (including paper sessions, symposia, and poster sessions) with over 120 papers/posters presented. Thank you to those who volunteered to lead workshops, participate in an invited panel, or an invited symposium. You allowed us to offer five invited workshops, an invited panel, and an invited symposium. We would also like to express gratitude to our Keynote speakers, Sarah Cohodes and Jennifer Bell-Ellwanger, for thought-provoking presentations that were very well received!

We also greatly appreciate Tabitha Bellamy for leading the Calculations and Cocktails Mixology Class and Wesley Lopez for leading the Battledecks social. NERA members enjoyed some laughs through these entertainment events and socialized further with colleagues old and new. On behalf of our student members, thank you to the GSIC for offering the GSIC Journeys session and social event, allowing our graduate and undergraduate members the opportunity to connect.

To our institutional sponsors, thank you for your generosity! We were able to secure $15,500 in institutional sponsorships thanks to the support of our colleagues at various testing organizations and institutions of higher education.

We also want to thank everyone who volunteered their time as proposal reviewers, session chairs, and discussants. We could not have held this conference without you! We are also very grateful to the 2020 NERA Conference team, Madison Holzman, Andrew Jones, Thai Ong, and Jonathan Rubright for providing support throughout the year as we transitioned into the Co-chair roles. Also, a special thank you to Tia Fetcher for her unwavering support of NERA, especially for helping us troubleshoot registration issues during the conference.

Finally, we would like to thank YOU, NERA members, for your support and, especially, for your patience as we navigated through the pandemic uncertainty. It's been said many times, but it cannot be stressed enough, there would not be a NERA conference or organization without you!!

We look forward to supporting the 2022 Conference Co-chairs, Kate Nolan, Frank Padellaro, Beth Perkins, and Duy Pham. We wish them and NERA President Nina Deng all the best in planning the 2022 NERA Conference.

We hope to see you all there!
Hank Johnson, Haifa Matos, Liz Spratto, Jonathan Steinberg
2021 Conference Co-Chairs

JMU The Center for Assessment and Research Studies

2022 NERA Conference Announcement
October 19–21, 2022
Trumbull Marriott Shelton, Trumbull, CT

Dear NERA Members,

We are so excited to share with you our plans for the upcoming conference! First and foremost, we look forward to seeing all of you **in-person** in Trumbull, CT this year! We have sincerely missed gathering together these past two years and cannot wait to join you all again this October. You can rest assured that we will be putting several new protocols in place according to the most recent health guidelines to ensure a comfortable and safe environment for everyone.

That said, we're thrilled to announce the 2022 NERA conference theme: "*Supporting Student Learning in a Dynamic Environment*". The COVID-19 pandemic has impacted instruction and student learning in so many ways. Across the globe, millions of students took classes from home or through a hybrid environment for an extended period. Research shows that there is significant unfinished learning compared to pre-pandemic averages. The field of education is hungry for research-based initiatives and solutions to support student learning and well-being in this dynamic educational environment.

Keep your eyes out for our Call for Proposals in April. We hope you will submit your research, coordinated symposia, and workshops that are aligned with the following preliminary content strands:

Unfinished and Remote Learning	*Diversity, Equity, and Inclusion*	*Measurement and Psychometrics*
Research Methods	*Educational Policy Challenges*	*P-12 Educators as Researchers*
Higher Education	*Miscellaneous*	

We also hope you will consider volunteering to be a chair or discussant at this year's conference.

Sneak Peek at the Conference Program

Keynote: Florence R. Sullivan, Professor of Learning Technology, University of Massachusetts, Amherst
Keynote: Paul Foster, Chief Technology and Accountability, Springfield Public School District, MA
Invited Panel: Building a Balanced System of Assessments
Invited Panel: NERA Past Presidents
Invited Panel: Equity in Learning and Assessment

Stay tuned for other featured symposia and workshops in the coming months. We look forward to seeing you all in October!

Your NERA 2022 Conference Co-Chairs,
Kate Nolan, Frank Padellaro, Beth Perkins, and Duy Pham

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The Graduate Lounge
Graduate Student Issues Committee – GSIC
Matthew Speno, Ed.D., Chair

Greetings graduate students!

I am pleased to announce that my doctorate was conferred on December 31, 2021. I say, what a way to end a mammoth journey and better yet, starting a New Year as Dr. Matthew Speno! Thank you to all my colleagues at NERA and GSIC who supported me in this accomplishment.

At the 2021 NERA conference this past October, the GSIC provided a forum for current and former graduate students to identify how the GSIC can continue to provide valuable support for its members. The session, which was entitled "GSIC Journeys," prompted attendees to reflect on their doctoral journey through the lens of their current and future needs as graduate students. Our discussion led us to identify various forms of support the GSIC can offer during and after an individual's doctoral journey.
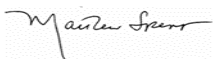
Also, as a direct result of a strong graduate student participation in the 2021 NERA conference, 14 graduate papers have been submitted for the GSIC Best Paper Award. The submission process and subsequent awarding of the Best Paper award are excellent ways for graduate students to get involved in NERA. Still, more importantly, the process provides the avenue for graduate students to get involved and begin to hone their scholarly pursuits in Educational Research. We look forward to sharing the results of the review process. Thank you to all who have submitted their research.

In the next several weeks, the GSIC will be offering virtual "hang-out" sessions, a doctoral-candidate tips and tricks webinar, and updating the GSIC career network, to name a few. These GSIC initiatives are designed to provide opportunities for graduate students to develop relationships with colleagues within GSIC and the wider NERA membership. If you have ideas for GSIC events or happenings, please get in touch!

The members of GSIC continue to honor our mission to support the involvement and professional development of NERA graduate student members. Please consider joining the GSIC this year. We look forward to meeting you!

If you have any thoughts, ideas, or questions, please reach out to me at mspeno@une.edu.

Best,

(signature)

The Leo D. Doherty Memorial Award for Outstanding Leadership and Service

April Zenisky, University of Massachusetts Amherst, Chair

The Leo D. Doherty Memorial Award is given to a longstanding NERA member who exemplifies the qualities that Leo Doherty brought to NERA members, his colleagues, and students throughout his career. The award, instituted by the NERA Board of Directors in 1981, honors the memory of Leo Doherty. He was instrumental in the development and growth of NERA as a professional association for educational researchers. His leadership qualities, which were both ethical and humane, encouraged others to pursue and achieve their goals.

The 2021 Doherty Award recipient is **Tia Fechter, a Personnel Research Psychologist at the Defense Personnel Assessment Center in Seaside, California**. She fully embodies the characteristics that make her an ideal recipient of the award. Tia has contributed to NERA in a multitude of ways over the last fifteen years, and in each role, she has made NERA a better organization for all members. Tia has served as conference co-chair, webmaster, board member, and treasurer and served as a presenter, invited panelist, chair, and discussant of many sessions over the years. In each role, she went beyond the role's responsibilities and found new ways to support the NERA community in these roles.

From Tia's nomination letter, from the now Past-President Steven Holtzman:

Personally, it has been an honor to work with Tia. I worked with Tia as she was a board member when I was treasurer and took over as treasurer when my term was over. As the previous treasurer, I can attest that it is the hardest and most time-consuming job within NERA, and despite this, Tia has done a wonderful job. In both roles, Tia always had great ideas of how NERA can do things differently, which have always been helpful. When Tia took over as treasurer, when we worked together to move NERA's accounts to a national bank, a move that was critical for NERA's success, she took time out of her vacation to come to NJ and meet with the new bank to make sure this went smoothly. On a similar note, during her term as treasurer, she fostered numerous important infrastructure improvements, including discovering a method to merge duplicate NERA member accounts, something I was never able to resolve. Moreover, in Tia's tenure as treasurer, I have observed her be a true fighter for what NERA is, standing up for what is best for NERA in so many cases. Throughout the past couple of years, as NERA faced the challenges of COVID-19, many decisions had to be made, and through each one of them, Tia has carefully advised and offered thoughtful guidance, making sure the interests of NERA are always put first. She has never been afraid to voice her opinion, even if other members of the NERA leadership team disagreed, and for this, I respect Tia as a strong leader.

Steven's sentiments were echoed by numerous other colleagues in NERA leadership positions who worked with Tia over the past several years:

One need look no further than the number of times that Tia has answered NERA's call in the past 10 years to see how generous she has been with her time, her talents, and herself to advance NERA's mission and enable it to thrive. As conference co-chair, webmaster, board member, and now treasurer, Tia has served, and continues to serve NERA, in many of its most demanding roles —and often from a great distance when it would have been so easy to say, sorry I'm no longer in the northeast. [Charlie DePascale, 2016 NERA President]

While her list of contributions to NERA is impressive, what is not reflected in that list is that she is an absolute JOY to work with. Talented, creative, hardworking, and fun. NERA is extremely lucky to have her. [Lynn Shelley, 2012 NERA President]

I had the great pleasure to serve with Tia as a NERA Co-Chair. Our team faced some unique challenges when the hotel switched ownership amidst our planning. Tia handled this with grace, professionalism, and good humor... No barrier, including the breadth of a continent was too great for her to overcome. Our research community has been well-served by her intellect, industry, and leadership. It is fitting, after many years of dedication, that we honor Tia. She is one of the very best of us and our organization is greatly enriched to enjoy her membership. [Gil Andrada, 2012 NERA Conference Co-chair]

Perhaps the most impressive aspect of Tia's service to NERA, and a testament to her dedication to our organization, is that she has done it while living in California over the past ten years. I cannot speak highly enough about Tia and her commitment to NERA. Without people like Tia, NERA would not be a thriving organization. [Craig Wells, 2012 NERA Conference Co-chair, and 2017 NERA President]

Tia has always been willing to go the extra mile for NERA. She will attend meetings to provide her input, even if she's not required to do so, and is always willing to help out and step up for the organization. When we were planning the virtual conference, she helped us with the platform selection and evaluating vendors. She gave NERA her time and expertise, even though this was not within the defined parameters of her role as Treasurer. Tia has been willing to volunteer for NERA in so many ways and I'm grateful to have worked with her as a conference co-chair. [Andrew Jones, 2020 NERA Conference Co-chair]

Tia is simply amazing. Not only is she an incredibly dedicated professional and brilliant researcher, but her willingness to transfer and share that knowledge sets her apart. When I first ended up in a leadership role at NERA, Tia went out of her way to make me feel welcomed and appreciated. Her kindness and grace really made me feel comfortable that I could share my ideas in the group while being new. [Hank Johnson, 2021 NERA Conference Co-chair]

Tia has continued to give generously of herself to NERA to make NERA better for our entire professional community. Speaking for all the members of the Doherty Committee (Sara Finney, Elizabeth Stone, Darlene Perner, Steven Holtzman, and myself), we send congratulations to Tia Fechter, the 2021 Doherty Award Recipient!
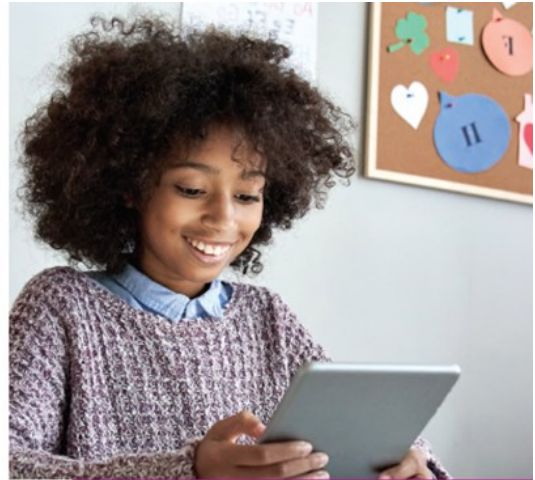
![Endicott College logo - 1939]

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Thomas F. Donlon Memorial Award for Distinguished Mentoring

Frank Daniello, Lesley University, 2021 Chair and Catherine O'Callaghan, Western Connecticut State University, 2022 Chair

The Thomas F. Donlon Memorial Award for Distinguished Mentoring was established to recognize Tom Donlon's valued contributions to NERA and his mentorship to colleagues. Established in 2000, this award is presented annually to NERA members who demonstrate distinction as mentors.

The 2021 award recipient is **Dr. Jennifer Randall. Dr. Randall is an Associate Professor and Director of Evaluation for the Center for Educational Assessment at the University of Massachusetts Amherst**. Dr. Randall also serves on the Board of Directors of Women in Measurement and previously served as co-chair of the NERA Diversity Task Force. Dr. Randall's unwavering guidance, support, and caring for students and colleagues encapsulates what it means to be a distinguished mentor. In the words of one of her students, she *"shines as a mentor and educator who inspires and motivates those around her."*

Professional relationships are the bedrock of high-quality mentoring. These relationships require trust, mutual respect, and open communication. According to students, Dr. Randall's office door is always open, and she welcomes interactions with students. Conversations in her office, decorated with inspirational quotations, span an array of topics, such as traditional academic inquiries, complexities of life, and career planning. Students feel heard, motivated, challenged, and supported during these interactions. For example, a current student communicated how he connected with Dr. Randall during a particularly challenging period, and she provided unwavering support. He had learned he did not pass one of his comprehensive exams and had not received a summer internship. According to this student, he was feeling *"vulnerable and rattled."* He reached out to Dr. Randall, who quickly responded. She assisted him and, in his words, helped him in his predicament to *"re-orient and find solutions."*

Dr. Randall shows unwavering support for her graduate candidates. One advisee commented, "Jennifer possesses the 'traditional' qualities of a good mentor: she cares, she is responsible, she provides timely and quality feedback, etc. But to me, one of the qualities that make her an outstanding mentor is that she is grounded, that she does not lose perspective as she advises you. What this means is that she understands the complexities of life, and she fosters academic rigor without making you feel that everything else in your life is less important."

In addition to providing support, Dr. Randall intellectually challenges her students and shares her extensive professional knowledge and vast experiences. Numerous students commented on how she fosters academic rigor. One doctoral student stated, *"She always healthily challenges me to be my best academically and professionally."* Another student stated that she is *"a thought leader in the area of social justice in assessment, challenging and encouraging us to think more deeply and do more in service of equity and fairness."*

It is evident from Dr. Randall's nomination letter and three letters of support that she exemplifies the type of mentor the Thomas F. Donlon Memorial Award for Distinguished Mentoring is meant to recognize. Her leadership and guidance have a long-lasting impact on her mentees.

Lorne H. Woollatt Distinguished Paper Award

Rochelle Michel, Curriculum Associates, Chair

Congratulations to **Sophia Mitra, Associate Professor at Union County College in Cranford, NJ** the 2021 winner of the Lorne H. Woollatt Distinguished Paper Award for her paper entitled, *Using Learning Management System Assessment Tools to Inform Faculty Practice: An Action Research Study*.

Although the current climate in higher education calls for an increase in accountability and improvement-based learning using digital tools, best practices in this field demonstrating effectiveness and efficiency are still scant. This mixed-method action research study focused on using learning management system (LMS) assessment tools to inform faculty practice in data-driven decision-making.

As online learning becomes more prevalent in higher education, understanding how best to support faculty using LMS becomes more critical. The study aimed to advance the field in understanding professional development needs in this area and incentives to ensure more faculty (including adjunct faculty) participate in these professional development opportunities.

The paper was rated by the award committee members on its relevance, theoretical backing, clarity, design, analytical procedures, and presentation of results and conclusion, and received the highest average rating by the Lorne H. Woollatt Distinguished Paper Award Committee. Sophia will receive a NERA travel stipend to present her paper at the 2022 meeting of the American Educational Research Association in San Diego.

The Lorne H. Woollatt Distinguished Paper Award is named in honor of Lorne H. Woollatt, a distinguished New York State educator and NERA member. It is awarded annually, and a plaque is given to the recipient at the subsequent year's conference (October 2022). Their authors submitted their research papers from the 2021 NERA conference to the award committee for this competitive award. Any questions about the award can be directed to the committee chair, Rochelle Michel at rochelle.michel@gmail.com.

NERA Mentoring Program Update

Kerry Cotter, New Meridian Corporation, Chair

The NERA Mentoring Program strives to facilitate meaningful connections for NERA participants through two key approaches: 1) conference-based connections and 2) year-round virtual events/ discussions.

Since 2012, the conference-based Mentoring Program has matched pairs of volunteer mentors and mentees through a focused, hand-selected match-making process. Each year, the Mentoring Program co-chairs collect information from members who volunteer to be a mentor or want to be mentored and match mentor-mentee pairs based on research interests, career goals, or areas of desired growth. Pairs are encouraged to communicate before the annual NERA conference and meet during the conference. Mentoring Program participants benefit from receiving a structured and informed match, having dedicated time during the conference to meet, and the opportunity to make new connections outside of their existing social networks.

In 2022, we plan to continue our work from last year of offering opportunities for NERA members to connect for mentorship outside of the annual conference, including panel discussions and webinars on key topics for students and early career members. The co-chairs will be sending information soon on how to participate in these opportunities and about the conference-based Mentoring Program later in the year.

Please feel free to reach out to the co-chairs at mentoring@nera-education.org should you have any questions or suggestions for improving the Mentoring Program. We are looking forward to working with the NERA membership over the coming year!

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Call for Nominations for the Thomas F. Donlon Award for Distinguished Mentoring

Dr. Catherine O'Callaghan, Western Connecticut State University, Chair,

The Thomas F. Donlon Memorial Award for Distinguished Mentoring was established in 2000 in recognition of Tom's long and valued contributions to NERA, particularly as a mentor to so many colleagues. Since then, the award has been presented annually to NERA members who have demonstrated distinction as mentors of colleagues by guiding them and helping them find productive paths toward developing their careers as educational researchers.

Mentoring in education has been going on for centuries, and most of us can name a person who helped us move our careers along by being more than just a friend or colleague. That person may have been an advisor in developing your research agenda, or perhaps brought you to NERA for the first time after suggesting that you might be ready for a conference presentation.

Nominations are again being sought for this annual award. Nominees must be NERA members and may be nominated by any member(s) of NERA to whom they served as mentors. If you would like to see a member of NERA who was your mentor be recognized for their contributions to your success, send your nomination to **Dr. Catherine O'Callaghan** via email at **ocallaghanc@wcsu.edu** by **June 30, 2022**. In addition to the nomination letter, all nominations must be accompanied by at least three letters of support indicating how the nominee distinguished themself as a mentor. Up to five separate letters of support can be sent for each nominee. The award will be presented at the 2022 NERA conference. Please contact Catherine if you have any questions about the Donlon Award or the nomination process.

Implementing Habits of Mind: Cross-Cultural Results from Educators-as-Researchers

Marcia A. B. Delcourt

Priscila Torres

Bena Kallick

Damian Bebell

Julio Cesar Vázquez

Philip G. Muscott

What does it mean to be a lifelong learner? How do we begin to prepare ourselves to achieve this goal? We can start with honing the skills that help us face the challenges and uncertainties that will most definitely arise over time and across careers. In addition to content and procedural knowledge, we need to develop dispositions for thoughtful learning. Through their research, Costa and Kallick (2008) defined a set of 16 thinking dispositions that they call Habits of Mind (HOM; https://www.habitsofmindinstitute.org/what-are-habits-of-mind/). These dispositions consist of core social, emotional, and cognitive behaviors that help us respond intelligently and empathically when confronted with complex problems and conflicts, the resolutions to which are not immediately apparent. In essence, our prospects for a successful life depend

Implementing Habits of Mind cont'd

The 16 HOM that facilitate intelligent behavior (Altan et al., 2019; Costa & Kallick, 2008; Gordon, 2011) are based on considerable research directly linking the key HOM dispositions to critical thinking, creative thinking, and problem-solving abilities (Alhamlan et al., 2018; Fletcher 2013; Lucas, 2016).

Figure 1. Habits of Mind. HOM; https://www.habitsofmindinstitute.org/what-are-habits-of-mind/

A symposium at the 2021 NERA conference brought together four educator-researchers working in three countries who shared their approaches to their work with HOM. The first, Julio Vazquez, Director of Instruction and Human Resources in the North Salem Central School District, in North Salem, NY, presented his qualitative study on teachers' and students' perceptions of the impact of Habits of Mind on their learning behaviors (https://westcollections.wcsu.edu /handle /20.500.12945/199). Key findings from his research revealed the value of infusing these dispositions into daily activities within the school community and specific actions administrators and teacher leaders could take to improve HOM implementation.

Implementing Habits of Mind cont'd

The next to present their research was Philip Muscott, Director of Curriculum for the Cambodian International Academy (CIA) First International School in Phnom Penh, Cambodia. His study ascertained the correlations between specific dispositions of the HOM and students' authentic performance assessments in English language arts and social studies. In addition, he highlighted the value of teaching Habits of Mind in conjunction with academic content.

Lastly, Priscila Torres, Chief Academic Officer of Escola Concept in São Paulo, Brazil, and Damian Bebell, Assistant Research Professor at Boston College, shared their work in collaboration with teachers at three campuses of Escola Concept. Through their initiatives, teachers learned to conduct action-research studies through which students assessed their Habits of Mind proficiencies skills simultaneously. In addition, faculty members at the Escola Concept schools learned how to collect data to inform their teaching and assessment practices further using Habits of Mind.

The Impact of Habits of Mind: An Exploratory Study
Julio Cesar Vázquez (jvazquez@northsalemschools.org)

Vázquez studied the effect of HOM in a school district that had incorporated the model for the past four years. He interviewed a selection of eight teachers and eight students who represented the eleventh grade. They agreed that direct instruction about the HOM was essential. They also believed that the ubiquitous nature of the HOM throughout the school led to successful learning for both in-school and future life outcomes. Supporting the concept of lifelong learning, one humanities teacher explained, "If I was trying to set up a kid's success in the coming decades, I would say you have the Habits of Mind to be a problem solver ... the person that has the Habits of Mind knows where to start." A student embraced the value of HOM in his life by remarking, "Habits of Mind help you to be more efficient and realize where you're going wrong and where your strengths are."

In terms of effective implementation of HOM, teachers recommended that there be time to exclusively focus on learning how to use HOM in their classrooms and, more significantly, time to make a mental shift away from thinking about content as the primary and exclusive objective of student learning. A teacher reflected, "We're sort of in a transition right now from really feeling that the ultimate goal is not the content [but] that the ultimate goal is the Habits of Mind." Students requested that their teachers use the Habits of Mind intentionally and authentically. When asked how HOM can affect the classroom context, a student provided the following example, "It would be nice to get [an HOM] reminder from a teacher if you ask for help, instead of being told to 'figure it out.' They could hand us the Habit of Mind sheet [https://www.habitsofmindinstitute.org/wp-content/uploads/2018/10 /HabitsofTheMindChartv2.pdf] and suggest, 'Did you try to think flexibly?' because we are moving so fast sometimes you forget to think about your thinking." These are wise words for all of us.

The Relationship Between Habits of Mind and Performance Task Achievement in an International School in South-east Asia
Philip G. Muscott (philip.muscott@ciaschool.edu.kh)

Substantiating the perceptions of teachers and students in Vazquez' study, Phillip Muscott conducted a quantitative study in a middle and high school where Habits of Mind had been infused throughout the curriculum for two years. In this correlative study, a multiple linear regression procedure was used to determine the predictive power of three different summative assessments in determining students' success in completing authentic performance tasks. Performance task achievement (PTA) for seven open-ended activities was predicted by measuring students' knowledge and skills, discussions about essential questions, and 2-3 Habits of

Implementing Habits of Mind cont'd

of Mind journal assessments per unit (e.g., persisting). The sample included 354 middle school students from 19 social studies classes and 246 high school students across 18 English language arts classes.

A performance task included a goal, role, audience, situation, and a description of the intended product/ performance and purpose. An example social studies topic was "Land Use Conflict in the Amazon." A scoring rubric was used to assess each performance task criterion. In addition, a scoring rubric was developed for each target habit to assess HOM dispositions. Teachers rated individual students based on the criteria of observable classroom behavior of the habit; evidence provided in a student journal; and self-reflection and goal setting, also indicated in the journal. A 5-point rating scale for each criterion included "Exceeds the Standard – 4," "Meets the Standard – 3," "Approaches the Standard – 2," "Attempts the Standard – 1," or "Didn't Attempt the Standard – 0." A student also provided their understanding of the target habit using the following scale: "Exemplary, like an expert – 4," "Proficient, like a practitioner – 3," "Developing, like an apprentice - 2," or "Emerging, like a Novice – 1."

The findings revealed a statistically significant result, $R = .702$, $R2 = .492$, $p < .000$ for middle school social studies, with HOM being the greatest contributor towards explaining PTA, $B = .355$; followed by essential questions, $B = .267$, and knowledge and skills, $B = .215$. The correlation for high school English language arts was also statistically significant, $R = .539$, $R2 = .290$, $p < .000$. The combination of knowledge and skills was the most significant predictor of PTA, $B = .212$, HOM was the second most influential variable in the model, $B = .3170$, and essential questions entered the equation last, with $B = .110$.

Since there was a statistically significant correlation between performance in HOM assessments and PTA, if transference of learning to authentic problem-solving tasks is valued, it is worth spending the time to include HOM within the school curriculum, instructional practices, and assessments. In addition, Sparks (2021) recently described the value of establishing learning dispositions in K-12 students and reported that curiosity and persistence were two of the most influential skills promoting academic success, based on an international study. In conclusion, the better the alignment between desired results, learning activities, and assessments, the higher the predictive power the assessments will have for students to ultimately succeed in the performance task.

STAR: Supporting Teachers as Researchers (Fostering data-informed reflection in a pandemic)
Priscila Torres (priscila.torres@conceptedu.com.br)
Damian Bebell (bebell@bc.edu)

Building upon the fact that beginning in 2020, Habits of Mind was the foundational model at three elementary schools in Brazil, Torres and Bebell worked with 250 Escola Concept teachers and staff members (e.g., librarians) to design and conduct collaborative action research projects. The goal was to Support Teachers as Researchers (STAR). Torres and Bebell began with the notions that research assists and improves formative assessment, can be used to check assumptions about learning, provides community evidence of success, and reveals a deeper understanding of student experiences.

Over seven months, from July to December, teachers engaged in professional development (PD) to be able to conduct their own studies. First, they were asked to reflect upon their teaching experience using the following prompt: How do you measure success? These educators formed hundreds of research questions then worked in 26 independent research groups across three campuses to investigate their common interests. Teachers in each group were provided with support from the lead researchers to learn how to collect data, analyze student responses, and address their communal research questions. For example, a group of third-grade teachers explored the concept of engagement during online learning classes. In one activity, teachers asked students to "draw the first memory that

Implementing Habits of Mind cont'd

comes to mind when you think about online learning." Emergent analytic, holistic, and trait coding were used to analyze these drawings, resulting in themes that provided insights about student perceptions of their class environment and assisted teachers in responding to learning needs.

Learners in second and third grade were first asked how they felt about the writing process to investigate what makes a successful writer. Writing samples included responses about favorite moments and what they loved learning. Student writing samples were examined over time. Take-aways included the concepts that learners were able to grow their use of descriptive words and demonstrate how to connect complex ideas. Rubrics were created for each of the HOM dispositions. For instance, when responding about managing impulsivity during language arts class, students used a 4-point rating scale that included these options: "I always think before I act - 4," "Most of the time I think before I act – 3," "Sometimes I think before I act – 2," or "I need to be reminded to control my impulses – 1." The teachers were able to connect certain HOM dispositions to student writing activities. Based on this action research project, the following outcomes were noted:

- Persistence was seen as an important disposition.
- Teachers felt empowered because they were making decisions about "Measuring What Matters."
- Self-esteem was seen as being connected to writing.
- Educators were able to take advantage of resources in the virtual village to benefit all learners.
- Teachers who explored the impact of Habits of Mind noted the positive effects on students who used HOM rubrics and how these rubrics positively influenced students' writing.

The action research conducted in Escola Concept gave groups of teachers the first-hand experience to answer their own research questions and use their findings to inform their instructional and assessment practices. Leadership, resources, and ongoing support strengthened teacher capacity in using assessment data and research techniques. During a tumultuous year, teachers and support staff felt energized when addressing real-world questions. Additional information about the STAR project is available through the Escola Concept Schools website http://reflectiveeducationalresearch.com/star.html.

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