### **OKHEE LEE**

#### **CURRICULUM VITAE**

#### **CONTACT INFORMATION**

Department of Teaching and Learning
Steinhardt School of Culture, Education, and Human Development
New York University
239 Greene Street, Room 620
New York, NY 10003
212.998.5882
olee@nyu.edu

https://steinhardt.nyu.edu/people/okhee-lee

https://www.nyusail.org/

https://en.wikipedia.org/wiki/Okhee\_Lee

https://wikitia.com/wiki/Okhee Lee

https://www.okheelee.com/

https://www.youtube.com/channel/UCmptRBGO6G6yl4Ph0n7Pr w/featured

## PERSONAL INFORMATION

Birthplace: Daegu, South Korea

Citizenship: U.S. citizen

**EDUCATION** 

1984-1989 Michigan State University, East Lansing, MI

PhD in educational psychology with an emphasis on learning and

cognition (academic advisor: Andrew C. Porter)

Dissertation: Motivation to Learn Science in Middle School Science

Classrooms (dissertation director: Charles W. Anderson)

1981-1983 Kyungpook National University, South Korea

MA in education with an emphasis on educational psychology and

instructional design

1977-1981 Kyungpook National University, South Korea

BA in English language

Teaching certificate: Teaching English as a Foreign Language (TEFL)

in secondary school

#### ACADEMIC POSITIONS

2011-present	Professor, Dep	partment of T	Ceaching and L	earning, Steir	hardt School of

Culture, Education, and Human Development, New York University

2000-2011 Professor, Department of Teaching and Learning, School of Education,

University of Miami

1997-2000	Associate Professor, Department of Teaching and Learning, School of Education, University of Miami
1993-1997	Assistant Professor, Department of Teaching and Learning, School of Education, University of Miami
1992-1993	Adjunct Assistant Professor, Department of Teaching and Learning, School of Education, University of Miami
1990-1992	Research Associate, Department of Teaching and Learning, School of Education, University of Miami
1990-1991	Director of Undergraduate Advising, School of Education, University of Miami
1989-1990	Lecturer, Department of Teaching and Learning, School of Education, University of Miami
1989	Adjunct Instructor, Department of Psychology and Education, Miami-Dade Community College
1983-1984	Adjunct Instructor, Teachers' College and College of Music and Visual Arts, Kyungpook National University, Daegu, South Korea
1983	Adjunct Instructor, College of Elementary Teacher Education, Daegu, South Korea
1983	Adjunct Instructor, College of Home Economics, Daegu, South Korea
AWARDS AND HO	ONORS
2023	Distinguished Contributions to Science Education through Research Award, National Association for Research in Science Teaching
	<i>Note:</i> See the award acceptance speech, <a href="https://www.youtube.com/watch?v=wa5tFI-pWZc">https://www.youtube.com/watch?v=wa5tFI-pWZc</a>
2022	Honorary Doctor of Humanities Degree recipient and keynote speaker at Baccalaureate Commencement Ceremony, Michigan State University
	<i>Note:</i> See the commencement speech, <a href="https://youtu.be/2g2GREd3T4M">https://youtu.be/2g2GREd3T4M</a>
2021	Exemplary Contributions to Practice-Engaged Research Award from the American Educational Research Association
	Note: See the award ceremony, <a href="https://www.aera.net/Events-Meetings/AERA-2021-Awards-Virtual-Celebration">https://www.aera.net/Events-Meetings/AERA-2021-Awards-Virtual-Celebration</a>

2020	Distinguished Service to Science Education Award from the National Science Teaching Association
2015-2020	RHSU Edu-Scholar Public Influence Rankings: 2020 (120), 2019 (106), 2018 (86), 2017 (77), 2016 (121), 2015 (110)
2019	Innovations in Research on Equity and Social Justice in Teacher Education Award from the American Educational Research Association Division K Teaching and Teacher Education
2019	Inaugural Distinguished Researcher Award from the Korean-American Educational Researchers Association
2017	Outstanding Educator of the Year by Education Update
2016	REVERE Awards finalist for Lee, O., Miller, E., & Januszyk, R. (Eds.). (2015). NGSS for all students. National Science Teachers Association
	<i>Note:</i> This was supported by the Next Generation Science Standards and Achieve, Inc.
2014	Educational Leadership Award from the National Association of Bilingual Education and the Florida Association of Bilingual Education
2008	University of Miami Provost's Award for Research Activity
	<i>Note:</i> The award is given each year to three to five faculty members across the University of Miami
2007	Florida Educational Research Association Distinguished Paper Award
2003	Distinguished Career Contribution Award from the American Educational Research Association Standing Committee for Scholars of Color in Education
1988	Sage Doctoral Dissertation Grant, College of Education, Michigan State University
1987	Scholarship Award, Arthur T. and Pearl Butler Scholarship, College of Education, Michigan State University
FELLOWSHIPS	
2022	National Academy of Education member
2021	AAAS Fellow, American Association for the Advancement of Science, Section Q Education

2011	Faculty in Residence Summer Term, University of Colorado at Boulder
2008-2011	Kurtz Fellow, School of Education, University of Miami
2009	Fellow of the American Educational Research Association
1996-1997	Fellow at the National Institute for Science Education funded by the National Science Foundation and Wisconsin Center for Education Research at the University of Wisconsin-Madison
1993-1995	National Academy of Education Spencer Postdoctoral Fellowship Topic: Children's Views of the World in Social and Cultural Contexts
1994	Visiting Scholar, Minority Visiting Scholars Program. Wisconsin Center for Education Research, School of Education, University of Wisconsin-Madison Topic: Children's World Views in Social and Cultural Contexts
1984-1987	Graduate Research Intern, selected as one of five doctoral students each year for the intern training program at the Institute for Research on Teaching, College of Education, Michigan State University

#### REFEREED JOURNAL ARTICLES

- 132. **Lee, O.**, & Grapin, S. E. (in press). English language proficiency standards aligned with content standards: How the Next Generation Science Standards and WIDA 2020 reflect each other. *Science Education*.
- 131. **Lee, O.**, & Grapin, S. E. (in press). Justice-centered STEM education with multilingual learners to address societal challenges. *Educational Leadership*.
- 130. Schwenger, A., Grapin, S. E., Altamirano, N., Haas, A., & Lee, O. (in press). Formative assessment from a translanguaging perspective in the NGSS classroom. *Science and Children*.
- 129. Taylor, J., Hanuscin, D., **Lee, O.**, Lynch, S., Stuhlsatz, M., & Talbot, R. (in press). Sources and consequences of teacher attrition in large-scale impact studies. *Research in Education*.
- 128. Grapin, S. E., Llosa, L., & **Lee, O.** (in press). Disciplinary practices with English learners in the content areas: Investigating *grasp of practice* in fifth-grade science. *Journal of Language, Identity & Education*. https://doi.org/10.1080/15348458.2021.2008253
- 127. Haas, A., Grapin, S. E, Llosa, L., & Lee, O. (in press). Computational modeling with multilingual learners across four science units. *Science and Children*.
- 126. Grapin, S. E., Haas, A., Llosa, L., Wendel, D., Pierson, A., & Lee, O. (2023). Multilingual learners' epistemologies in practice in the context of computational

- modeling in an elementary science classroom. *Journal of Research in Science Teaching*, 60(9), 1998-2041. https://doi.org/10.1002/tea.21850
- 125. **Lee, O.**, Grapin, S. E., & Haas, A. (2023). Teacher professional development programs integrating science and language with multilingual learners: A conceptual framework. *Science Education*, 107(5), 1302-1323. https://doi.org/10.1002/sce.21807
- 124. Grapin, S. E., Haas, A., McCoy, X., & Lee, O. (2023). Justice-centered STEM education with multilingual learners: Conceptual framework and initial inquiry into pre-service teachers' sense-making. *Journal of Science Teacher Education*. 34(5), 522-543. https://doi.org/10.1080/1046560X.2022.2130254
- 123. Nordine, J. C., & Lee, O. (2023). On the nature and utility of crosscutting concepts. *Education Sciences*. 13(7). https://doi.org/10.3390/educsci13070640
- 122. Haas, A. Schwenger, A., Master, L., Grapin, S. E., & Lee, O. (2023). Symmetry in NGSS teacher professional learning: "Walking the walk" and "talking the talk." *Science and Children*, 60(5), 60-63. https://www.nsta.org/science-and-children/science-and-children-mayjune-2023/walking-walk-and-talking-talk
- 121. Grapin, S. E., Dudek, S., & Lee, O. (2023). Justice-centered STEM education with multilingual learners: Computational modeling to explain and design solutions to COVID-19 disparities. *Science Scope*, 46(5), 36-44. https://www.nsta.org/science-scope/science-scope-mayjune-2023/justice-centered-stem-education-multilingual-learners
- 120. Grapin, S. E., Haas, A., Llosa, L., & **Lee, O.** (2023). Developing instructional materials for English learners in the content areas: An illustration of traditional and contemporary approaches in science. *TESOL Journal*, *14*(1), e673. https://onlinelibrary.wiley.com/doi/abs/10.1002/tesj.673
- 119. Grapin, S. E., Llosa, L., Haas, A., & **Lee, O.** (2022). Affordances of computational models for English learners in science: Theoretical foundations and initial inquiry. *Journal of Science Education and Technology, 31*(1), 52-67. https://link.springer.com/article/10.1007/s10956-021-09930-3
- 118. **Lee, O.**, & Grapin, S. E. (2022). The role of phenomena and problems in science and STEM education: Traditional, contemporary, and future approaches. *Journal of Research in Science Teaching*, *59*(7), 1301-1309. https://onlinelibrary.wiley.com/doi/10.1002/tea.21776
  - *Note:* See a commentary by Adah Miller, E., Makori, H., Akgun, S., Miller, C., Li, T., & Codere, S. (2022). Including teachers in the social justice equation of project-based learning: A response to Lee & Grapin. *Journal of Research in Science Teaching*, *59*(9), 1726-1732. https://doi.org/10.1002/tea.21805
- 117. **Lee, O.**, Bauler, C., Kang, E., & Ocol, T. (2022). "Doing" science, using language: Professional development to promote science and language integration with a focus on

- multilingual learners. *NYS TESOL Journal*, *9*(1), 3-15. http://journal.nystesol.org/nystj\_vol9\_1.html
- 116. Lee, S., Russell, J., Campbell, J., & Lee, O. (2022). Student agency through engineering. *Science and Children, 59*(3), 48-55. https://www.nsta.org/science-and-children/science-and-children-januaryfebruary-2022/student-agency-through-engineering#
- 115. Grapin, S. E., & Lee, O. (2022). WIDA English language development standards framework, 2020 edition: Key shifts and emerging tensions. *TESOL Quarterly*, 56(2), 827-839. https://onlinelibrary.wiley.com/doi/10.1002/tesq.3092
- 114. Grapin, S. E., Llosa, L., Haas, A., & **Lee, O.** (2021). Rethinking instructional strategies with English learners in the content areas in light of contemporary perspectives on content and language learning. *TESOL Journal*, *12*(2), 1-12. https://doi.org/10.1002/tesj.557
- 113. Haas, A., Januszyk, R., Grapin, S. E., Goggins, M., Llosa, L., & Lee, O. (2021). Developing instructional materials aligned to the Next Generation Science Standards for all students, including English learners. *Journal of Science Teacher Education*. 32(7), 735-756. https://www.tandfonline.com/doi/full/10.1080/1046560X.2020.1827190
- 112. Haas, A., Grapin, S. E., Simon, K., Llosa, L., & Lee, O. (2021, May/June). Integrating computational modeling into science instruction with English learners. *Science and Children*, 74-79. https://www.nsta.org/science-and-children/science-and-children-mayjune-2021/integrating-computational-modeling-science
- 111. **Lee, O.** (2021). Asset-oriented framing of science and language with multilingual learners. *Journal of Research in Science Teaching, 58*(7), 1073-1979. https://doi.org/10.1002/tea.21694
- 110. **Lee. O.** (2020). Science and language instructional shifts with second-language learners. *Asian-Pacific Science Education*, 6(2), 263-284. https://doi.org/10.1163/23641177-BJA10005
- 109. **Lee, O.**, & Campbell, D. T. (2020). What science and STEM teachers can learn from COVID-19: Harnessing data science and computer science through the convergence of multiple STEM subjects. *Journal of Science Teacher Education, 31*(8), 932-944. https://doi.org/10.1080/1046560X.2020.1814980
- 108. **Lee, O.** (2020). Making everyday phenomena phenomenal: Using phenomena to promote equity in science instruction: *Science and Children, 58*(1), 56-61. https://www.nsta.org/science-and-children/science-and-children-septemberoctober-2020/making-everyday-phenomena
- 107. **Lee, O.**, & Stephens, A. (2020). English learners in STEM subjects: Contemporary views on STEM subjects and language with English learners. *Educational Researcher*, 49(6), 426-432. https://doi.org/10.3102%2F0013189X20923708

- 106. Haas, A., Grapin, S. E., Wendel, D., Llosa, L., & Lee, O. (2020). How fifth-grade English learners engage in systems thinking using computational models. *Systems*, 8(4), 47. https://doi.org/10.3390/systems8040047
- 105. **Lee, O.** (2019). Aligning English language proficiency standards with content standards: Shared opportunity and responsibility across English learner education and content areas. *Educational Researcher*, 48(8), 534-542. https://doi.org/10.3102%2F0013189X19872497

*Note:* See the related video on the American Educational Research Association website, <a href="https://www.youtube.com/watch?v=RkDi0rNGuDs&feature=youtu.be">https://www.youtube.com/watch?v=RkDi0rNGuDs&feature=youtu.be</a>

*Note:* See the *Education Week* blog on this article, <a href="https://www.edweek.org/policy-politics/for-english-learners-to-excel-more-collaboration-needed-researcher-argues/2019/10">https://www.edweek.org/policy-politics/for-english-learners-to-excel-more-collaboration-needed-researcher-argues/2019/10</a>

Note: Listen to Conversations with Tim: Examining How the 2020 Edition Impacts Multilingual Learner Education, <a href="https://wida.wisc.edu/about/news/conversations-tim-examining-how-2020-edition-impacts-multilingual-learner-education">https://wida.wisc.edu/about/news/conversations-tim-examining-how-2020-edition-impacts-multilingual-learner-education</a>

- 104. **Lee, O.**, & Januszyk, R. (2019). Formative assessment of English language proficiency in the science classroom. *Science and Children, 56*(9), 80-85. https://www.nsta.org/science-and-children/science-and-children-july-2019/formative-assessment-english-language
- 103. **Lee, O.**, Llosa, L., Grapin, S. E., Haas, A., & Goggins, M. (2019). Science and language integration with English learners: A conceptual framework guiding instructional materials development. *Science Education*, 103(2), 317-337. https://doi.org/10.1002/sce.21498
- 102. Grapin, S. E., Haas, A., Goggins, M., Llosa, L., & Lee, O. (2019). Beyond general-purpose talk moves: Using discipline-specific probes with English learners in the science classroom. *Science and Children*, 57(4), 36-43. https://www.nsta.org/science-and-children/science-and-children-novemberdecember-2019/beyond-general-purpose-talk-moves-0
- 101. Grapin, S. E., Llosa, L., Haas, A., Goggins, M., & Lee, O. (2019). Precision: Toward a meaning-centered view of language use with English learners in the content areas. *Linguistics and Education*, 50(1), 71-83. https://doi.org/10.1016/j.linged.2019.03.004
- 100. Goggins, M., Haas, A., Grapin, S. E., Llosa, L., & Lee, O. (2019). Integrating crosscutting concepts into science instruction. *Science and Children*, 57(1), 56-61. https://www.nsta.org/science-and-children/science-and-children-september-2019/integrating-crosscutting-concepts-0
- 99. **Lee, O.** (2018). English language proficiency standards aligned with content standards. *Educational Researcher*, 47(5), 317-327. https://doi.org/10.3102%2F0013189X18763775

- 98. **Lee, O.** (2017). Common Core State Standards for ELA/literacy and Next Generation Science Standards: Convergences and discrepancies using argument as an example. *Educational Researcher*, 46(2), 90-102. https://doi.org/10.3102%2F0013189X17699172
  - *Note:* See the *Education Week* blog on this article, <a href="http://blogs.edweek.org/edweek/curriculum/2017/04/science\_standards\_common\_core.html">http://blogs.edweek.org/edweek/curriculum/2017/04/science\_standards\_common\_core.html</a>
- 97. Diamond, B., Maerten-Rivera, J., & Lee, O. (2017). Effects of a multiyear curricular and professional development intervention on elementary teachers' science content knowledge. *Florida Journal of Educational Research*, 55(2), 1-24. https://feraonline.org/journal/journal-contents/?issue=2017-volume-55
- 96. **Lee, O.**, Llosa, L., Jiang, F., Haas, A., O'Connor, C., & Van Booven, C. (2016). Elementary teachers' science knowledge and instructional practices: Impact of an intervention focused on English language learners. *Journal of Research in Science Teaching*, 53(4), 579-597. https://doi.org/10.1002/tea.21314
- 95. **Lee, O.**, Llosa, L., Jiang, F., O'Connor, C., & Haas, A. (2016). School resources in teaching science to diverse student groups: An intervention's effect on elementary teachers' perceptions. *Journal of Science Teacher Education*, *27*(7), 769-794. https://doi.org/10.1007/s10972-016-9487-y
- 94. Caswell, L., Martinez, A., **Lee, O.**, Berns, B. B., & Rhodes, H. (2016). Analysis of the National Science Foundation's Discovery Research K–12 on mathematics and science education for English learners. *Teachers College Record*, *118*(5), 1-48. https://www.tcrecord.org/Content.asp?ContentId=19368
- 93. Maerten-Rivera, J., Ahn, S., Lanier, K., Diaz, J., & Lee, O. (2016). Effect of a multiyear intervention on science achievement of all students including English language learners. *The Elementary School Journal*, 116(4), 600-623. https://doi.org/10.1086/686250
- 92. Llosa, L., **Lee, O.**, Jiang, F., Haas, A., O'Connor, C., Van Booven, C. D., & Kieffer, M. (2016). Impact of a large-scale science intervention focused on English language learners. *American Educational Research Journal*, *53*(2), 395-424. https://doi.org/10.3102%2F0002831216637348
- 91. Januszyk, R., Miller, E. C., & Lee, O. (2016). Addressing student diversity and equity: The Next Generation Science Standards are leading a new wave of reform. *Science Scope*, 39(8), 16-19. https://www.jstor.org/stable/43827310
- 90. Maerten-Rivera, J. L., Huggins-Manley, A. C., Adamson, K., Lee, O., & Llosa, L. (2015). Development and validation of a measure of elementary teachers' science content knowledge in two multiyear teacher professional development intervention projects. *Journal of Research in Science Teaching*, 52(3), 371-396. https://doi.org/10.1002/tea.21198

- 89. Haas, A., Hollimon, S., & Lee, O. (2015). Methods & strategies: Deep assessment. *Science and Children*, 53(3), 73-77. https://www.jstor.org/stable/43692233
- 88. Miller, E., Januszyk, R., & Lee, O. (2015). NGSS in action. *Science and Children*, *53*(2), 64-70. https://www.jstor.org/stable/43691981
- 87. Miller, E. C., Januszyk, R., & Lee, O. (2015). Engineering progressions in the NGSS diversity and equity case studies. *Science Scope*, *38*(9), 27-30. https://www.jstor.org/stable/43691290
- 86. Llosa, L., Van Booven, C. D., & **Lee, O.** (2015). Teaching content standards to English language learners: Elementary science teachers' use of language development and home language strategies. *NYS TESOL Journal*, *2*(2), 6-19. http://journal.nystesol.org/july2015/6elementaryscienceteachers.pdf
- 85. Buxton, C. A., Salinas, A., Mahotiere, M., Lee, O., & Secada, W. G. (2015). Fourth-grade emergent bilingual learners' scientific reasoning complexity, controlled experiment practices, and content knowledge when discussing school, home, and play contexts. *Teachers College Record*, 117(2), 1-36.
- 84. Januszyk, R., Miller, E., & **Lee, O.** (2014). Guest editorial: NGSS case studies: Economically disadvantaged students developing conceptual models. *Science Scope,* 38(4), 6-11. https://www.jstor.org/stable/43691208
- 83. **Lee, O.**, Miller, E. C., & Januszyk, R. (2014). Next Generation Science Standards: All standards, all students. *Journal of Science Teacher Education*, 25(2), 223-233. https://doi.org/10.1007/s10972-014-9379-y
- 82. Turkan, S., De Oliveira, L. C., **Lee, O.**, & Phelps, G. (2014). Proposing a knowledge base for teaching academic content to English language learners: Disciplinary linguistic knowledge. *Teachers College Record*, *116*(3), 1-30. https://www.tcrecord.org/content.asp?contentid=17361
- 81. Maerten-Rivera, J. L., Myers, N. D., & Lee, O. (2014). Studying longitudinal change in teacher practices using the multilevel model and latent growth model with an examination of alternative covariance structures. *International Journal of Quantitative Research in Education*, 2(2), 89-112. https://doi.org/10.1504/IJQRE.2014.064395
- 80. Cone, N., Buxton, C. A., **Lee, O.**, & Mahotiere, M. (2014). Negotiating a sense of identity in a foreign land: Navigating public school structures and practices that often conflict with Haitian culture and values. *Urban Education*, 49(3), 125-148. https://doi.org/10.1177%2F0042085913478619
- 79. Diamond, B. S., Maerten-Rivera, J., Rohrer, R. E., & Lee, O. (2014). Effectiveness of a curricular and professional development intervention at improving elementary teachers' science content knowledge and student achievement outcomes: Year 1 results. *Journal of Research in Science Teaching*, 51(5), 635-658. https://doi.org/10.1002/tea.21148

- 78. **Lee, O.**, Quinn, H., & Valdés, G. (2013). Science and language for English language learners in relation to Next Generation Science Standards and with implications for Common Core State Standards for English language arts and mathematics. *Educational Researcher*, 42(4), 223-233. https://doi.org/10.3102%2F0013189X13480524
  - *Note:* See the related video on the American Educational Research Association website, <a href="https://www.youtube.com/watch?v=Ch05eSKObUM">https://www.youtube.com/watch?v=Ch05eSKObUM</a>
- 77. **Lee, O.**, & Buxton, C. A. (2013). Teacher professional development to improve science and literacy achievement of English language learners. *Theory Into Practice*, *52*(2), 110-117. https://doi.org/10.1080/00405841.2013.770328
- 76. **Lee, O.**, & Buxton, C. A. (2013). Integrating science and English proficiency for English language learners. *Theory Into Practice*, *52*(1), 36-42. https://doi.org/10.1080/07351690.2013.743772
- 75. Adamson, K., Santau, A., & **Lee, O.** (2013). The impact of professional development on elementary teachers' strategies for teaching science with diverse student groups in urban elementary schools. *Journal of Science Teacher Education*, 24(3), 553-571. https://doi.org/10.1007/s10972-012-9306-z
- 74. Buxton, C. A., Salinas, A., Mahotiere, M., Lee, O., & Secada, W. G. (2013). Leveraging cultural resources through teacher pedagogical reasoning: Elementary grade teachers analyze second language learners' science problem solving. *Teaching and Teacher Education*, 32(1), 31-42. https://doi.org/10.1016/j.tate.2013.01.003
- 73. Diamond, B. S., Maerten-Rivera, J., Rohrer, R., & Lee, O. (2013). Elementary teachers' science content knowledge: Relationships among multiple measures. *Florida Journal of Educational Research*, *51*(1), 1-20. https://doi.org/10.1016/j.tate.2013.01.003
- 72. **Lee, O.**, & Maerten-Rivera, J. (2012). Teacher change in elementary science instruction with English language learners: Results of a multiyear professional development intervention across multiple grades. *Teachers College Record*, 114(8), 1-44. https://www.researchgate.net/publication/287014025
- 71. Emdin, C., & **Lee, O.** (2012). Hip-hop, the "Obama effect," and urban science education. *Teachers College Record*, 114(2), 1-24. https://www.tcrecord.org/Content.asp?ContentId=16245
- 70. **Lee, O.**, Penfield, R. D., & Buxton, C. A. (2011). Relationship between "form" and "content" in science writing among English language learners. *Teachers College Record*, 113(7), 1401-1434. https://www.tcrecord.org/Content.asp?ContentId=16073
- 69. **Lee, O.**, & Buxton, C. A. (2011). Engaging culturally and linguistically diverse students in learning science. *Theory Into Practice*, *50*(4), 277-284. https://doi.org/10.1080/00405841.2011.607379

- 68. Adamson, K., Secada, W., Maerten-Rivera, J., & Lee, O. (2011). Measurement instruction in the context of scientific investigations with diverse student populations. *School Science and Mathematics*, 111(6), 288-299. https://doi.org/10.1111/j.1949-8594.2011.00089.x
- 67. Lewis, S., Maerten-Rivera, J., Adamson, K., & Lee, O. (2011). Urban third grade teachers' practices and perceptions in science instruction with English language learners. *School Science and Mathematics*, 111(4), 156-163. https://doi.org/10.1111/j.1949-8594.2011.00073.x
- 66. Lewis, S., Lee, O., Santau, A., & Cone, N. (2010). Student initiatives in urban elementary science classrooms. *School Science and Mathematics*, 110(3), 160-172. https://doi.org/10.1111/j.1949-8594.2010.00018.x
- 65. Maerten-Rivera, J., Myers, N., **Lee, O.**, & Penfield, R. (2010). Student and school predictors of high-stakes assessment in science. *Science Education*, 94(6), 937-962. https://doi.org/10.1002/sce.20408
- 64. Penfield, R. D., & **Lee, O.** (2010). Test-based accountability: Potential benefits and pitfalls of science assessment with student diversity. *Journal of Research in Science Teaching*, 47(1), 6-24. https://doi.org/10.1002/tea.20307
- 63. Santau, A. O., Secada, W., Maerten-Rivera, J., Cone, N., & Lee, O. (2010). US urban elementary teachers' knowledge and practices in teaching science to English language learners: Results from the first year of a professional development intervention. *International Journal of Science Education*, 32(15), 2007-2032. https://doi.org/10.1080/09500690903280588
- 62. **Lee, O.**, Mahotiere, M., Salinas, A., Penfield, R. D., & Maerten-Rivera, J. (2009). Science writing achievement among English language learners: Results of three-year intervention in urban elementary schools. *Bilingual Research Journal*, *32*(2), 153-167. https://doi.org/10.1080/15235880903170009
- 61. **Lee, O.**, Penfield, R., & Maerten-Rivera, J. (2009). Effects of fidelity of implementation on science achievement gains among English language learners. *Journal of Research in Science Teaching*, 46(7), 836-859. https://doi.org/10.1002/tea.20335
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- 40. **Lee, O.,** Shelton, T., & Grapin, S. E. (2023, January 26). Future approaches to instructional materials in STEM education. National Science Teaching Association. <a href="https://www.nsta.org/blog/future-approaches-instructional-materials-stem-education">https://www.nsta.org/blog/future-approaches-instructional-materials-stem-education</a>
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- 38. **Lee, O.**, Shelton, T., & Soriano, K. (2022, June 17). *Contemporary approaches in science education with all students*, National Science Teaching Association. <a href="https://www.nsta.org/blog/contemporary-approaches-science-education-all-students">https://www.nsta.org/blog/contemporary-approaches-science-education-all-students</a>
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- 35. **Lee, O.** (2022, February 24). Policy advocacy for science teaching workforce. *Developing and supporting a strong, diverse science teaching workforce*. National Science Teaching Association. <a href="https://www.nsta.org/blog/developing-and-supporting-strong-diverse-science-teaching-workforce?utm\_medium=email&utm\_source=rasa\_io">https://www.nsta.org/blog/developing-and-supporting-strong-diverse-science-teaching-workforce?utm\_medium=email&utm\_source=rasa\_io</a>
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- the special issue. *Journal of Science Teacher Education*, *32*(7), 727-734. <a href="https://www.tandfonline.com/doi/full/10.1080/1046560X.2021.1975359">https://www.tandfonline.com/doi/full/10.1080/1046560X.2021.1975359</a>
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- 19. **Lee, O.**, & Llosa, L. (2015). How is the term academic language helpful? How is it imprecise? In G. Valdés, K. Menken, & M. Castro (Eds.), *Common Core bilingual and English language learners: A resource for educators* (pp. 54-55). Caslon Publishing.
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#### **BRIEFS AND MONOGRAPHS**

9. Furtak, E., & Lee, O. (2023). Equity and justice in classroom assessment of STEM learning. In C. J. Harris, E. Wiebe, S. Grover, & J. W. Pellegrino (Eds.). *Classroom-based STEM assessment: Contemporary issues and perspectives* (pp. 69-85). Community for Advancing Discovery Research in Education (CADRE). Education Development Center, Inc. <a href="https://cadrek12.org/sites/default/files/2023-08/Classroom-Based%20STEM%20Assessment%20FULL%20REPORT.pdf">https://cadrek12.org/sites/default/files/2023-08/Classroom-Based%20STEM%20Assessment%20FULL%20REPORT.pdf</a>

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- 2. **Lee, O.** (1998). Science instruction and assessment for English language learners in the state of Florida. In S. H. Fradd & O. Lee (Eds.), *Creating Florida's multilingual work force: Policies and practices for instruction and assessment of English language learners* (pp. v, 1-11). Florida Department of Education Office of Multicultural Student Language Education.
- 1. **Lee, O.**, Eichinger, D., Anderson, C. W., Berkheimer, G. D., & Blakeslee, T. C. (1990). *Changing middle school students' conceptions of matter and molecules*. Michigan State University Institute for Research on Teaching.

# **COMMITTEE DOCUMENTS**

- 9. National Science Foundation Broadening Participation Subcommittee of the Advisory Committee for the Education and Human Resources Directorate. (2021). An Education and Human Resources Directorate prototype for identifying common metrics for monitoring broadening participation in National Science Foundation programs. National Science Foundation.
  - *Note:* As chair of the subcommittee, I led the development of this report.
- 8. National Academies of Sciences, Engineering, and Medicine. (2018). *English learners in STEM subjects: Transforming classrooms, schools, and lives.* National Academies Press.

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*Note:* As part of this project, I coauthored seven case studies focused on the following:

- 1. Economically disadvantaged students
- 2. Students from marginalized racial and ethnic groups
- 3. Students with disabilities
- 4. English language learners
- 5. Girls
- 6. Students in alternative education
- 7. Gifted and talented students
- 6. Next Generation Science Standards Lead States. (2013). *Next Generation Science Standards: For states, by states.* National Academies Press.
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- 4. Deussen, T., Autio, E., Miller, B., Lockwood, A. T., & Stewart, V. (2008). What teachers should know about instruction for English language learners: A report to Washington State. Northwest Regional Educational Laboratory.
- 3. Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). *Educating English language learners: Building teacher capacity roundtable report*. National Clearinghouse for English Language Acquisition.
- 2. National Research Council, Committee on Science Learning, Kindergarten Through Eighth Grade. (2007). *Taking science to school: Learning and teaching science in grades K-8.* National Academies Press.
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# RESOURCES FOR NEW YORK STATE EDUCATION DEPARTMENT

Integrating Science and Language for All Students With a Focus on English Language Learners. <a href="http://www.nysed.gov/bilingual-ed/news/integrating-science-and-language-all-students-focus-english-language-learners">http://www.nysed.gov/bilingual-ed/news/integrating-science-and-language-all-students-focus-english-language-learners</a>

http://www.nysed.gov/bilingual-ed/integrating-science-and-language-all-students-focus-english-language-learners

Resources include an introduction and seven sets of webinars and briefs (2021):

- 1. Introduction
- 2. Unpacking the New York State P-12 Science Learning Standards
- 3. Science and language with English language learners
- 4. Science instructional shifts
- 5. Language instructional shifts
- 6. A classroom example
- 7. Science and language assessment shifts
- 8. Formative assessment in the science classroom

Kang, E., Ocol, T., Bauler, C., & Lee, O. (2022). CTLE professional development series: Integrating science and language for all students with a focus on English language learners. Collaboration among Adelphi University, New York City Department of Education, and New York University. <a href="https://sites.google.com/schools.nyc.gov/nysed-ctle-integrating-science/home">https://sites.google.com/schools.nyc.gov/nysed-ctle-integrating-science/home</a>

## RESOURCES FOR NATIONAL SCIENCE TEACHING ASSOCIATION

## NSTA playlists:

- 8. Tracking COVID-19 in the United States <a href="https://www.nsta.org/playlist/tracking-covid-19-united-states">https://www.nsta.org/playlist/tracking-covid-19-united-states</a>
- 7. Computational modeling of COVID-19 <a href="https://www.nsta.org/playlist/understanding-covid-19-disparities-using-computational-modeling">https://www.nsta.org/playlist/understanding-covid-19-disparities-using-computational-modeling</a>
- 6. Computational thinking and modeling <a href="https://www.nsta.org/playlist/computational-thinking-and-modeling">https://www.nsta.org/playlist/computational-thinking-and-modeling</a>
- 5. How do ants help the plants and animals of the woods? https://www.nsta.org/playlist/how-do-ants-help-plants-and-animals-woods
- 4. How do fireflies see the light? https://www.nsta.org/playlist/how-do-fireflies-see-light
- 3. How were the Scablands formed? https://www.nsta.org/playlist/how-were-channeled-scablands-formed
- 2. What happens to our garbage? <a href="https://www.nsta.org/playlist/what-happens-our-garbage">https://www.nsta.org/playlist/what-happens-our-garbage</a>
- 1. Lee, S., Russell, J., **Lee, O.**, & Campbell, T. (2021). What is a problem you want to design solutions for? What is a problem you see in your community that you want to design solutions for? What would you make? <a href="https://www.nsta.org/lesson-plan/what-problem-you-want-design-solutions">https://www.nsta.org/lesson-plan/what-problem-you-want-design-solutions</a>

# **CURRICULUM DEV**ELOPMENT

- 7. SAIL Research Lab. (2020). Science and integrated language plus computational thinking and modeling (SAIL+CTM): A yearlong fifth-grade science curriculum aligned to the Next Generation Science Standards with a focus on English learners that integrates computation thinking and modeling. New York University. <a href="https://www.nyusail.org">https://www.nyusail.org</a>
- 6. SAIL Research Lab. (2019). Science and integrated language (SAIL): A yearlong fifth-grade science curriculum aligned to the Next Generation Science Standards with a focus on English learners. New York University. <a href="https://www.nyusail.org">https://www.nyusail.org</a>
  - *Note:* Achieve, Inc. awarded *Grade 5: SAIL Garbage Unit* the NGSS Design Badge, which is the highest rating for NGSS-aligned curriculum units, <a href="https://www.nextgenscience.org/resources/grade-5-sail-garbage-unit">https://www.nextgenscience.org/resources/grade-5-sail-garbage-unit</a>
- 5. **Lee, O.**, and others. (2013). *Promoting science among English language learners (P-SELL) science 5th grade* (student book and teacher guide). New York University (a comprehensive, stand-alone, year-long science curriculum for fifth grade).
- 4. Buxton, C. A., Cone, N., Oddone, S., & Lee, O. (2009). *Promoting science among English language learners (P-SELL) in middle school science* (student book and teacher guide). University of Miami.
- 3. Lee, O., Buxton, C. A., LeRoy, K., & Secada, W. G. (2008). Promoting science among English language learners (student books and teacher guides). University of Miami. This is a series of nine science curriculum units for third, fourth, and fifth grade:

  Measurement, States of Matter, Water Cycle and Weather, Energy, Force and Motion, Processes of Life, Nature of Matter, Earth Systems, and Synthesis.
- 2. Berkheimer, G. D., Anderson, C. W., **Lee, O.**, & Blakeslee, T. C. with Eichinger, D., & Sands, K. (1988). *Matter and molecules teacher's guide: Science book* (Occasional Paper No. 121). Michigan State University Institute for Research on Teaching.
- 1. Berkheimer, G. D., Anderson, C. W., & Blakeslee, T. C. with **Lee, O.**, Eichinger, D., & Sands, K. (1988). *Matter and molecules teacher's guide: Activity book* (Occasional Paper No. 122). Michigan State University Institute for Research on Teaching.

# **CONFERENCE PROCEEDINGS**

- 4. Rehmat, A. P., Lee, O., Nordine, J., Novak, A., Osborne, J., & Willard, T. (2019). Modeling the role of crosscutting concepts for strengthening science learning of all students. In S. J. Fick, J., Nordine, & K. W. McElhaney (Eds.), *Proceedings of the summit for examining the potential for crosscutting concepts to support three-dimensional learning*. University of Virginia. <a href="https://curry.virginia.edu/CCC-Summit">https://curry.virginia.edu/CCC-Summit</a>
- 3. **Lee, O.** (2000). Equity for culturally and linguistically diverse students in science education: Recommendations for a research agenda. An invited paper presented at the National Institute for Science Education Forum. The Forum was organized by the

- National Institute for Science Education, Wisconsin Center for Education Research, and University of Wisconsin-Madison with funding from the National Science Foundation (Cooperative Agreement No. RED 9452971).
- 2. **Lee, O.** (1996). Science teacher education for the 21st century in South Korea. An invited speech presented at the 20th Anniversary of the Korean Association for Research in Science Education International Seminar and Workshop, Seoul, South Korea.
- 1. Burns-Hoffman, R., Lee, O., & Fradd, S. H. (1995). Patterns of noun-phrase expression in hands-on instructional conversations in science. In D. MacLaughlin & M. Bernstein (Eds.), *Proceedings of the 19th annual Boston University conference on language development*. Cascadilla Press.

# FOREWORDS AND ENDORSEMENTS

- 9. **Lee, O.** (2024). Endorsement of *Teaching toward rightful presence in middle school STEM* by Edna Tan and Angela Calabrese Barton. Harvard Education Press.
- 8. **Lee, O.** (2022). Endorsement of *How to prepare for kindergarten* by Gabriella S. Rajguru. The Paper House Publishing.
- 7. **Lee, O.** (2022). Endorsement of *Expanding reading comprehension in grades 3-6* by Katherine A. Doughtery Stahl & Georgia Earnest García, Guilford Press.
- 6. **Lee, O.** (2017). Endorsement of *Language power: Key uses for accessing content* by Gottlieb and Castro, Corwin Press.
- 5. **Lee, O.** (2016). Foreword. In E. G. Lyon, S. Tolbert, J. Solís, T. Stoddart, & G. Bunch, Secondary science teaching for English learners: Developing supportive and responsive learning contexts for sense-making and language development (pp. vii-ix). Rowman & Littlefield.
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- 2. **Lee, O.** (2000). Foreword. In A. E. Sweeny & K. G. Tobin (Eds.), *Language, discourse, and learning in science: Improving professional practice through action research* (pp. 9-11). Southeastern Regional Vision for Education.
- 1. **Lee, O.** (2000). Foreword. In W. W. Cobern, *Everyday thoughts about nature: An interpretive study of 16 ninth graders' conceptualizations of nature* (pp. ix-x). Kluwer Academic Publishers.

# **BOOK REVIEWS**

- Lee, O. (1996). Review [Review of the book The other side of the Asian American success story, by W. Walker-Mofatt]. World Communication, 25(2), 106.
- Lee, O. (1996). Review [Review of the book Asian Americans: Contemporary trends and 1. issues, by P. G. Min]. World Communication, 25(2), 105.

FUNDED PROJECTS			
2023-2027	Principal Investigator, Justice-Centered STEM Education With Multilingual Learners to Address Pressing Societal Challenges Using the Case of the COVID-19 Pandemic (with Eric Banilower as Co-PI at Horizon Research, Inc., Scott Grapin as Co-PI at University of Miami, Alison Haas as Co-PI at New York University, and Eric Klopfer as Co-PI at MIT). National Science Foundation Division of Discovery Research PreK-12 (\$3 million).		
2023-2025	<b>Principal Investigator.</b> Piloting Curriculum Units Aligned to the New York State P-12 Science Learning Standards That Integrates Science and Language Learning Across K-12. Mid-RBERN, New York (\$50,000).		
2020-2025	<b>Principal Investigator</b> , Professional Development to Support an Elementary School Science and Integrated Language Curriculum (with Eric Banilower as Co-PI at Horizon Research, Inc. and Jessaca Spybrook as Co-PI at Western Michigan University). National Science Foundation Division of Discovery Research PreK-12 (\$3 million).		
2021-2023	<b>Principal Investigator.</b> Developing Curriculum Units Aligned to the New York State P-12 Science Learning Standards That Integrates Science and Language Learning Across K-12. Mid-RBERN, New York (\$50,000).		
2020-2023	<b>Co-Principal Investigator</b> , STEM Identities and K-Career Pathways of Immigrant Youth of Color (with Hua-Yu Sebastian Cherng as PI at New York University, Stella Flores and Sumie Okazaki as Co-PIs at New York University, and Amy Hsin as Co-PI at CUNY Queens College). National Science Foundation Division of Undergraduate Education (\$300,000).		
2017-2022	<b>Principal Investigator</b> , Science and Integrated Language Plus Computational Thinking and Modeling With English Learners (with Eric Klopfer as Co-PI at Massachusetts Institute of Technology, Lorena Llosa as Co-PI at New York University, and Corey Brady as Co-PI at Vanderbilt University). National Science Foundation Division of Research on Learning (\$2.5 million).		
2019-2021	Project Director, Supporting Statewide Leadership for Implementation of		

New York State P-12 Science Learning Standards With English Language

Learners. New York State Education Department (\$45,000).

2015-2021	<b>Principal Investigator</b> , Development of Language-Focused Three-Dimensional Science Instructional Materials to Support English Language Learners in Fifth Grade (with Guadalupe Valdés as PI at Stanford University and Lorena Llosa as Co-PI at New York University). National Science Foundation Discovery Research K-12 (\$1.7 million to New York University and \$1.3 million to Stanford University, for a total of \$3 million).
2018-2019	<b>Project Director</b> , New York State Science Learning Standards With a Focus on ELLs Professional Learning Cycle. New York City Department of Education (\$15,000).
2017-2018	<b>Co-Principal Investigator</b> , Capitalizing on Aircraft Air and Noise Pollution: Transforming Deficits Into Assets (with Tae Hong Park as PI at New York University). Internal award from NYU (\$50,000).
2011-2017	<b>Principal Investigator</b> , Promoting Science Among English Language Learners (P-SELL): Scale-Up (with Lorena Llosa as Co-PI at New York University). National Science Foundation Discovery Research K-12 (\$4.5 million).
2009-2014	<b>Principal Investigator</b> , Promoting Science Among English Language Learners (P-SELL) Efficacy and Sustainability. U.S. Department of Education Institute of Education Sciences (\$3 million).
2004-2010	<b>Principal Investigator</b> , Promoting Science Among English Language Learners (P-SELL) in a High-Stakes Testing Policy Context (with Walter G. Secada as Co-PI at the University of Miami). National Science Foundation Teacher Professional Continuum Program (\$5.5 million).
2009	<b>Principal Investigator</b> , Promoting Science Among English Language Learners in Middle School. Carnegie Corporation of New York (\$49,700).
2008	<b>Project Director</b> , P-SELL Institute. Two private donations (\$50,000).
2000-2005	<b>Principal Investigator</b> , Instructional Intervention to Promote Science and Literacy With Linguistically Diverse Elementary Students (sub-contract to the University of California at Berkeley, Eugene García as Co-PI). National Science Foundation, U.S. Department of Education, and National Institutes of Health Interagency Education Research Initiative Program (\$2.5 million).
2003-2004	<b>Principal Investigator</b> , Science and Literacy in the Context of Students' Home Language and Culture. Sherman Fairchild Foundation (\$50,000).

1999-2004 Co-Principal Investigator, Evaluation of South Florida Annenberg Challenge (with Jeanne Schumm as PI at University of Miami). Annenberg Foundation (\$1,169,403). 2000-2003 Principal Investigator, Highly Effective USI Schools: An Outlier Study (sub-contract to the University of Miami from the Urban Institute, Beatriz Clewell as project PI). National Science Foundation Division of Research, Education, and Communication (\$150,000). 1998-2003 Co-Principal Investigator and Project Evaluator, Bilingual Beginnings for Teachers and Students-5th Year Program (with Sandra H. Fradd as PI followed by Mary Avalos at University of Miami). U.S. Department of Education Office of Bilingual and Minority Languages Affairs (\$975,394). Co-Principal Investigator and Project Evaluator, Biliteracy for 1998-2001 Beginning Teachers-1st Year Program (with Sandra H. Fradd as PI at University of Miami). U.S. Department of Education Office of Bilingual and Minority Languages Affairs (\$671,425). 1997-2000 Principal Investigator, Science for All, Including Linguistically Diverse Students: Achieving the Promise (with Sandra H. Fradd as Co-PI at University of Miami). National Science Foundation Research in Education, Policy, and Practice Program (\$764,405). Project Director, Secondary School Science and Mathematics Teacher 1995-1999 Preparation Project (with Gilbert Cuevas as Co-PI at University of Miami). Eisenhower Funding for Florida Region 6 Higher Education Consortium Florida Department of Education. *Note:* Funding was awarded based on annual competition: 1999: \$18,500 1997-1998: \$17,000 \$30,000 1996-1997: 1995-1996: \$14,400 1997-1998 Co-Principal Investigator, Assessment and Instruction for Students Learning English: Policies and Practices (with Sandra H. Fradd as PI at University of Miami). Florida Department of Education Office of Multicultural Student Language Education (\$102,000). 1995-1998 Co-Principal Investigator, Promoting Science Literacy for All Americans, Including Culturally and Linguistically Diverse Students: Keeping the Promise (with Sandra H. Fradd as PI at University of Miami

and Frank X. Sutman as Co-PI at Rollins College). National Science Foundation Research on Teaching and Learning Program (\$659,000).

1996-1997	<b>Fellow</b> , Current Conceptions of Science Achievement in Major Reform Documents and Implications for Equity. National Science Foundation (\$16,465).
1996-1997	<b>Principal Investigator</b> , Asian American Students: Social, Cultural, and Linguistic Influences on Academic Performance and Social Adjustment. University of Miami General Research Support Award (\$4,600).
1994-1996	Co-Principal Investigator and Project Evaluator, Master's ESOL Teacher Training (MET) Program (with Sandra H. Fradd as PI at University of Miami). U.S. Department of Education Office of Bilingual and Minority Languages Affairs (\$607,000).
1993-1995	National Academy of Education Spencer Postdoctoral Fellow, Children's Views of the World in Social and Cultural Contexts. National Academy of Education Spencer Postdoctoral Fellowship (\$35,000).
1993-1994	<b>Principal Investigator</b> , Children's Views of the World in Social and Cultural Contexts. University of Miami General Faculty Research Support Award (\$4,000).
1992-1993	Co-Principal Investigator, Linguistic Performance, Cognitive Strategies, and Science Knowledge of Non-English Background Students (with Sandra H. Fradd as PI at University of Miami). National Science Foundation Small Grant for Exploratory Research (\$50,000).
1992-1993	Co-Project Director, Teacher Enhancement in Physics and Chemistry Project (with Shepard Faber as PI at University of Miami). Florida Department of Education (\$100,000). (This project was conducted in collaboration with the Miami Museum of Science and Dade County Public Schools.)
1990-1993	<b>Co-Project Director</b> , Mathematics and Science Resource Teacher Project (with Gilbert Cuevas as PI at University of Miami). U.S. Department of Education National Eisenhower Mathematics and Science Program (\$414,000).
1991-1992	<b>Co-Project Director</b> , Teacher Improvement in Physical Science Project (with Shepard Faber as PI at University of Miami). Florida Department of Education (\$96,350). (This project was conducted in collaboration with the Miami Museum of Science and Dade County Public Schools.)
1991	<b>Commissioned Project</b> , Faculty Development for Effective Teaching (with Billy Birnie and Gilbert Cuevas at University of Miami). University of Miami School of Business Administration (\$6,500).

EDITORIAL BOARD	5
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EDITORIAL BUAR	MDS
2022-present	NYS TESOL Journal
2015-present	Journal of Teacher Education
2008-2022	The Elementary School Journal
2004-2013	American Educational Research Journal
1999-2011	Review of Educational Research
1992-2005	Science Education
1998-2001	International Journal of Science Education
1995-1999	Journal of Research in Science Teaching
EDITORSHIPS OF	SPECIAL ISSUES AND HANDBOOK SECTIONS
2023	Lee, O. (2023). Editor of the 2023 ARISE Blog Series on the theme of Culturally relevant learning experiences and/or justice-centered STEM education. American Association for the Advancement of Science.
2022	Lee, O. (2022). Developing and supporting a strong, diverse science teaching workforce [Special issue]. National Science Teaching Association. <a href="https://www.nsta.org/blog/developing-and-supporting-strong-diverse-science-teaching-workforce?utm_medium=email&amp;utm_source=rasa_io">https://www.nsta.org/blog/developing-and-supporting-strong-diverse-science-teaching-workforce?utm_medium=email&amp;utm_source=rasa_io</a>
2020-2023	Buxton, C. A., & Lee, O. (2022). Section on diversity and equity in science education. In N. G. Lederman, D. Zeidler, & J. Lederman (Eds.), <i>Handbook of research in science education</i> (3rd ed.). Routledge.
2020-2021	<b>Lee, O.</b> , & Campbell, D. T. (2021). Instructional materials aligned to <i>A Framework for K-12 Science Education</i> and the Next Generation Science Standards [Special issue]. <i>Journal of Science Teacher Education</i> , 32(7).
2020	Lee, O. (2020, August 27). <i>Local phenomena</i> [Special issue]. National Science Teaching Association. <a href="https://www.nsta.org/blog/local-phenomena">https://www.nsta.org/blog/local-phenomena</a>
2011-2014	Buxton, C. A., & Lee, O. (2014). Section on diversity and equity in science education. In N. G. Lederman & S. K. Abell (Eds.), <i>Handbook of research in science education</i> (2nd ed.). Erlbaum.
2009-2013	<b>Lee, O.</b> , & Buxton, C. A. (2013). Diversity and equity in science education [Special issue]. <i>Theory Into Practice</i> , 52(1).

2010-2012	<b>Lee, O.</b> , & Krajcik, J. (2012). Large-scale interventions in science education for diverse student groups in varied educational settings [Special issue]. <i>Journal of Research in Science Teaching</i> , 49(3).
1999-2000	Lee, O., & Lynch, S. (2001). Language and culture in science education
COMMITTEES	
<b>NATIONAL</b> 2024-2027	Committee on Equal Opportunities in Science and Engineering, National Science Foundation
2024-2027	Distinguished Contribution to Science Education Through Research Award Committee, National Association for Research in Science Teaching
2023-2027	Professional Development Committee, National Academy of Education
2023-2026	Selection Committee for the National Academy of Education / Spencer Dissertation Fellowship Program, National Academy of Education
2023-2026	Selection Committee for the AERA Fellows Program, American Educational Research Association
2023	Chair, National Academy of Education Board Nominating Committee, National Academy of Education
2023	Planning Committee for Artificial Intelligence in Education, National Academy of Education
2023	Review Committee for Undergraduate Student Education Research Training Workshop, American Educational Research Association
2022-2023	Review Committee for Education Research Conference Awards, American Educational Research Association
2022-2023	Chair (January 2022 through December 2023), Section Q (Education) Steering Committee, American Association for the Advancement of Science
2022-2023	National Assessment of Educational Progress (NAEP) Science Assessment Framework Steering Panel
2022	Coordinator of "Taking Stock of Science Standards Implementation: Proceedings of a Virtual Symposium," by the Board on Science Education, National Academies of Sciences, Engineering, and Medicine. National Academies Press.

2021-2022	Search Advisory Committee for the Assistant Director for Education and Human Resources, National Science Foundation
2019-2022	Member-at-Large, American Educational Research Association, Washington, DC
2019-2022	Distinguished Contribution to Science Education Through Research Award Committee, National Association for Research in Science Teaching
2016-2022	Advisory Committee for the Directorate of Education and Human Resources, National Science Foundation
2020-2021	Chair, Subcommittee on Broadening Participation, Advisory Committee for the Directorate of Education and Human Resources, National Science Foundation
2018-2021	Board of Trustees, Center for Applied Linguistics, Washington, DC
2019-2020	Co-Chair, Division K Legacy Award Committee, American Educational Research Association
2019-2020	Division C Early Career Award, American Educational Research Association
2019	Chair, Committee of Visitors to Review the Portfolio of the Division of Research on Learning in Formal and Informal Settings, National Science Foundation
2017-2018	Committee on Supporting English Learners in STEM Subjects, National Research Council
2015-2016	Chair, Division K Mid-Career Award Committee, American Educational Research Association
2015	National Conversation on Equity Through STEM, National Science Teachers Association
2012-2015	Advisory Committee on English Language Learners for Smarter Balanced Assessment Consortium
2011-2014	Steering Committee on Building on the Common Core State Standards Initiative to Improve Learning for English Language Learners (Kenji Hakuta as PI; Kenji Hakuta and Maria Santos as Co-Chairs of Steering Committee), Stanford University, Stanford, CA

2011-2013	Writing Team for Next Generation Science Standards, Achieve, Inc., Washington, DC
2011-2013	Leader, Next Generation Science Standards Diversity and Equity Team, Achieve, Inc., Washington, DC
2009-2013	Board of Directors, Korean-American Educational Researchers Association
2012	English Language Proficiency Development Framework Committee, Council of Chief State School Officers, Washington, DC
2010-2011	Chair, Division G Early Career Award Committee, American Educational Research Association
2009	Committee of Visitors to Review the Portfolio of the Discovery Research K-12 and Research and Evaluation on Education in Science and Engineering Programs, Division of Research on Learning, National Science Foundation
2007-2009	Early Career Award Committee, American Educational Research Association
2004-2007	Committee on Science Learning, Kindergarten Through Eighth Grade, National Research Council
2004-2006	Board of Science Education, Center for Education, National Research Council
2003-2006	Board of Directors, National Association for Research in Science Teaching
2001-2004	Executive Member, Committee on Science Education K-12, Center for Education, National Research Council
2001-2003	Chair, Science and Diversity Synthesis Committee. A joint project by the Center for Research on Education, Diversity and Excellence at the University of California-Santa Cruz, the University of Houston, and the National Center for Improving Student Learning and Achievement in Mathematics and Science at the University of Wisconsin-Madison
2002	Committee of Visitors to Review the Portfolio of the Research on Learning and Education Program, Division of Research, Evaluation, and Communication, National Science Foundation

1999-2002	Committee for the Scholars of Color in Education (formerly Committee on the Role and Status of Minorities in Educational Research and Development), American Educational Research Association
1997-2000	Chair, Equity and Ethics Committee, National Association for Research in Science Teaching
1995-1998	Journal of Research in Science Teaching Award Committee, National Association for Research in Science Teaching
1994-1996	Project 2061 Equity Blueprint Committee, American Association for the Advancement of Science
STATE	
2018-present	New York State Science Content Advisory Panel, New York State Education Department, Albany, NY
2016-2020	New York State Science Conference Planning Committee, New York State Boards of Cooperative Education Services
2015-2018	New York State Science Education Steering Committee, New York State Education Department, Albany, NY
1995-1996	Advisory Board, Department of Environmental Education, Florida Department of Education
1993-1994	Writing Committee, Science for All Educators, Florida Department of Education, grant funded by the U.S. Department of Education
DISTRICT	
2000-2005	Advisory Board, Miami-Dade County Urban Systemic Program, grant funded by the National Science Foundation
1994-1999	Advisory Board, Dade County Urban Systemic Initiative, grant funded by the National Science Foundation
1995-1997	Advisory Board, Dade County Public Schools, Academy of Instructional Leadership, grant funded by the U.S. Department of Education
1993-1996	Advisory Board, Region 6 Florida Statewide Systemic Initiative, grant funded by the National Science Foundation

<b>PANELS</b>	
2022	Building knowledge by focusing on academic language development for native English speakers and English learners. Council of Great City Schools panel (virtual)
2022	External Reviewer, School of Education, University of Colorado at Boulder
2022	Reframing STEM education for equity and the role of education research: Fireside chat with Dr. Alondra Nelson, Acting Director and Deputy Director of the White House Office of Science and Technology Policy, and Dr. Sethuraman Panchanathan, Director of the National Science Foundation [Presidential session]. American Educational Research Association
	Note: See the video on the American Educational Research Association website, <a href="https://www.youtube.com/watch?v=ZTFxo6Kton0&amp;t=7s">https://www.youtube.com/watch?v=ZTFxo6Kton0&amp;t=7s</a>
2022	Beyond stopping hate: Cultivating safe, equitable and affirming Education systems for Asian/Asian American students [Presidential session]. American Educational Research Association
2020	Integrating Science and Literacy in Elementary Education, National Academies of Sciences, Engineering, and Medicine (virtual)
2019	Contemporary Leadership in Science Education, Science Teachers Association of New York State annual conference, NY
2019	Language, Culture, and Education: Implications for Second Language Learners, Center for Applied Linguistics, Washington, DC
2016	New York State P-12 Science Standards Adoption, New York State Board of Regents, NY
2016	Advisory Panel to Review and Update WIDA's 2012 Amplification of the English Language Development Standards, PA
2015	#Sci4allSs Twitter Book Study Group, National Science Teachers Association, VA
2015	Finding Common Ground: How the New Math and Science Standards Can Equalize Education, <i>U.S. News and World Report</i> STEM Solutions Conference, CA
2015	Disciplined Dialogues Project-Building a Better Teacher Workplace, Spencer Foundation, CA

2014	Celebrating the Merck Institute for Science Education, NJ
2013	City & State on Education Forum, NY
2012	Advancing the College- and Career-Ready Agenda for All Students, American Diploma Project Network Leadership Team, Washington, DC
2011	High-Quality STEM Education for English Learners: Best Practices and Current Challenges, U.S. Department of Education Office of English Language Acquisition, Washington, DC
2010	New Ways to Assess What Children Learn in School, Spencer Foundation, IL
2010	Quality of Teaching English Language Learners in the Content Areas, Educational Testing Service, NJ
2010	Managing Career Development in the US, Korean-American Educational Researchers Association, CO
2008-2009	Science for English Language Learners Position Statements, National Science Teachers Association, VA
2008	English Language Learners for Washington State, Northwest Regional Educational Laboratory and Washington Department of Education, WA
2008	Professional Development of ELL Content Teachers, National Clearinghouse for English Language Acquisition and U.S. Department of Education, Washington, DC
2008	Inspiration Panel, University of Miami and NASA's Future Forum, FL
2007	Science Education Panel, Institute of Education Sciences, U.S. Department of Education, Washington, DC
DISCUSSANT	
2023	2023 fall retreat and annual meeting [session]. National Academy of Education.
2023	Using AI to promote equitable science teaching and learning [Session]. National Science Foundation Discovery Research PreK-12 PI Meeting.
2022	Elementary preservice teachers learning to support equitable sensemaking [Symposium]. National Association for Research in Science Teaching.

2022	Equity and justice in engineering and science: Centering Black and Latinx culture, language and identity [Symposium]. National Association for Research in Science Teaching.
2021	Transforming science education by fostering students' creativity and critical thinking [Invited Speaker Session]. American Educational Research Association.
2017	Using NGSS to inform and provide equitable instruction, learning, and assessments to diverse students [Poster presentation]. American Educational Research Association.
2013	What's language got to do with it [Paper presentation]. Principal investigators' meeting, U.S. Department of Education Institute of Education Sciences.
2011	Advancing English language learners in science and math: Realizing the promise [Roundtable]. American Educational Research Association.
2011	Language in the science classroom [Paper presentation]. American Educational Research Association.
2011	Advancing English language learners in science and math: Realizing the promise [Symposium]. American Educational Research Association.
2011	Effective science teaching for English language learners [Symposium]. American Educational Research Association.
2010	NARST sponsored session for new researchers [Symposium]. National Association for Research in Science Teaching.
2010	Writing a competitive proposal for the National Science Foundation's (NSF) Division of Research on Learning in Formal and Informal Settings: Strategies and tips for novice and seasoned proposers [Preconference workshop]. National Association for Research in Science Teaching.
2009	Culturally relevant science teaching and learning [Symposium]. American Educational Research Association.
2008	The relationship between integrated science, language and literacy teaching, and student learning in diverse classrooms [Symposium]. American Educational Research Association.
2008	Bridging marginalized science stories, experiences, and meanings [Symposium]. American Educational Research Association.

2005	Science instruction for all: Responsive pedagogies in scientific inquiry development [Symposium]. American Educational Research Association.
2005	Navigating the academy: Critical issues for scholars of color [Preconference workshop] (with M. Atwater and G. Solano-Flores). National Association for Research in Science Teaching.
2004	Research and writing process for underrepresented scholars [Preconference workshop] (with A. Rodriguez and O. Norman). National Association for Research in Science Teaching.
2003	Increasing the capacity for change in districts with diverse student populations [Symposium]. American Educational Research Association.
2003	Science instruction for all: Promoting science and literacy for linguistically and culturally diverse elementary students [Symposium]. American Educational Research Association.
2003	The effects of power, culture, and discourse as they impact learners in science education [Paper presentation]. American Educational Research Association.
2001	Learning in two languages: Teaching and learning literacy and science in an urban elementary school [Symposium]. American Educational Research Association.
2001	Theoretical and empirical perspectives on urban science education [Symposium]. National Association for Research in Science Teaching.
2000	Grounded science: Making sense of urban science education with youth and teachers [Symposium]. American Educational Research Association.
2000	Inquiry-based science supported by technology [Symposium]. American Educational Research Association.
2000	Demystifying the research writing process for underrepresented scholars [Professional development]. American Educational Research Association.
2000	From good intentions to transformative action: Exploring the practical issues of teaching "science for all" in various school contexts [Symposium]. National Association for Research in Science Teaching.
2000	Science education for all? Examining connections/disconnections between theory and classroom practice and finally moving this idea from rhetoric toward reality—Part I [Symposium]. National Association for Research in Science Teaching.

2000	Designing and revising curriculum for diverse learners: Promoting scientific understandings through inquiry and embedded technologies [Symposium]. National Association for Research in Science Teaching.
1999	Organizational resources in support of teaching for understanding in mathematics and science [Symposium]. American Educational Research Association.
1999	Negotiated practices: Teaching, learning, and researching in science [Paper presentation]. American Educational Research Association.
INTERVIEWS ANI	D PODCASTS
2023	Summit K12 Presents Doing Science, Using Language
	Part 1: Contemporary Science Education. <a href="https://summitk12-4.wistia.com/medias/7efacfrlr6">https://summitk12-4.wistia.com/medias/7efacfrlr6</a>
	Part 2: Contemporary Language Education with Multilingual Learners <a href="https://summitk12-4.wistia.com/medias/m52yej4m59">https://summitk12-4.wistia.com/medias/m52yej4m59</a>
	Part 3: Contemporary Approaches to Science and Language Integration with Multilingual Learners <a href="https://summitk12-4.wistia.com/medias/zbtn9zd8va">https://summitk12-4.wistia.com/medias/zbtn9zd8va</a>
	Part 4: Justice-Centered STEM Education with Multilingual Learners <a href="https://summitk12-4.wistia.com/medias/3vhk6280bi">https://summitk12-4.wistia.com/medias/3vhk6280bi</a>
2023	EXPLOR(ED) with Dean Jackson / Episode 2 / NYU Steinhardt Professor Okhee Lee. <a href="https://www.youtube.com/watch?v=iE1-Exy8oEE">https://www.youtube.com/watch?v=iE1-Exy8oEE</a>
2023	Dean Jack Knott and Okhee Lee, NYU Steinhardt. <a href="https://www.youtube.com/watch?v=rbZ2dWaYq34&amp;t=15s">https://www.youtube.com/watch?v=rbZ2dWaYq34&amp;t=15s</a>
2022	Conversations with CAST Speakers: Dr. Okhee Lee. <a href="https://www.statweb.org/stat-studio?wchannelid=y1inik34h0&amp;wmediaid=z7tmj2swg8">https://www.statweb.org/stat-studio?wchannelid=y1inik34h0&amp;wmediaid=z7tmj2swg8</a>
2022	Conversations with Tim: Examining How the 2020 Edition Impacts Multilingual Learner Education. <a href="https://wida.wisc.edu/about/news/conversations-tim-examining-how-2020-edition-impacts-multilingual-learner-education">https://wida.wisc.edu/about/news/conversations-tim-examining-how-2020-edition-impacts-multilingual-learner-education</a>
2021	Ask Matt–NGSS Science Education Advice From an Expert: Part 2 Science and Language. Hosts: Eugene Cordero and Matt d'Alessio (February 5). <a href="https://www.buzzsprout.com/282085/7483864-interview-with-dr-okhee-lee-part-2-science-and-language">https://www.buzzsprout.com/282085/7483864-interview-with-dr-okhee-lee-part-2-science-and-language</a>

Ask Matt-NGSS Science Education Advice From an Expert: Part 1 Intentions of the NGSS. Hosts: Eugene Cordero and Matt d'Alessio (February 2). <a href="https://www.buzzsprout.com/282085/7483804-interview-">https://www.buzzsprout.com/282085/7483804-interview-</a>

with-dr-okhee-lee-part-1-intentions-of-the-ngss

2020 RBERNing Questions–Supporting ELLs in Science. Host: Liesl Coope;

Co-host: Christopher Leece (April 29). <a href="https://drive.google.com/file/d/13a-">https://drive.google.com/file/d/13a-</a>

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## **INVITED SPEECHES (278 TOTAL)**

Talks at the international level (7)

Talks at the national level (90)

Talks at the state level (88)

Talks at the district level (25)

Talks for business and organizations in education (34)

Talks at higher education institutions (34)

## SERVICE TO NEW YORK UNIVERSITY

SERVICE TO NEW	Y YORK UNIVERSITY
2023-present	Faculty Awards Task Force, New York University
2018-2024	Co-Chair (2022-2024) and Member (2018-2022), Dean's Advisory Committee for Promotion and Tenure, Steinhardt School of Culture, Education, and Human Development
2023	Presentation on National Academy of Education / Spencer Doctoral Fellows applications for doctoral students in Steinhardt School of Culture, Education, and Human Development
2023	Chief Marshall in Steinhardt's Doctoral Convocation
2021-2023	Department of Teaching and Learning Doctoral Committee, Steinhardt School of Culture, Education, and Human Development
2018-2023	Department of Teaching and Learning Promotion and Tenure Committee, Steinhardt School of Culture, Education, and Human Development
2021	Presentation for NYU faculty: Demystifying the Review Process at the National Science Foundation
2019-2020	Faculty First Look Mentor, Steinhardt School of Culture, Education, and Human Development

2019-2020	Dean Search Committee, Steinhardt School of Culture, Education, and Human Development
2019	Associate to Full Professor Workshop, Steinhardt School of Culture, Education, and Human Development
2018	Discussion panel, Fundraising Fundamentals: The Importance of Fundraising From Government, Corporate and Private Foundations, sponsored by Steinhardt School of Culture, Education, and Human Development
2018	Workshop facilitator, A New Professional Development Opportunity—The Steinhardt Pilot Grant Writing Workshops, sponsored by Steinhardt School of Culture, Education, and Human Development
2017-2018	Co-Chair, Peter L. Agnew Professor of Education Chair Search Committee, Steinhardt School of Culture, Education, and Human Development
2017	Faculty spotlight presentation at the faculty meeting of Steinhardt School of Culture, Education, and Human Development
2017	Grant writing presentation, sponsored by the Office of Research at Steinhardt School of Culture, Education, and Human Development
2017	IES discussion panel, sponsored by the Office of Research at Steinhardt School of Culture, Education, and Human Development
2014-2017	Promotion and Tenure Committee, Department of Teaching and Learning
2013-2017	Co-Chair, Doctoral Committee, Department of Teaching and Learning, Steinhardt School of Culture, Education, and Human Development
2014-2015	Music Education Search Committee, Steinhardt School of Culture, Education, and Human Development
2014-2015	Childhood Education and Multilingual and Multicultural Studies Search Committee, Department of Teaching and Learning
2014	Attendance at New York University Korean Alumni Association event in South Korea
2014	Dean's Convocation for New Undergraduate Students, Steinhardt School of Culture, Education, and Human Development

2014	Faculty Speaker at Baccalaureate Commencement Ceremony, Steinhardt School of Culture, Education, and Human Development
2013-2014	Dean Search Committee, Steinhardt School of Culture, Education, and Human Development
2013-2014	Search Committee for Multilingual and Multicultural Studies, Department of Teaching and Learning
2013	NSF Grant Funding, sponsored by the Office of Research and Doctoral Studies at Steinhardt School of Culture, Education, and Human Development
2012-2013	Search Committee for Music Education, Steinhardt School of Culture, Education, and Human Development
2011-2013	Teacher Education Working Group, Steinhardt School of Culture, Education, and Human Development
2011-2013	Cabinet for the Department of Teaching and Learning
SERVICE TO THE	UNIVERSITY OF MIAMI
2010	Grand Marshall for Commencement Ceremony
2010	Provost's Award for Scholarly Activity Selection Committee
2010	Provost's Award for Scholarly Activity Selection Committee  Note: The Committee selected three to five faculty members for University-wide awards based on research productivity.
2010 2008-2010	<i>Note:</i> The Committee selected three to five faculty members for
	<i>Note:</i> The Committee selected three to five faculty members for University-wide awards based on research productivity.
	Note: The Committee selected three to five faculty members for University-wide awards based on research productivity.  University of Miami Fellows Selection Committee  Note: The Committee selected incoming doctoral students for University-
2008-2010	Note: The Committee selected three to five faculty members for University-wide awards based on research productivity.  University of Miami Fellows Selection Committee  Note: The Committee selected incoming doctoral students for University-wide fellowship awards.
2008-2010 2007-2010	Note: The Committee selected three to five faculty members for University-wide awards based on research productivity.  University of Miami Fellows Selection Committee  Note: The Committee selected incoming doctoral students for University-wide fellowship awards.  School of Education Research Policy Committee, School of Education
2008-2010 2007-2010 2006-2007	Note: The Committee selected three to five faculty members for University-wide awards based on research productivity.  University of Miami Fellows Selection Committee  Note: The Committee selected incoming doctoral students for University-wide fellowship awards.  School of Education Research Policy Committee, School of Education  Search Committee for the Associate Provost and Dean of Graduate School
2008-2010 2007-2010 2006-2007 2004-2007	Note: The Committee selected three to five faculty members for University-wide awards based on research productivity.  University of Miami Fellows Selection Committee  Note: The Committee selected incoming doctoral students for University-wide fellowship awards.  School of Education Research Policy Committee, School of Education  Search Committee for the Associate Provost and Dean of Graduate School School Council, School of Education

1999-2001	Faculty Diversity Recruitment Committee, School of Education
1999-2001	School Council, School of Education
1994-2000	English to Speakers of Other Languages/Bilingual Education Committee, Department of Teaching and Learning
1993-2000	Undergraduate Secondary Education Committee, Department of Teaching and Learning
1999	Chair, Task Force on Improving the Quality and Visibility of the School's Research, School of Education
1998-1999	Chair, Ad Hoc Committee on Funded Projects, Department of Teaching and Learning
1998-1999	Search Committee for the Department of Teaching and Learning
1996-1997	Chair, Doctoral Programs Committee, Department of Teaching and Learning
1996-1997	Chair, Search Committee for the Chairperson of the Department of Teaching and Learning
1994-1995	Preparation of the <i>Conceptual Framework/Knowledge Base</i> document for the National Council for Accreditation of Teacher Education review
1994-1995	Preparation of the folio for the Undergraduate Secondary Science Education Program to the Florida Department of Education
1992	Preparation of a comprehensive report on the faculty and student affairs during the 1987-1992 academic years in the School of Education

December 1, 2023