## **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 olee@nyu.edu

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

https://www.nyusail.org/

https://en.wikipedia.org/wiki/Okhee Lee

https://www.okheelee.com/

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

# PERSONAL INFORMATION

Daegu, South Korea Birthplace:

Citizenship: **USA** 

<b>EDUCATION</b>	
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

ACADEMIC I OSI	IONS
2025	Peter L. Agnew Professor of Education, Steinhardt School of Culture, Education, and Human Development, New York University
2011-present	Professor, Department of Teaching and Learning, Steinhardt 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	Adjunct Instructor, 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
2025	Distinguished Paper Award, Classroom Assessment SIG (with Erin M. Furtak and Scott E. Grapin), American Educational Research Association
2023	Distinguished Contributions to Science Education through Research Award, National Association for Research in Science Teaching
	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
	Commencement speech: <a href="https://youtu.be/2g2GREd3T4M">https://youtu.be/2g2GREd3T4M</a>

2021	Exemplary Contributions to Practice-Engaged Research Award, American Educational Research Association
	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, 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, American Educational Research Association Division K Teaching and Teacher Education
2019	Inaugural Distinguished Researcher Award, Korean-American Educational Researchers Association
2017	Outstanding Educator of the Year, Education Update
2016	REVERE Awards finalist for Lee, O., Miller, E., & Januszyk, R. (Eds.). (2015). <i>NGSS for all students</i> . National Science Teachers Association
	<i>Note:</i> This work was supported by the Next Generation Science Standards and Achieve, Inc.
2014	Educational Leadership Award, National Association of Bilingual Education and the Florida Association of Bilingual Education
2008	University of Miami Provost's Award for Research Activity
	Note: This annual award was given to three to five faculty members across the University of Miami
2007	Florida Educational Research Association Distinguished Paper Award
2003	Distinguished Career Contribution Award, 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

<b>FELLOWSHIPS</b>	
2022	National Academy of Education member
2021	American Association for the Advancement of Science (AAAS) Fellow, 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	American Educational Research Association Fellow
1996-1997	National Institute for Science Education Fellow, Wisconsin Center for Education Research, School of Education, University of Wisconsin-Madison
1993-1995	National Academy of Education Spencer Postdoctoral Fellow 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

- 140. Kang, E., Rosado-Barringer, T., Leece, C., O'Brien, S., Stoker, Y., Haas, A., Grapin, S., & Lee, O. (in press). Addressing sustainability in science instruction with multilingual learners: Plastics across local and global scales. *Science Scope*.
- 139. **Lee, O.**, Haas, A., Schwenger, A., & Grapin, S. E. (in press). Teacher feedback guiding professional development programs: A 2-year field trial integrating science and language with multilingual learners. *Journal of Science Teacher Education*. https://doi.org/10.1080/1046560X.2025.2547419
- 138. **Lee, O.**, Boals, T., & Grapin, S. E. (2025). WIDA 2020 edition: Conceptual shifts for English language proficiency or development standards aligned with content standards. *NYS TESOL Journal*, *12*(1), 3-21. https://journal.nystesol.org/index.php/NYSTJ/article/view/228
- 137. **Lee, O.**, & Grapin, S. E. (2025). STEM education with a focus on equity and justice: Traditional, contemporary, and proposed future approach. *Journal of Research in Science Teaching*. https://doi.org/10.1002/tea.70013

- 136. **Lee, O.**, & Grapin, S. E. (2025). Justice-centered STEM education with multilingual learners to address societal challenges: A conceptual framework. *Journal of Research in Science Teaching*, 62(5), 1202-1231. https://onlinelibrary.wiley.com/doi/10.1002/tea.21999
- 135. Prasai, A., Mogami, M., Lee, C. S., Jung, S., Okazaki, S., Cherng, H.-Y. S., Flores, S. M., Hsin, A., & Lee, O. (2025). Facilitators and barriers in the college pathways of working-class immigrant-origin youth of color in New York City. *Journal of Diversity in Higher Education*. Advance online publication. https://doi.org/10.1037/dhe0000596
- 134. Grapin, S. E., Plumley, C., Banilower, E., Sterenberg Mahon, A. J., Craven, L., Malzahn, K., Pasley, J., Schwenger, A., Haas, A., & Lee, O. (2025). Development of a questionnaire on teachers' beliefs, preparedness, and instructional practices for teaching NGSS science with multilingual learners. *Science Education*, 109(1), 128-156. https://doi.org/10.1002/sce.21905
- 133. Cherng, H.-Y. S., Moreno, M., Carroll, T., Okazaki, S., **Lee, O.**, Hsin, A., & Flores, S. M. (2024). A flawed policy metaphor: An empirical test of earlier academic promise and later STEM outcomes. *American Journal of Education*, *131*(1), 93-124. https://doi.org/10.1086/732393
- 132. Schwenger, A., Grapin, S. E., Altamirano, N., Haas, A., & Lee, O. (2024). Translanguaging in formative assessment: Formative assessment from a translanguaging perspective in the NGSS classroom. *Science and Children*, 61(4), 48-54. https://doi.org/10.1080/00368148.2024.2366011
- 131. **Lee, O.**, & Grapin, S. E. (2024). Transforming STEM by focusing on justice. *Educational Leadership*, 81(7), 65-68. https://ascd.org/el/articles/transforming-stem-by-focusing-on-justice
- 130. **Lee, O.**, & Grapin, S. (2024). English language proficiency standards aligned with content standards: How the Next Generation Science Standards and WIDA 2020 reflect each other. *Science Education*, 108(2), 637-658. https://doi.org/10.1002/sce.21843
- 129. Grapin, S. E., Llosa, L., & Lee, O. (2024). Disciplinary practices with multilingual learners in the content areas: Investigating *grasp of practice* in fifth-grade science. *Journal of Language, Identity & Education*, 23(4), 590-605. https://doi.org/10.1080/15348458.2021.2008253
- 128. Taylor, J. A., Hanuscin, D., **Lee, O.**, Lynch, S., Stuhlsatz, M. A. M., & Talbot, R. (2023). Sources and consequences of teacher attrition in large-scale impact studies. *Research in Education*, *116*(1), 43-66. https://doi.org/10.1177/00345237231155835
- 127. Haas, A., Grapin, S. E, Llosa, L., & Lee, O. (2023). Computational modeling with multilingual learners: Integration across four science units. *Science and Children*, 60(7),

- 64-70. https://www.nsta.org/science-and-children/science-and-children-fall-2023/computational-modeling-multilingual-learners
- 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
  - *Note:* This article was recognized with the Research Worth Reading Award by the National Association for Research in Science Teaching and National Science Teaching Association in 2024.
- 125. **Lee, O.**, Grapin, S., & 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, N., & 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
- Haas, A., Schwenger, A., Master, L., Grapin, S. E., & Lee, O. (2023). Walking the walk and talking the talk: Symmetry in NGSS teacher professional learning. *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 address 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 materials in science education. *TESOL Journal*, *14*(1), e673. https://doi.org/10.1002/tesj.673
- 119. Grapin, S. E., Llosa, L., Haas, A., & Lee, O. (2022). Affordances of computational models for English learners in science instruction: Conceptual foundation 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://doi.org/10.1002/tea.21776

- *Note:* See 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. V., Kang, E. J. S., & 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. https://journal.nystesol.org/index.php/NYSTJ/article/view/25
- 116. Lee, S., Russell, J., Campbell, J., & Lee, O. (2022). Student agency through engineering. *Science and Children*, *59*(3), 44-51. https://doi.org/10.1080/00368148.2022.12291751
- 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://doi.org/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. *TESOL Journal*, *12*(2), e557. 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://doi.org/10.1080/1046560X.2020.1827190
- 112. Haas, A., Grapin, S., Simon, K., Llosa, L., & Lee, O. (2021). Teaching teachers: Integrating computational modeling into science instruction with English learners. *Science and Children*, *58*(5), 74-79. https://doi.org/10.1080/19434812.2021.12291679
- 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, 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/10.3102/0013189X20923708
- 106. Haas, A., Grapin, S., 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/10.3102/0013189X19872497

*Note:* See the related American Educational Research Association video, <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., 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., 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., 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/10.3102/0013189X18763775
- 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/10.3102/0013189X17699172
  - Note: See the Education Week blog on this article, <a href="http://blogs.edweek.org/edweek/curriculum/2017/04/science\_standards\_common\_core.ht">http://blogs.edweek.org/edweek/curriculum/2017/04/science\_standards\_common\_core.ht</a> ml
- 97. Diamond, B. S., 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. D. (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://doi.org/10.1177/016146811611800502
- 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. J. (2016). Impact of a large-scale science intervention focused on English language learners. *American Educational Research Journal*, *53*(2), 395-424. https://doi.org/10.3102/0002831216637348
- 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. https://journal.nystesol.org/index.php/NYSTJ/article/view/136/112
- 85. Buxton, C., Salinas, A., Mahotiere, M., Lee, O., & Secada, W. (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://doi.org/10.1177/016146811411600303
- 81. Maerten-Rivera, J., 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., **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), 263-296. https://doi.org/10.1177/0042085913478619

- 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/10.3102/0013189X13480524
  - *Note:* See the related American Educational Research Association video, <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://journals.flvc.org/fjer/article/view/133606
- 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://doi.org/10.1177/016146811211400805
- 71. Emdin, C., & **Lee, O.** (2012). Hip-hop, the "Obama effect," and urban science education. *Teachers College Record*, 114(2), 1-24. https://doi.org/10.1177/016146811211400205
- 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://doi.org/10.1177/016146811111300707

- 69. **Lee, O.**, & Buxton, C. (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
- 60. **Lee, O.**, Maerten-Rivera, J., Buxton, C., Penfield, R., & Secada, W. G. (2009). Urban elementary teachers' perspectives on teaching science to English language learners. *Journal of Science Teacher Education*, 20(3), 263-286. https://doi.org/10.1007/s10972-009-9133-z

- 59. Kitchen, R. S., Roy, F. C., **Lee, O.**, & Secada, W. G. (2009). Comparing teachers' conceptions of mathematics education and student diversity at highly effective and typical elementary schools. *Journal for Urban Mathematics Education*, *2*(1), 52-80. https://doi.org/10.21423/jume-v2i1a24
- 58. Maerten-Rivera, J., Penfield, R., Myers, N., **Lee, O.**, & Buxton, C. A. (2009). School and teacher predictors of science instruction practices with English language learners in urban elementary schools. *Journal of Women and Minorities in Science and Engineering*, *15*(2), 93-118. https://doi.org/10.1615/JWomenMinorScienEng.v15.i2.10
- 57. Buxton, C. A., **Lee, O.**, & Mahotiere, M. (2009). The role of language in academic and social transition of Haitian children and their parents to urban U.S. schools. *Bilingual Research Journal*, 31(1-2), 47-74. https://doi.org/10.1080/15235880802640573
- 56. Penfield, R. D., Alvarez, K., & Lee, O. (2008). Using a taxonomy of differential step functioning form to improve the interpretation of DIF in polytomous items. *Applied Measurement in Education*, 22(1), 61-78. https://doi.org/10.1080/08957340802558367
- 55. Bessell, A. G., Burke, M. C., Plaza, M. P., **Lee, O.**, & Schumm, J. S. (2008). The educational reform rating rubric: Example of a new tool for evaluating complex school reform initiatives. *Field Methods*, 20(3), 283-295. https://doi.org/10.1177/1525822X07313838
- 54. Buxton, C., **Lee, O.**, & Santau, A. (2008). Promoting science among English language learners: Professional development for today's culturally and linguistically diverse classrooms. *Journal of Science Teacher Education*, *19*(5), 495-511. https://doi.org/10.1007/s10972-008-9103-x
- 53. Luykx, A., **Lee, O.**, & Edwards, U. (2008). Lost in translation: Negotiating meaning in a beginning ESOL science classroom. *Educational Policy*, *22*(5), 640-674. https://doi.org/10.1177/0895904807307062
- 52. **Lee, O.,** & Buxton, C. (2008). Science curriculum and student diversity: A framework for equitable learning opportunities. *The Elementary School Journal*, 109(2), 123-137. https://doi.org/10.1086/590522
- 51. **Lee, O.**, Adamson, K., Maerten-Rivera, J., Lewis, S., Thornton, C., & LeRoy, K. (2008). Teachers' perspectives on a professional development intervention to improve science instruction among English language learners. *Journal of Science Teacher Education*, 19(1), 41-67. https://doi.org/10.1007/s10972-007-9081-4
- 50. **Lee, O.**, Lewis, S., Adamson, K., Maerten-Rivera, J., & Secada, W. G. (2008). Urban elementary school teachers' knowledge and practices in teaching science to English language learners. *Science Education*, *92*(4), 733-758. https://doi.org/10.1002/sce.20255
- 49. **Lee, O.**, Maerten-Rivera, J., Penfield, R. D., LeRoy, K., & Secada, W. G. (2008). Science achievement of English language learners in urban elementary schools: Results

- of a first-year professional development intervention. *Journal of Research in Science Teaching*, 45(1), 31-52. https://doi.org/10.1002/tea.20209
- 48. **Lee, O.**, Deaktor, R., Enders, C., & Lambert, J. (2008). Impact of a multiyear professional development intervention on science achievement of culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching*, 45(6), 726-747. https://doi.org/10.1002/tea.20231
- 47. **Lee, O.**, Luykx, A., Buxton, C., & Shaver, A. (2007). The challenge of altering elementary school teachers' beliefs and practices regarding linguistic and cultural diversity in science instruction. *Journal of Research in Science Teaching*, 44(9), 1269-1291. https://doi.org/10.1002/tea.20198
- 46. **Lee, O.**, Lester, B. T., Ma, L., Lambert, J., & Jean-Baptiste, M. (2007). Conceptions of the greenhouse effect and global warming among elementary students from diverse languages and cultures. *Journal of Geoscience Education*, *55*(2), 117-125. https://doi.org/10.5408/1089-9995-55.2.117
- 45. Luykx, A., Lee, O., Barnett, J. E. H., Mahotiere, M., Lester, B., & Deaktor, R. (2007). Cultural and home language influences on children's responses to science assessments. *Teachers College Record*, 109(4), 897-926. https://doi.org/10.1177/016146810710900403
- 44. Luykx, A., & Lee, O. (2007). Measuring instructional congruence in elementary science classrooms: Pedagogical and methodological components of a theoretical framework. *Journal of Research in Science Teaching*, 44(3), 424-447. https://doi.org/10.1002/tea.20127
- 43. Shaver, A., Cuevas, P., **Lee, O.**, & Avalos, M. (2007). Teachers' perceptions of policy influences on science instruction with culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching*, 44(5), 725-746. https://doi.org/10.1002/tea.20151
- 42. **Lee, O.**, Buxton, C., Lewis, S., & LeRoy, K. (2006). Science inquiry and student diversity: Enhanced abilities and continuing difficulties after an instructional intervention. *Journal of Research in Science Teaching*, 43(7), 607-636. https://doi.org/10.1002/tea.20141
  - *Note:* This article was selected by the National Science Teachers Association Committee on Research in Science Education as one of 10 articles from the past 10 years that teachers should read.
- 41. Lester, B. T., Ma, L., **Lee, O.**, & Lambert, J. (2006). Social activism in elementary science education: A science, technology, and society approach to teach global warming. *International Journal of Science Education*, 28(4), 315-339. https://doi.org/10.1080/09500690500240100

- 40. Cuevas, P., **Lee, O.**, Hart, J., & Deaktor, R. (2005). Improving science inquiry with elementary students of diverse backgrounds. *Journal of Research in Science Teaching*, 42(3), 337-357. https://doi.org/10.1002/tea.20053
- 39. **Lee, O.**, Deaktor, R. A., Hart, J. E., Cuevas, P., & Enders, C. (2005). An instructional intervention's impact on the science and literacy achievement of culturally and linguistically diverse elementary students. *Journal of Research in Science Teaching*, 42(8), 857-887. https://doi.org/10.1002/tea.20071
- 38. **Lee, O.**, & Luykx, A. (2005). Dilemmas in scaling up innovations in elementary science instruction with nonmainstream students. *American Educational Research Journal*, 42(3), 411-438. https://doi.org/10.3102/00028312042003411
- 37. **Lee, O.** (2005). Science education with English language learners: Synthesis and research agenda. *Review of Educational Research*, 75(4), 491-530. https://www.jstor.org/stable/3516105
- 36. **Lee, O.** (2005). Science education and student diversity: Synthesis and research agenda. *Journal of Education for Students Placed at Risk*, 10(4), 431-440. https://doi.org/10.1207/s15327671espr1004 5
- 35. **Lee, O.**, Hart, J. E., Cuevas, P., & Enders, C. (2004). Professional development in inquiry-based science for elementary teachers of diverse student groups. *Journal of Research in Science Teaching*, 41(10), 1021-1043. https://doi.org/10.1002/tea.20037
- 34. **Lee, O.** (2004). Teacher change in beliefs and practices in science and literacy instruction with English language learners. *Journal of Research in Science Teaching*, 41(1), 65-93. https://doi.org/10.1002/tea.10125
- 33. Hart, J. E., & **Lee, O.** (2003). Teacher professional development to improve the science and literacy achievement of English language learners. *Bilingual Research Journal*, 27(3), 475-501. https://doi.org/10.1080/15235882.2003.10162604
- 32. **Lee, O.** (2003). Equity for linguistically and culturally diverse students in science education: A research agenda. *Teachers College Record*, 105(3), 465-489. https://doi.org/10.1111/1467-9620.00247
- 31. **Lee, O.**, & Avalos, M. A. (2002). Promoting science instruction and assessment for English language learners. *The Electronic Journal for Research in Science & Mathematics Education*, 7(2), 1-24. https://ejrsme.icrsme.com/article/view/7704
- 30. Fradd, S. H., **Lee, O.**, Sutman, F. X., & Saxton, M. K. (2001). Promoting science literacy with English language learners through instructional materials development: A case study. *Bilingual Research Journal*, *25*(4), 479-501. https://doi.org/10.1080/15235882.2001.11074464

- 29. Thurmond, C. K., & **Lee, O.** (2000). Perceptions of scientific literacy and elementary teacher preparation held by science professors and science education professors. *Florida Journal of Educational Research*, 40(1), 5-27. https://feraonline.org/fjer/2758/
- 28. **Lee, O.**, & Paik, S.-H. (2000). Conceptions of science achievement in major reform documents. *School Science and Mathematics*, 100(1), 16-26. http://dx.doi.org/10.1111/j.1949-8594.2000.tb17316.x
- 27. Paik, S.-H., & Lee, O. (1999). Science achievement: Synthesis of current conceptions in major reform documents in the United States and Korea. *Elementary Science Education* (South Korea), 18(2), 1-19.
- 26. Westby, C., Dezale, J., Fradd, S. H., & **Lee, O.** (1999). Learning to do science: Influences of culture and language. *Communication Disorders Quarterly*, 21(1), 50-64. https://doi.org/10.1177/152574019902100107
- 25. **Lee, O.** (1999). Science knowledge, world views, and information sources in social and cultural contexts: Making sense after a natural disaster. *American Educational Research Journal*, 36(2), 187-219. https://doi.org/10.3102/00028312036002187
- 24. **Lee, O.** (1999). Equity implications based on the conceptions of science achievement in major reform documents. *Review of Educational Research*, 69(1), 83-115. https://doi.org/10.3102/00346543069001083
- 23. Fradd, S. H., & Lee, O. (1999). Teachers' roles in promoting science inquiry with students from diverse language backgrounds. *Educational Researcher*, 28(6), 14-20, 42. https://doi.org/10.3102/0013189X028006014
- 22. Paik, S.-H., & Lee, O. (1998). Analysis of the conceptions of science achievement in major reform documents in the United States and Korea. *Journal of the Korean Association for Research in Science Education*, 18(4), 571-587.
- 21. Fradd, S. H., & **Lee, O.** (1998). Development of a knowledge base for ESOL teacher education. *Teaching and Teacher Education*, *14*(7), 761-773. https://doi.org/10.1016/S0742-051X(98)00023-7
- 20. **Lee, O.**, & Fradd, S. H. (1998). Science for all, including students from non-English-language backgrounds. *Educational Researcher*, 27(4), 12-21. https://doi.org/10.3102/0013189X027004012
- 19. **Lee, O.** (1997). Diversity and equity for Asian American students in science education. *Science Education*, *81*(1), 107-122. https://doi.org/10.1002/(SICI)1098-237X(199701)81:1%3C107::AID-SCE6%3E3.0.CO;2-M
- 18. Fradd, S. H., **Lee, O.**, Cabrera, P., del Rio, V., Leth, A., Morin, R., . . . Mathieu, T. (1997). School-university partnership to promote science with students learning English. *TESOL Journal*, 7, 35-40.

- 17. Fradd, S. H., & Lee, O. (1997). Teachers' voices in program evaluation and improvement: A case study of a TESOL program. *Teaching and Teacher Education*, 13(6), 563-577. https://doi.org/10.1016/S0742-051X(97)80001-7
- 16. Anderson, C. W., & Lee, O. (1997). Will students take advantage of opportunities for meaningful science learning? *Phi Delta Kappan*, 78, 720-724.
- 15. Brett, A., **Lee, O.**, & Sorhaindo, L. (1997). Effect of field-based technology laboratory on preservice teachers' knowledge, attitudes, and infusion of technology. *Florida Journal of Educational Research*, *37*(1), 1-16. https://journals.flvc.org/fjer/article/view/133643
- 14. **Lee, O.**, & Fradd, S. H. (1996). The interplay among language, science knowledge, and cognitive strategy use with linguistically diverse students. *Journal of the New York State Association for Bilingual Education*, 11, 26-45.
- 13. **Lee, O.**, & Fradd, S. H. (1996). Interactional patterns of linguistically diverse students and teachers: Insights for promoting science learning. *Linguistics and Education*, 8(3), 269-297. https://doi.org/10.1016/S0898-5898(96)90024-8
- 12. **Lee, O.**, & Fradd, S. H. (1996). Literacy skills in science learning among linguistically diverse students. *Science Education*, 80(6), 651-671. https://doi.org/10.1002/(SICI)1098-237X(199611)80:6%3C651::AID-SCE2%3E3.0.CO;2-I
- 11. **Lee, O.**, & Brophy, J. (1996). Motivational patterns observed in sixth-grade science classrooms. *Journal of Research in Science Teaching*, *33*(3), 303-318. https://doi.org/10.1002/(SICI)1098-2736(199603)33:3%3C303::AID-TEA4%3E3.0.CO;2-X
- 10. **Lee, O.**, Fradd, S. H., & Sutman, F. X. (1995). Science knowledge and cognitive strategy use among culturally and linguistically diverse students. *Journal of Research in Science Teaching*, *32*(8), 797-816. https://doi.org/10.1002/tea.3660320804
- 9. Fradd, S., & **Lee, O.** (1995). Science for all: A promise or a pipe dream for bilingual students? *Bilingual Research Journal*, 19(2), 261-278. https://doi.org/10.1080/15235882.1995.10668605
- 8. **Lee, O.** (1995). Subject matter knowledge, classroom management, and instructional practices in middle school science classrooms. *Journal of Research in Science Teaching*, 32(4), 423-440. https://doi.org/10.1002/tea.3660320409
- 7. Fradd, S. H., Burns-Hoffman, R., **Lee, O.**, & Evelyn, V. (1994). Action research and the professional development of ESOL teachers. *Gulf TESOL Journal*, *9*, 23-28.
- 6. **Lee, O.**, & Anderson, C. W. (1993). Task engagement and conceptual change in middle school science classrooms. *American Educational Research Journal*, *30*(3), 585-610. https://doi.org/10.3102%2F00028312030003585

- 5. **Lee, O.**, & Porter, A. C. (1993). A teacher's bounded rationality in middle school science. *Teaching and Teacher Education*, *9*(4), 397-409. https://doi.org/10.1016/0742-051X(93)90006-3
- 4. **Lee, O.**, Eichinger, D. C., Anderson, C. W., Berkheimer, G. D., & Blakeslee, T. D. (1993). Changing middle school students' conceptions of matter and molecules. *Journal of Research in Science Teaching*, 30(3), 249-270. https://doi.org/10.1002/tea.3660300304
- 3. McIntosh, R., Vaughn, S., Schumm J. S., Haager, D., & Lee, O. (1993). Observations of students with learning disabilities in general education classrooms. *Exceptional Children*, 60(3), 249-261. http://dx.doi.org/10.1177/001440299406000306
- 2. Contreras, A., & **Lee, O.** (1990). Differential treatment of students by middle school science teachers: Unintended cultural bias. *Science Education*, 74(4), 433-444. https://doi.org/10.1002/sce.3730740404
- 1. **Lee, O.**, & Porter, A. C. (1990). Bounded rationality in classroom teaching. *Educational Psychologist*, 25(2), 159-171. https://psycnet.apa.org/doi/10.1207/s15326985ep2502\_4

## **BOOKS**

- 7. **Lee, O.** (in progress). STEM education with equity and justice: Traditional, contemporary, and potential future approaches.
- 6. **Lee, O.**, Haas, A., & Grapin, S. E. (2025). Science and STEM education for equity and justice with multilingual learners in elementary school. National Science Teaching Association. https://my.nsta.org/resource/132572
- 5. Nordine, J., & Lee, O. (Eds.). (2021). Crosscutting concepts: Strengthening science and engineering learning. National Science Teaching Association.
- 4. **Lee, O.**, Miller, E., & Januszyk, R. (Eds.). (2015). *NGSS for all students*. National Science Teachers Association.
  - Note: This book was a 2016 REVERE Awards finalist.
- 3. Bianchini, J. A., Akerson, V. L., Calabrese Barton, A., **Lee, O.**, & Rodriguez, A. J. (Eds.). (2012). *Moving the equity agenda forward: Equity research, practice, and policy in science education*. Springer.
  - *Note:* This book was supported by the National Association for Research in Science Teaching.
- 2. **Lee, O.**, & Buxton, C. A. (2010). *Diversity and equity in science education: Theory, research, and practice.* Teachers College Press.

*Note:* This book was part of the *Multicultural Education Series* edited by James A. Banks.

## Published reviews:

Bannier, B. J. (2015). Cultural Studies of Science Education, 10, 545-549.

Feinstein, H. (2011). Science Education, 95(3), 571-573. Riendeau, D. (2011). International Journal of Multicultural Education, 13(1).

Wellik, J. (2011). National Science Teachers Association (January 24).

Monhardt, R. (2010). Teachers College Record (September 13).

1. **Lee, O.**, & Luykx, A. (2006). *Science education and student diversity: Synthesis and research agenda*. Cambridge University Press.

*Note:* This book was supported by the Center for Research on Education, Diversity, and Excellence and the National Center for Improving Student Learning and Achievement in Mathematics and Science.

### Published review:

Bianchini, J. (2007). Science Education, 91(3), 518-521.

### HANDBOOK CHAPTERS

- 6. Nordine, J., & Lee, O. (2024). Crosscutting concepts and learning progressions. In H. Jin, D. Yan, & J. Krajcik (Eds.), *Handbook of research on science learning progressions* (pp. 332-345). Taylor & Francis.
- 5. Buxton, C. A., & Lee, O. (2023). Multilingual learners in science education. In N. G. Lederman, D. Zeidler, & J. Lederman (Eds.), *Handbook of research in science education* (3rd ed., pp. 290-323). Routledge.
- 4. Buxton, C. A., & Lee, O. (2014). English language learners in science education. In N. G. Lederman & S. K. Abell (Eds.), *Handbook of research in science education* (2nd ed., pp. 204-222). Erlbaum.
- 3. **Lee, O.,** & Luykx, A. (2007). Science education and student diversity: Race/ethnicity, language, culture, and socioeconomic status. In S. K. Abell & N. G. Lederman (Eds.), *Handbook of research in science education* (1st ed., pp. 171-197). Erlbaum.
- 2. **Lee, O.** (2002). Science inquiry for elementary students from diverse backgrounds. In W. G. Secada (Ed.), *Review of research in education* (Vol. 26, pp. 23-69). American Educational Research Association.
- 1. **Lee, O.**, & Yarger, S. J. (1996). Modes of inquiry in research on teacher education. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 14-37). Macmillan.

## **BOOK CHAPTERS**

- 31. Kang, E., Haas, A., O'Brien, S., Grapin, S., Rosado-Barringer, T., Stoker, Y., Leece, C., & Lee, O. (2024). Plastic pollution: What happens to the plastics we use every day? In D. Steele & A. K. Mercier (Eds.), *Justice-oriented science teaching and learning:*Anchoring phenomena in secondary classrooms (pp. 333-353). Springer Nature.
- 30. Nordine, J., & Lee, O. (2021). What are crosscutting concepts and why are they useful? In J. Nordine & O. Lee (Eds.), *Crosscutting concepts: Strengthening science and engineering learning* (pp. 3-17). National Science Teaching Association.
- 29. Goggins, M., Haas, A., Grapin, S. E., Januszyk, R., Llosa, L., & Lee, O. (2021). Broadening access to science: Crosscutting concepts as resources in the Next Generation Science Standards classroom. In J. Nordine & O. Lee (Eds.), *Crosscutting concepts: Strengthening science and engineering learning* (pp. 43-59). National Science Teaching Association.
- 28. Nordine, J., **Lee, O.**, & Willard, T. (2021). Conclusions. In J. Nordine & O. Lee (Eds.), *Crosscutting concepts: Strengthening science and engineering learning* (pp. 377-380). National Science Teaching Association.
- 27. **Lee, O.**, Goggins, M., Haas, A., Januszyk, R., Llosa, L., & Grapin, S. E. (2019). Making everyday phenomena phenomenal: Next Generation Science Standards-aligned instructional materials using local phenomena with diverse student groups. In P. Spycher & E. Haynes (Eds.), *Culturally and linguistically diverse learners and STEAM: Teachers and researchers working in partnership to build a better tomorrow* (pp. 211-228). Information Age Publishing.
- 26. **Lee, O.**, Grapin, S. E., & Haas, A. (2018). How science instructional shifts and language instructional shifts support each other for English learners: Talk in the science classroom. In A. Bailey, C. Maher, & L. Wilkinson (Eds.), *Language, literacy and learning in the STEM disciplines: How language counts for English learners* (pp. 35-52). Routledge.
- 25. **Lee, O.**, O'Connor, C., & Haas, A. (2017). Promoting science among English language learners (P-SELL) model: Curricular and professional development intervention in elementary science instruction with a focus on English language learners. In C. A. Buxton & M. Allexsaht-Snider (Eds.), *Teaching science to English learners: Research into practice* (pp. 15-30). Springer.
- 24. Maerten-Rivera, J., Llosa, L., & Lee, O. (2017). Promoting science among English language learners (P-SELL) research and evaluation: Measures and outcomes with students and teachers. In C. A. Buxton & M. Allexsaht-Snider (Eds.), *Teaching science to English learners: Research into practice* (pp. 31-51). Springer.
- 23. **Lee, O.**, & Miller, E. (2016). Engaging in phenomena from project-based learning in a place-based context in science. In L. C. de Oliveira (Ed.), *The Common Core State Standards for literacy in history/social studies, science, and technical subjects for*

- *English language learners: Grades 6-12* (pp. 59-73). Teaching English to Speakers of Other Languages.
- 22. **Lee, O.** (2015). Preface. In O. Lee, E. Miller, & R. Januszyk (Eds.), *NGSS for all students* (pp. xi-xiv). National Science Teachers Association.
- 21. **Lee, O.**, Miller, E., & Januszyk, R. (2015). Conceptual framework guiding the NGSS diversity and equity. In O. Lee, E. Miller, & R. Januszyk (Eds.), *NGSS for all students* (pp. 37-42). National Science Teachers Association.
- 20. Januszyk, R., Lee, O., & Miller, E. (2015). Charges of the NGSS diversity and equity team. In O. Lee, E. Miller, & R. Januszyk (Eds.), NGSS for all students (pp. 29-35). National Science Teachers Association.
- 19. Miller, E., Januszyk, R., & Lee, O. (2015). Using the case studies to inform unit design. In O. Lee, E. Miller, & R. Januszyk (Eds.), *NGSS for all students* (pp. 171-177). National Science Teachers Association.
- 18. Miller, E., Januszyk, R., & Lee, O. (2015). Case study utility for classroom teaching and professional development. In O. Lee, E. Miller, & R. Januszyk (Eds.), *NGSS for all students* (pp. 193-202). National Science Teachers Association.
- 17. **Lee, O.** (2014). Diversity and equity in science education. In R. Slavin (Ed.), *Proven programs in education: Science, technology, engineering, and mathematics* (pp. 98-102). Corwin.
- 16. **Lee, O.** (2012). Teaching science with English language and literacy. In M. Calderón (Ed.), *Breaking through: Effective instruction and assessment for reaching English learners* (pp. 129-142). Solution Tree Press.
- 15. **Lee, O.**, Santau, A. O., & Maerten-Rivera, J. (2011). Science and literacy assessments with English language learners. In C. Basterra, E. Trumbull, & G. Solano-Flores (Eds.), *Cultural validity in assessment: Addressing linguistic and cultural diversity* (pp. 254-274). Routledge.
- 14. Buxton, C. A., & Lee, O. (2010). Fostering scientific reasoning as a strategy to support science learning for English language learners. In D. Senal, C. Senal, & E. Wright (Eds.), *Teaching science with Hispanic ELLs in K-16 classrooms* (pp. 11-36). Information Age Publishing.
- 13. LeRoy, K., & Lee, O. (2008). What research says about science assessment with English language learners. In J. Coffey, R. Douglas, & C. Sterns (Eds.), *Science assessment:* Research and practical approaches (pp. 341-355). National Science Teachers Association.
- 12. García, E. E., & Lee, O. (2008). Science instruction for all: Creating a responsive learning community. In A. S. Rosebery & B. Warren (Eds.), *Teaching science to English*

- language learners: Building on students' strengths (pp. 151-161). National Science Teachers Association.
- 11. Lambert, J., Lester, B., **Lee, O.**, & Luykx, A. (2007). An earth systems inquiry-based approach reshapes teachers' beliefs about instruction of diverse students. In D. B. Zandvliet (Ed.), *Sustainable communities, sustainable environments* (pp. 97-114). Sense Publishers.
- 10. **Lee, O.** (2007). Implementation and evaluation of scale-up. In B. Schneider & S. McDonald (Eds.), *Scale up in education: Issues in practice* (Vol. 2, pp. 123-127). Rowman & Littlefield.
- 9. **Lee, O.** (2006). Embracing serendipity and celebrating diversity. In K. Tobin & W.-M. Roth (Eds.), *The culture of science education* (pp. 251-261). Sense Publishers.
- 8. Colucci, M., Ceballos, M., Smith, M., & Lee, O. (2006). Wind cycle. In A. K. Fathman & D. T. Crowther (Eds.), *Science for English language learners: K-12 classroom strategies* (pp. 127-129). National Science Teachers Association.
- 7. Luykx, A., Cuevas, P., Lambert, J., & Lee, O. (2005). Unpacking teachers' "resistance" to integrating students' language and culture into elementary science instruction. In A. Rodríguez & R. S. Kitchen (Eds.), Preparing prospective mathematics and science teachers to teach for diversity: Promising strategies for transformative action (pp. 119-141). Erlbaum.
- 6. Bessell, A. G., Schumm, J. S., **Lee, O.**, Liftin, E., & Walsh, S. (2003). Beyond standardized test scores: Using case studies to evaluate a reform strategy. In *Research perspectives on school reform: Lessons from the Annenberg Challenge* (pp. 117-132). Annenberg Institute for School Reform at Brown University.
- 5. **Lee, O.**, & Fradd, S. H. (2001). Instructional congruence to promote science learning and literacy development for linguistically diverse students. In D. R. Lavoie & W.-M. Roth (Eds.), *Models for science teacher preparation: Bridging the gap between research and practice* (pp. 109-126). Kluwer Academic Publishers.
- 4. Fradd, S. H., & Lee, O. (2000). Needed: A framework for integrating standardized and informal assessment for students developing academic language proficiency in English. In J. V. Tenajero & S. Hurley (Eds.), *Literacy assessment of bilingual learners* (pp. 130-148). Allyn and Bacon.
- 3. **Lee, O.** (1996). Children's science conceptions and worldviews in social and cultural contexts: Making sense after Hurricane Andrew. In S. Sayre & D. Horne (Eds.), *Earth, wind, fire and water: Approaching natural disaster* (pp. 197-221). Open Door Publishers.
- 2. Yarger, S. J., & Lee, O. (1994). Teachers as leaders: The development and sustenance of teacher leadership. In D. R. Walling (Ed.), *Teachers as leaders: Perspectives on the*

- professional development of teachers (pp. 223-237). Phi Delta Kappan Educational Foundation.
- 1. **Lee, O.**, & Salwen, M. B. (1994). *New York Times*' coverage of education reform during the 1950s and 1980s. In P. Farber, E. F. Provenzo, Jr., & G. Holm (Eds.), *Education in the light of popular culture* (pp. 131-148). State University of New York Press.

# EDITORIALS AND INVITED JOURNAL ARTICLES

- 44. Philip, T. M., Morales-Doyle, D., & **Lee, O.** (2025). In defense of the arts, humanities, and social sciences: A call for a transdisciplinary, transnational, ecological approach to science and science education. *Journal of College Science Teaching*. *54*(4), 353-357. https://doi.org/10.1080/0047231X.2025.2472142
- 43. **Lee, O.**, Grapin, S. E., & Haas, A. (2023). Teacher professional development programs integrating science and language with multilingual learners. *ARISE Blog Series*, American Association for the Advancement of Science. <a href="https://aaas-arise.org/2023/10/03/teacher-professional-development-programs-integrating-science-and-language-with-multilingual-learners/">https://aaas-arise.org/2023/10/03/teacher-professional-development-programs-integrating-science-and-language-with-multilingual-learners/</a>
- 42. Borman, G., Ocol, T., & Lee, O. (2023). New York State P-12 Science Learning Standards: Student agency and equity as core of contemporary science education with all students. *Impact On Instructional Improvement*, 47(2), 27-34. <a href="https://issuu.com/nysascd/docs/impactfallwinter2022">https://issuu.com/nysascd/docs/impactfallwinter2022</a>
- 41. Ocol, T., Borman, G., & Lee, O. (2023). Integrating science and language with multilingual learners through consensus among policy, research, and practice. *Impact On Instructional Improvement*, 47(2), 13-19. https://issuu.com/nysascd/docs/impactfallwinter2022
- 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>
- 39. **Lee, O.**, Shelton, T., & Grapin, S. E. (2022, December 21). Future approaches in STEM education. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/future-approaches-stem-education">https://www.nsta.org/blog/future-approaches-stem-education</a>
- 38. Grapin, S. E., Haas, A., Rasmussen, E., & Lee, O. (2022, November 16). Integrating science, language, and computational thinking with multilingual learners. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/integrating-science-language-and-computational-thinking-multilingual-learners">https://www.nsta.org/blog/integrating-science-language-and-computational-thinking-multilingual-learners</a>
- 37. 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>

- 36. Borman, G., Ocol, T., & Lee, O. (2022, June 10). New York City Department of Education takes a systems approach to science education with multilingual learners. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/new-york-city-department-education-takes-systems-approach-science-education-multilingual">https://www.nsta.org/blog/new-york-city-department-education-takes-systems-approach-science-education-multilingual</a>
- 35. **Lee, O.** (2022, February 24). Developing and supporting a strong, diverse science teaching workforce: Policy advocacy for 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>
- 34. Campbell, D. T., & Lee, O. (2021). Instructional materials designed for *A Framework for K-12 Science Education* and the Next Generation Science Standards: An introduction to 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>
- 33. Haas, A., Januszyk, R., Grapin, S. E., Llosa, L., & Lee, O. (2021). Yearlong fifth-grade science curriculum for all students, including English learners. *California Classroom Science: A Publication of the California Association of Science Educators*. <a href="https://classroomscience.org/articles/fyi/yearlong-fifth-grade-science-curriculum-all-students-including-english-learners-free-download">https://classroomscience.org/articles/fyi/yearlong-fifth-grade-science-curriculum-all-students-including-english-learners-free-download</a>
- 32. **Lee, O.** (2021). Integration of science and language with a focus on multilingual learners: Shared opportunities and responsibilities. *NYS TESOL Journal*, 8(1), 3-14. https://journal.nystesol.org/index.php/NYSTJ/article/view/166/153
- 31. **Lee, O.** (2021). Commentary on the special issue, *Systems for Systems: Computational Systems Modeling to Promote Equity and Access in K-12 STEM Educational Systems. Systems*, 9(2), 30. <a href="https://doi.org/10.3390/systems9020030">https://doi.org/10.3390/systems9020030</a>
- 30. Campbell, D. T., & **Lee, O.** (2021, February 23). Teaching science to address societally pressing phenomena and challenges. *PBS Thinkalong*. <a href="https://thinkalong.org/teaching-science-to-address-pressing-phenomena/">https://thinkalong.org/teaching-science-to-address-pressing-phenomena/</a>
- 29. **Lee, O.,** & Campbell, D. T. (2021). How can STEM disciplines and STEM education work in concert to address systemic racism and the COVID-19 pandemic? Creating a new normal for STEM education. *ARISE Blog Series*, American Association for the Advancement of Science. <a href="https://aaas-arise.org/2021/01/26/how-can-stem-disciplines-and-stem-education-work-in-concert-to-address-systemic-racism-and-the-covid-19-pandemic-creating-a-new-normal-for-stem-education/">https://aaas-arise.org/2021/01/26/how-can-stem-disciplines-and-stem-education-work-in-concert-to-address-systemic-racism-and-the-covid-19-pandemic-creating-a-new-normal-for-stem-education/</a>
- 28. **Lee, O.** (2020, August 27). Making everyday phenomena phenomenal. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/local-phenomena">https://www.nsta.org/blog/local-phenomena</a>
- 27. **Lee, O.** (2019, March 21). Contemporary instructional approaches to promote STEM learning for English learners. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/contemporary-instructional-approaches-promote-stem-learning-english-learners">https://www.nsta.org/blog/contemporary-instructional-approaches-promote-stem-learning-english-learners</a>

- 26. **Lee, O.** (2019, January 8). English learners in STEM subjects. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/english-learners-stem-subjects">https://www.nsta.org/blog/english-learners-stem-subjects</a>
- 25. Haas, A., Goggins, M., Grapin, S. E., Llosa, L., & Lee, O. (2018, October 7). Integrating computational thinking and modeling into science instruction. *National Science Teaching Association*.
- 24. **Lee, O.** (2018, January 16). How children learn science? At a glance, news from the Steinhardt School of Culture, Education, and Human Development.
- 23. **Lee, O.** (2017, July 25). How NGSS and CCSS for ELA/literacy address argument. *National Science Teaching Association*. <a href="https://www.nsta.org/blog/how-ngss-and-ccss-elaliteracy-address-argument">https://www.nsta.org/blog/how-ngss-and-ccss-elaliteracy-address-argument</a>
- 22. **Lee, O.** (2017, March 17). *Embracing new ways of teaching science and language with English learners.*
- 21. Llosa, L., Kieffer, M. J., & Lee, O. (2016). *How can educational systems better serve English learners?* New York University Education Solution Initiative.
- 20. Lee, O. (2015, May 20). NGSS for all students. *National Science Teaching Association*.
- 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.
- 18. **Lee, O.**, & Llosa, L. (2015). What are the language demands for science in the Next Generation Science Standards? In G. Valdés, K. Menken, & M. Castro (Eds.), *Common Core bilingual and English language learners: A resource for educators* (pp. 164-165). Caslon Publishing.
- 17. **Lee, O.**, Diaz, J., & Maerten-Rivera, J. (2014). Results from the promoting science among English language learners (P-SELL) project. *The FAST Journal: Florida Association of Science Teachers, Spring*, 17-18.
- 16. **Lee, O.** (2013). Science and technology, teacher preparation for diversity. In J. A. Banks (Ed.), *Encyclopedia of diversity in education* (Vol. 4, pp. 1904-1907). Sage.
- 15. Buxton, C. A., & Lee, O. (2013). Introduction to theme issue on diversity and equity in science education. *Theory Into Practice*, 52(1), 1-5.
- 14. **Lee, O.**, & Krajcik, J. (2012). Large-scale interventions in science education for diverse student groups in varied educational settings. *Journal of Research in Science Teaching*, 49(3), 271-281.

- 13. **Lee, O.**, & Bianchini, J. (2012). Part I introduction: Science education policy. In J. A. Bianchini, V. L. Akerson, A. Calabrese Barton, O. Lee, & A. J. Rodriguez (Eds.), *Moving the equity agenda forward: Equity research, practice, and policy in science education* (pp. 1-3). Springer.
- 12. Rodriguez, A. J., & Lee, O. (2012). Part III introduction: Context and culture. In J. A. Bianchini, V. L. Akerson, A. Calabrese Barton, O. Lee, & A. J. Rodriguez (Eds.), *Moving the equity agenda forward: Equity research, practice, and policy in science education* (pp. 127-129). Springer.
- 11. **Lee, O.**, & Buxton, C. A. (2010, April). Teaching science to English language learners. *NSTA Reports!*
- 10. Buxton, C. A., **Lee, O.**, & Penfield, R. D. (2009/2010). Developing English literacy through science instruction. *The International Journal of Foreign Language Teaching*, 5(2), 11-14.
- 9. Buxton, C. A., & Lee, O. (2007). Bridging the divide between curriculum theory and practice for non-mainstream students in science education. *Journal of Curriculum and Pedagogy*, 4(1), 39-44.
- 8. Fraser-Abder, P., Atwater, M., & Lee, O. (2006). Research in urban science education: An essential journey. *Journal of Research in Science Teaching*, 43(7), 599-606.
- 7. Calabrese Barton, A., & Lee, O. (2006). NARST equity and ethics committee: A call to action. *Journal of Research in Science Teaching*, 43(9), 875-878.
- 6. **Lee, O.**, & Luykx, A. (2003). Ecological education for students from non-mainstream backgrounds in the climate of accountability. *Frontiers in Ecology and the Environment*, *1*(7), 384-385.
- 5. **Lee, O.**, & Avalos, M. (2003). Integrating science with English language development. *Southwest Educational Development Laboratory Letter*, *XV*(1), 21-28.
- 4. Bessell, A. G., Sinagub, J. M., Lee, O., & Schumm, J. S. (2003). Engaging families with technology: South Florida's FamilyTech Program increases parental involvement, student success. *T.H.E. Journal*, *31*(5), 7, 10-13.
- 3. **Lee, O.** (2001). Culture and language in science education: What do we know and what do we need to know? *Journal of Research in Science Teaching*, 38(5), 499-501.
- 2. **Lee, O.** (1997). Scientific literacy for all. *Journal of Research in Science Teaching*, 34, 219-222.
- 1. **Lee, O.** (1991). Author's response to Finkel's criticism. *Science Education*, 75(4), 491-492.

### **BRIEFS AND MONOGRAPHS**

- 9. Furtak, E. M., & 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>
- 8. Guzman-Orth, D., Supalo, C., Smith, D., Lee, O., & King, T. (2020). Equitable STEM instruction and assessment: Accessibility and fairness considerations for special populations (ETS Research Report Series No. ETS RR-21-11). <a href="http://doi.org/10.1002/ets2.12324">http://doi.org/10.1002/ets2.12324</a>
- 7. Bell, P., Suárez, E., Buxton, C. A., Morrison, D., Rodriguez, A., Lee, O., Bang, M., Tzou, C., & Tesoriero, G. (2018). *OpenSciEd design specifications for equitable science instruction for all students*. https://tinyurl.com/OpenSciEd-Equity-Specs
- 6. Quinn, H., Lee, O., & Valdés, G. (2012). Language demands and opportunities in relation to Next Generation Science Standards for English language learners: What teachers need to know. Stanford University Understanding Language Initiative.
- 5. **Lee, O.** (2007). Science achievement gaps: Race/ethnicity, culture, and socioeconomic status. RMC Research Corporation's Center on Instruction and U.S. Department of Education.
- 4. **Lee, O.** (1998). Current conceptions of science achievement in major reform documents and implications for equity and assessment. University of Wisconsin-Madison and National Institute for Science Education.
- 3. Fradd, S. H., & Lee, O. (Eds.). (1998). Creating Florida's multilingual work force: Policies and practices for instruction and assessment of English language learners. Florida Department of Education Office of Multicultural Student Language Education.
- 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.
- 7. **Lee, O.**, Miller, E., Januszyk, R., Okoro, B., O'Day, B., Gutierrez, J., & Jones, N. (2013). *All standards, all students: Making Next Generation Science Standards accessible to all students.* Achieve, Inc.

*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.
- 5. Council of Chief State School Officers. (2012). Framework for English Language Proficiency Development Standards corresponding to the Common Core State Standards and the Next Generation Science Standards.
- 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.
- 1. Lynch, S., Atwater, M., Cawley, J., Eccles, J., Lee, O., Marrett, C., . . . Wiletto, A. (1996). *An equity blueprint for Project 2061 science education reform*. American Association for the Advancement of Science Project 2061.

### 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>

 $\underline{http://www.nysed.gov/bilingual-ed/integrating-science-and-language-all-students-focus-english-language-learners}$ 

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>
- Understanding COVID-19 disparities using computational modeling <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? <a href="https://www.nsta.org/playlist/how-do-ants-help-plants-and-animals-woods">https://www.nsta.org/playlist/how-do-ants-help-plants-and-animals-woods</a>
- 4. Why do fireflies light up? <a href="https://www.nsta.org/playlist/why-do-fireflies-light">https://www.nsta.org/playlist/why-do-fireflies-light</a>
- 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? https://www.nsta.org/lesson-plan/whatproblem-you-want-design-solutions

- 7. SAIL Research Lab (2020) S. 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 computational thinking and modeling. New York University. https://www.nyusail.org
- 6. SAIL Research Lab. (2019). Science and integrated language (SAIL): A yearlong fifthgrade science curriculum aligned to the Next Generation Science Standards with a focus on English learners. New York University. https://www.nyusail.org
  - Note: Achieve, Inc. awarded Grade 5: SAIL Garbage Unit the NGSS Design Badge, which is the highest rating for NGSS-aligned curriculum units, https://www.nextgenscience.org/resources/grade-5-sail-garbage-unit
- 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.
- Berkheimer, G. D., Anderson, C. W., & Blakeslee, T. C. with Lee, O., Eichinger, D., & 1. 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**

Rehmat, A. P., Lee, O., Nordine, J., Novak, A. M., 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 (pp. 66-73). University of Virginia. https://par.nsf.gov/servlets/purl/10178633
- 3. **Lee, O.** (2010). 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

- 11. **Lee, O.** (in press). Endorsement of *Centering multilingual learners in school curriculum through community asset mapping: A practical guide for teachers* by Ching Ching Lin and Huseyin Uysal. Myers Education Press.
- 10. **Lee, O.** (in press). Endorsement of *Early childhood and the Asian American experience: Exploring intersectionality and addressing misrepresentations* by Sohyun Meacham, Su-Jeong Wee, Jinhee Kim, Sophia Han, and Wu-Ying Hsieh. Routledge.
- 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 and Georgia Earnest García. Guilford Press.
- 6. **Lee, O.** (2017). Endorsement of *Language power: Key uses for accessing content* by Margo Gottlieb and Mariana 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.

- 4. **Lee, O.** (2015). Endorsement of English language learners and the new standards: Developing language, content knowledge, and analytical practices in the classroom by Margaret Heritage, Aída Walqui, and Robert Linquanti. Harvard Education Press.
- 3. **Lee, O.** (2008). Foreword. In K. R. Bruna & K. Gomez (Eds.), *Talking science, writing science: The work of language in multicultural classrooms* (pp. viii-xi). Taylor and Francis.
- 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**

- 2. **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.
- 1. **Lee, O.** (1996). Review [Review of the book *Asian Americans: Contemporary trends and 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).

2024-2025

**Principal Investigator**, Integrating the North Carolina K-12 Science Standards and English Language Development Standards (with Alison Haas, Scott Grapin, and Abigail Schwenger). The Charlotte-Mecklenburg School District, North Carolina (\$70,000).

2023-2025

**Principal Investigator**, Piloting Curriculum Units Aligned to the New York State P-12 Science Learning Standards That Integrates Science and Language Learning Across K-12. Mid-State RBERN at OCM BOCES, New York (\$50,000).

2020-2025

**Principal Investigator**, 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 (\$3,157,000).

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-State RBERN at OCM BOCES, New York (\$50,000).
2020-2023	Co-Principal Investigator, 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 MIT, 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	<b>Project Director</b> , 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	Project Director, 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	<b>Co-Principal Investigator</b> , Evaluation of South Florida Annenberg Challenge (with Jeanne Schumm as PI at University of Miami). Annenberg Foundation (\$1,169,403).
2000-2003	<b>Principal Investigator</b> , 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	<b>Co-Principal Investigator and Project Evaluator</b> , 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).
1998-2001	<b>Co-Principal Investigator and Project Evaluator</b> , Biliteracy for 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	<b>Principal Investigator</b> , 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).
1995-1999	<b>Project Director</b> , Secondary School Science and Mathematics Teacher 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
1996-1997:	\$30,000
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

**Fellow**, Current Conceptions of Science Achievement in Major Reform Documents and Implications for Equity. National Science Foundation (\$16,465).

1996-1997

**Principal Investigator**, 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

**Principal Investigator**, 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 Co-Project Director, 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 **Co-Project Director**, 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 Commissioned Project, Faculty Development for Effective Teaching

(with Billy Birnie and Gilbert Cuevas at University of Miami). University

of Miami School of Business Administration (\$6,500).

## **INVITED SPEECHES (303 TOTAL)**

International (9) National (102)

State (95)

School District (28)

Business or Education Organization (34)

Higher Education Institution (35)

## 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-">https://www.nsta.org/blog/developing-and-supporting-strong-</a>

diverse-science-teaching-

workforce?utm medium=email&utm source=rasa ioutm medium=email

&utm source=rasa io

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.),

*Handbook of research in science education* (3rd ed.). Routledge.

2020-2021 Lee, O., & Campbell, D. T. (2021). Instructional materials aligned to A

Framework for K-12 Science Education and the Next Generation Science Standards [Special issue]. Journal of Science Teacher Education, 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-I">https://www.nsta.org/blog/local-I</a> <a href="phenomena">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	
NATIONAL	
2024-2028	Chair, Professional Development Committee, National Academy of Education
2024-2027	Retreat Planning Committee, National Academy of Education
2024-2027	Committee on Equal Opportunities in Science and Engineering, National Science Foundation
2024-2027	Co-Chair and Chair, Committee for the Distinguished Contribution to Science Education Through Research Award, National Association for Research in Science Teaching
2022-2025	Chair, Section Q (Education) Steering Committee, American Association for the Advancement of Science
2022-2025	Selection Committee for the National Academy of Education/Spencer Dissertation Fellowship Program, National Academy of Education
2022-2025	Selection Committee for the AERA Fellows Program, American Educational Research Association
2023-2024	Professional Development Committee, National Academy of Education
2023	Chair, 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	National Assessment of Educational Progress (NAEP) Science Assessment Framework Steering Panel
2022	Coordinator of <i>Taking Stock of Science Standards Implementation:</i> 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,
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
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
2011-2013	Writing Team for Next Generation Science Standards, Achieve, Inc.
2011-2013	Leader, Next Generation Science Standards Diversity and Equity Team, Achieve, Inc.
2009-2013	Board of Directors, Korean-American Educational Researchers Association
2012	English Language Proficiency Development Framework Committee, Council of Chief State School Officers
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
<b>STATE</b> 2025	Environmental Education Advisory Committee, New York State Education Department
2018-present	New York State Science Content Advisory Panel, New York State Education Department
2018-present 2016-2020	·
-	Education Department  New York State Science Conference Planning Committee, New York
2016-2020	Education Department  New York State Science Conference Planning Committee, New York State Boards of Cooperative Education Services  New York State Science Education Steering Committee, New York State
2016-2020 2015-2018	Education Department  New York State Science Conference Planning Committee, New York State Boards of Cooperative Education Services  New York State Science Education Steering Committee, New York State Education Department  Advisory Board, Department of Environmental Education, Florida

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	
INTERVIEWS AND PODCASTS		
2024	Conversations From CAST24: Okhee Lee and JW Marshall	
	https://www.statweb.org/stat-studio?wchannelid=hiljbflbz4&wmediaid=2g3wyyjw6m	
2024	RBERNing Questions: Language and Science to Empower All Students <a href="https://www.buzzsprout.com/2402273/episodes/16190682">https://www.buzzsprout.com/2402273/episodes/16190682</a>	
2024	Cultural Connections Lab, S2, E18 <a href="https://podcasts.apple.com/us/podcast/dr-okhee-lee/id1678370702?i=1000678157810">https://podcasts.apple.com/us/podcast/dr-okhee-lee/id1678370702?i=1000678157810</a>	
2024	Teaching STEM #4Real: STEM for Multilingual Learners, S3, E6 <a href="https://podcasts.apple.com/ca/podcast/s3-e6-stem-for-multilingual-learners-with-dr-okhee-lee/id1611583589?i=1000673809251">https://podcasts.apple.com/ca/podcast/s3-e6-stem-for-multilingual-learners-with-dr-okhee-lee/id1611583589?i=1000673809251</a>	
2024	Teaching STEM #4Real: STEM for Multilingual Learners, S3, E6 <a href="https://open.spotify.com/episode/18TPSnvW16VM1avMdXkl8g">https://open.spotify.com/episode/18TPSnvW16VM1avMdXkl8g</a>	
2023	Summit K12 Presents Doing Science, Using Language	
	Part 1: Contemporary Science Education	
	https://summitk12-4.wistia.com/medias/7efacfrlr6	
	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 From CAST22: 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)
	(February 2) <a href="https://www.buzzsprout.com/282085/7483804-interview-with-dr-okhee-lee-part-1-intentions-of-the-ngss">https://www.buzzsprout.com/282085/7483804-interview-with-dr-okhee-lee-part-1-intentions-of-the-ngss</a>
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-8WRgqNXHqu41NMg2xHniJsGf2y6Qd/view">https://drive.google.com/file/d/13a-8WRgqNXHqu41NMg2xHniJsGf2y6Qd/view</a>

November 1, 2025