Eunhye Flavin, Ph.D.

Curriculum Vitae

Senior Research Scientist (Research Faculty Member)
Georgia Institute of Technology
Center for Education Integrating Science, Mathematics, and Computing
eflavin@gatech.edu
https://flavineducationlab.com

RESEARCH EXPERTISE

Mathematics Education, Learning Science, Technology-mediated Learning (Augmented reality, Human-computer interaction), Immigrant Family, Bilingual Education, and Mixed Methods

OVERALL AIM: Developing and implementing technology and tools as pedagogical mediations for mathematics education to support historically marginalized populations

EDUCATION

Ph.D.	Boston College, Chestnut Hill, MA. Major: Curriculum and Instruction (Specialization: **Mathematics and Technology Education**) Dissertation Title: The effects of school mathematics resources on students' intention to study mathematics over other subjects: Multilevel mediation structural equation modeling Doctoral advisor: Professor Lillie R. Albert
M.A.	Seoul National University, Seoul, South Korea. Major: Foundations of Education
B.A.	Daegu National University of Education, Daegu, South Korea Major: Elementary Education Teaching Certification: Elementary School Teacher

PROFESSIONAL APPOINTMENTS

2024-current	Senior Research Scientist, Georgia Institute of Technology, Atlanta, GA. Center for Education Integrating Science, Mathematics, and Computing
2021-2024	Assistant Professor of STEM Education (tenured-track), Stonehill College, Easton, MA. - Department of Graduate Teacher Education (2023- present) - Faculty Coordinator for Graduate Mathematics/Science Teacher Education (2023-Present) - Department of Education Studies, May School of Arts & Sciences (2021-2023)

2022 July	Instructor, Summer Program: Competition Math (Grades 5-6) Center for Talent Development, Northwestern University, Evanston, IL.
2017-2021	Teaching Fellow (2020-2021), Graduate Assistant (2017-2021) Lynch School of Education and Human Development, Boston College, Chestnut Hill, MA.
2016-2017	Associate/Instructional Designer (for online programs) e-Learning Contents Development Division, Seoul National University, Seoul, South Korea.
2015-2016	Associate Researcher Center for Bahrom Character Education, Seoul Women's University, Seoul, South Korea.
2013-2016	Teaching Assistant (2013-2014) & Lecturer (2015-2016) College of Education, Korea National Open University, Seoul, South Korea.
2011-2015	Elementary School Teacher (Grades 1-6, Curriculum development, part-time) The School of Global Sarang, Seoul, South Korea.
2011-2014	Assistant Administrator The Korean Society for the Study of Anthropology of Education, Seoul, South Korea.

FUNDED RESEARCH and RESEARCH EXPERIENCE

Under review	**"Mathematics as the foundation of artificial intelligence": Co-designing culturally responsive mathematics tasks in the context of AI** Sponsor: National Council of Teachers of Mathematics Amount: $10,000 Role: PI (**E. Flavin**)
Under review	**A Pressing need: Smart haptic clothing for affective STEM learning** Sponsor: National Science Foundation (NSF) – Research on Innovative Technologies for Enhanced Learning (RITEL) Amount: $900,000,000 Role: Co-PI (**E. Flavin**)
Under review	**Fostering mathematical modeling competencies via collaborative learning in large language model-simulated virtual classrooms** Sponsor: National Science Foundation (NSF) – Research on Innovative Technologies for Enhanced Learning (RITEL) Amount: $900,000,000 Role: Consultant (**E. Flavin**)
2024-2025	**Mechatronics and motivation**

Sponsor: Georgia Institute of Technology – Vertically Integrated Projects
Amount: $5,000
Role: Co-PI (**E. Flavin**)

Under review — **Children as urban planners: Integrating youth research into an urban mathematics program**
Sponsor: American Educational Research Association. Education Research Service Projects Grant
Role: PI (**E. Flavin)**

2024 — **Haitian im/migrant caregiver and community engagement in mathematics education**
Sponsor: Stonehill College, Research, Writing, & Artistic Production Grant
Amount: $4,350
Role: PI (**E. Flavin**)

2023 — **An international comparative study on elementary preservice teachers' noticing of mathematics groupwork: Focusing on communication, collaboration, and problem-solving competencies (***translated to Korean*: 수학 그룹 활동에 대한 초등 예비교사의 노티싱 분석: 의사소통, 협력, 문제해결 역량에 대한 국제 비교 연구**)**
Sponsor: South Korea Ministry of Education, Network Utilizing IDEA Grant of Chuncheon National University of Education
Amount: ₩5,000,000
Role: Co-PI (**E. Flavin**)
PI: S. Hwang, Chuncheon National University of Education

2023 — **ARGeometry: Urban informal mathematics education program for *STEM for All Brockton***
Sponsor: Avanade Tech Grant
Amount: 15 laptops (January 2023)
Role: PI (**E. Flavin**)

2023 — **Augmented reality mathematics manipulatives for equity**
Sponsor: Stonehill College, Research, Writing, & Artistic Production Grant
Amount: $5,000
Role: PI (**E. Flavin**)

2022-2024 — **GeoComputation: Integrating computational thinking into elementary geometry lesson**
Sponsor: Stonehill College, College Start-up Funds
Amount: $5,000
Role: PI (**E. Flavin**)

2022 — **Four decades of research of the pedagogical content knowledge of mathematics teachers**

Sponsor: Stonehill College, Research, Writing, & Artistic Production Grant
Amount: $5,000
Role: PI (**E. Flavin**)

2021-2022 **Social justice-oriented instructional practices grounded in real-world data**
Sponsor: Stonehill College, Research Expense Grant/Start-up Funds
Amount: $2,000
Role: PI (**E. Flavin**)

2018-2021 **Collaborative fellow grant with Potter Rd elementary school in Framingham**
Sponsor: Boston College
Amount: $105,000
Role: Survey team lead & Research Assistant (**E. Flavin**)
PI: G. Oliveira, Boston College (currently at Harvard)

2021 **Dissertation Grant**
American Educational Research Association/National Science Foundation Grant (*submitted*)
ETS Harold Gulliksen Psychometric Research Fellowship (*submitted*)

2019-2020 **Catholic immigrant networks**
Sponsor: Boston College Warmenhoven Fellowship
Amount: $45,000
Role: Survey team lead & Research assistant, including Field work (**E. Flavin**)
PI: G. Oliveira, Boston College (currently at Harvard)

2019-2020 **The Hyukshin school innovation movement in Seoul**
Sponsor: Seoul Metropolitan Office of Education
Amount: $236,000
Role: Graduate Student Team Leader & Research Assistant (**E. Flavin**)
PI: Dr. Yoonmi Lee, Dennis Shirley, Deoksoon Kim, & Stanton Wortham.

2018-2019 **Warmenhoven Fellowship**
Sponsor: Boston College Rocche Center for Education
Amount: $30,000
Role: Research assistant (**E. Flavin**)
PI: G. Oliveira, Boston College (currently at Harvard)

2018 **The Lemelson-Massachusetts Institute of Technology junior varsity InventTeams program (Chill Out!)**
Role: Research assistant of D. Kim, Boston College (**E. Flavin)**

2016-2018 **A longitudinal study on middle school free-semester program**
Sponsor: Korean Educational Development Institute
Role: Research Assistant (**E. Flavin)**

2015-2016 **Measurement of educational effectiveness of the Bahrom character education program**
Sponsor: Seoul Women's University
Role: Associate Researcher (**E. Flavin)**

2014-2015 **A study on job development and employment support for immigrant youth**
Sponsor: Rainbow Youth Center in South Korea
Amount: ₩30,000,000
Role: Research Assistant (**E. Flavin)**
PI: D. Seo, Chosun University

2014-2015 **A study on curriculum and educational contents development for training instructors for multicultural education**
Sponsor: Korean Healthy Family Support Center
Role: Research Assistant (**E. Flavin)**
PI: M. Jung, Korea National Open University

2011-2012 **A study on curriculum and manual for cultural diversity education** (KACES-1240-R024)
Sponsor: Korea Arts & Culture Education Service
Role: Lesson plan developer (**E. Flavin)**
PI: C. I., Lim, Seoul National University

2011-2012 **A study on current issues in mathematics education in Korea** (Policy Research 2-11-9)
Sponsor: South Korean Ministry of Education
Role: Interviewer (**E. Flavin)**
PI: K. Park

REFREED JOURNAL PUBLICATIONS

M. Flavin,* K. Ha,* Z. Guo,* S. Li,* J. Kim,* T. Saxena, F. D. Simatos, F. Al-Najjar, Y. Mao, S. Bandapalli, C. Fan, D. Bai, Z. Zhang, Y. Zhang, **E. Flavin**, K. Madson, Y. Huang, L. Emu, J. Zhao, J. Yoo, M. Park, J. Shin, A. Huang, H. Shin, J. Colgate, Y. Huang, Z. Xie, H. Jiang, J. Rogers. (2024) Bioelastic state recovery for haptic sensory substitution, *Nature*, 635, 345-352. https://doi.org/10.1038/s41586-024-08155-9

Lee, J., **Flavin, E**., & Hwang, S. (2024). Open mathematical tasks conceived, designed, and reflected upon by preservice elementary teachers. *Journal of Mathematics Teacher Education.* https://doi.org/10.1007/s10857-024-09661-3

Flavin, E. & *Lee, J. H., Chamberlin, M., Powers, R. (2024). GPS: Artificial intelligence image processing. *Mathematics Teachers: Learning and Teaching PK-12, 117* (11). 848-852. https://doi.org/10.5951/MTLT.2024.0103 (*equal contribution)

Flavin, E., & Flavin, M. (2024). Black feminist thought as a guide for ethical integration of artificial intelligence in mathematics classroom. *Connections, 34*(1), 1-8, https://amte.net/sites/amte.net/files/FlavinFlavin_Connections_Fall2024.pdf

Lee, J., **Flavin, E.**, Kim, S, & Hwang, S. (2024). Recording and representing student mathematical thinking: A comparison of preservice teachers in the U.S. and Korea, *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education, 34*(3), 511-542. https://doi.org/10.29275/jerm.2024.34.3.511

Flavin, E. & Suh, J. (2024). Centering empathy in a mathematics classroom. *Mathematics Teacher: Learning and Teaching PK–12, 117*(5), 361-370. https://doi.org/10.5951/MTLT.2023.0246

Flavin, E., Lima Becker, M., Hubacz, H., Barbieri, O., & Oliveira, G. (2024). "(Not) the same as it was": Parents' and teachers' perception of the impact of COVID-19 on a bilingual elementary program. *Language and Education*, 1–19. https://doi.org/10.1080/09500782.2024.2343479

Segel, M., **Flavin, E**., Hubacz, H. & Oliveira, G. (2024). A currency of love: Illuminating motherhood across immigrant, cultural, and socioeconomic lines during Covid–19. *Urban Education*, 00420859241244769, https://doi.org/10.1177/00420859241244769

Flavin, E. & * Hwang, S. (2024). U.S. and Korean teacher candidates' approaches to mathematics modeling on a social justice issue. *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education*, *27*(1), 25–47. https://doi.org/10.7468/jksmed.2024.27.1.25 (*equal contribution)

Hwang, S., **Flavin, E.**, & Lee, J. (2023). Exploring research trends of technology use in mathematics education: A scoping review using topic modeling. *Education and Information Technologies*, 1–28. https://doi.org/10.1007/s10639-023-11603-0

Oliveira, G., **Flavin, E**., & Hubacz, H. (2023). Teachers and parents at odds: Results from a survey on a dual language program implementation. *Education and Urban Society*. 00131245221141071. https://doi.org/10.1177/00131245221141071

Hwang, S., **Flavin, E**., Lee, J. (2023). The use of technology in Korean mathematics education: A systemic review. *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education, 33*(3), 537–557. https://doi.org/10.29275/jerm.2023.33.3.537

Hwang, S. & **Flavin, E**. (2023). Understanding a mathematics teacher community through a computational text analysis: Review of *change in mathematics pedagogical lexicons* by Lee & Kim (2022). *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education,* 26 (1), 31–38. https://doi.org/10.7468/jksmed.2023.26.1.31

Flavin, E., & Hwang, S. (2022). Examining multicultural education research in Korean mathematics education. *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education, 25* (1), 45–63. https://doi.org/10.7468/jksmed.2022.25.1.45

Hwang, S., & **Cho, E**. (2021). Exploring latent topics and research trends in mathematics teachers' knowledge using topic modeling: A systematic review. *Mathematics*, 9, 2956. https://doi.org/10.3390/math9222956

Oliveira, G., **Cho, E**., & Barbieri, O. (2021). Latino family engagement in a network of Catholic bilingual schools. *Journal of Catholic Education, 24*(1), 183–203. http://dx.doi.org/10.15365/joce.2401102021

Cho, E., Albert., L, & Hwang, S. (2021). Exploring white preservice mathematic teachers' racial identity and culturally relevant teaching practices. *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education*, 24(1). 29–47. http://doi.org/10.7468/jksmed.2021.24.1.29

Hwang, S., **Cho, E.**, & Albert, L. (2020). Examining mathematics teachers' perception toward multicultural education: Teachers' noticing of multicultural contents in mathematics textbooks. *Journal of the Korean Society of Mathematical Education Series D: Research in Mathematical Education, 23* (2), 93–111. https://doi.org/10.7468/jksmed.2020.23.2.93

Oliveira, G., Chang-Bacon, C. K., **Cho, E.**, & Baez-Cruz, M. (2020). Parent and teacher perceptions of a Brazilian Portuguese two-way immersion program. *Bilingual Research Journal, 43*(2), 212–231. https://doi.org/10.1080/15235882.2020.1773961

Kim, D., **Cho, E.**, Stephanie, C., & Barnett, M. (2019). Culturally relevant science: Incorporating visualizations and home culture in an invention-oriented middle school science curriculum. *Technology & Innovation, 20*, 251–266. https://doi.org/10.21300/20.3.2019.251

Cho, E. & Hwang, S. (2019). Exploring changes in multi-ethnic students' mathematics achievement motivation: A longitudinal study using expectancy-value theory. *Journal of the Korean Society of Mathematical Education Series A: The Mathematical Education, 58*(1), 101–120. https://doi.org/10.7468/mathedu.2019.58.1.101

Seo, D. & **Cho, E.** (2017). An exploratory research on career dispositions of immigrant youths and their ecological conditions. *Journal of Education and Culture, 23*(1), 217–247. https://doi.org/ 10.24159/joec.2017.23.1.217

JOURNAL ARTICLES UNDER REVIEW / IN PREPARATION

Flavin, E., Hwang, S., & Flavin, M. Lekòl, Legliz, Lakay: Haitian immigrant parental engagement in mathematics education, completed internal round review in *Educational*

Studies in Mathematics, 2024. (Special Issue: Parents, caregivers, and community in mathematics education)

Flavin, E., * Hwang, S & Flavin, M.T. Augmented reality for mathematics achievement: A meta-analysis of main and moderator effects, submitted second revision in *International Journal of Science and Mathematics Education,* 2024. (*equal contribution)

Flavin, E. Chung, M. Hwang, S., & Flavin, M. Augmented reality for area measurement reasoning of elementary students, under review in *Educational Technology Research and Development.*

Flavin, E. & Hwang, S. "Let's Ask the Robot!": Epistemic Stance between Teacher Candidates towards AI in Mathematics Lesson Planning. Submitted to *Journal of Teacher Education*.

Lee, J. H. & ***Flavin, E.** AI algorithm and mathematics modeling. Under first revision in MTLT (equal contribution)

Flavin, E., Chung, M., & Flavin, M. (Will submit in 2024) Augmented reality-based intervention package on children's construction of a volume measurement. In preparation.

REFREED CONFERENCE PROCEEDINGS

Flavin, E., & Flavin, M. (2024, *Accepted*). Developing augmented reality system for embodied mathematics learning. *Proceedings of the 46th Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education* (PME-NA). Ohio, United States: PME

Witt, N., Chandler, K., **Flavin, E.**, Suh, J., Panorkou, N., McCulloch, A., Hollebrands, K., & Joseph, M. (2024, accepted). Working group proposal (Year 2): Conceptualizing the role of technology in equitable mathematics classrooms (Math TechQuity). *Proceedings of the 46th Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education* (PME-NA). Ohio, United States: PME

Chandler, K., Witt, N., Suh, J., Hollebrands, K., McCulloch, A., **Flavin, E.,** Panorkou, N., Joseph, M., Yao, X. (2024, accepted). Working group report (Year 1): Conceptualizing the role of technology in equitable mathematics classrooms (Math TechQuity). *Proceedings of the 46th Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education* (PME-NA). Ohio, United States: PME

Flavin, E. (2024, accepted). Artificial intelligence in mathematics education [*Title will be updated*]. Proceedings of the Korean Society of Educational Studies in Mathematics 2024 62nd Annual Conference. pp. ##-##. Incheon, South Korea.

Hwang, S., Lee, J., & **Flavin, E.** (2024). Analysis of preservice teachers' perception of open mathematical tasks (개방형 수학 과제에 대한 예비교사들의 인식 분석). Proceedings of the Korean Society of Elementary Mathematics Education 2024 Annual Conference. pp. 75-78. Seoul, South Korea.

SCHOLARLY CONFERENCE PRESENTATION (*Research with a mentoring student)

Flavin, E. (2024, December 6-7). *Artificial intelligence in mathematics education [Title will be updated]*. The Korean Society of Educational Studies in Mathematics 2024 62nd Annual Conference, Incheon, South Korea.

Flavin, E., & Flavin, M. (2024, November 7-10). *Developing augmented reality system for embodied mathematics learning* [Brief report presentation]. North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) 2024 46th Annual Conference. Cleveland, Ohio, United States.

Hwang, S., Lee, J., & **Flavin, E.** (2024, November 1-2. A study on the characteristics of open mathematical tasks developed by preservice teachers (예비교사들이 개발한 개방형 수학 과제의 특성 연구). The Korean Society of Mathematical Education Fall Academic Conference. Suwon, South Korea.

Flavin, E., Flavin, M, & Hwang, S. (2024, September 25-28). *Augmented reality: Integrating real-world into math classroom*. National Council of Teachers of Mathematics [NCTM] 2024 Annual Meeting & Exposition. Chicago, IL, United States.

Hwang, S., Lee, J., & **Flavin, E.** (2024, August 9). Analysis of preservice teachers' perception of open mathematical tasks (개방형 수학 과제에 대한 예비교사들의 인식 분석). Korean Society of Elementary Mathematics Education 2024 Annual Conference. Seoul, South Korea.

Hwang, S. & **Flavin, E**. (2024, April 5-6). *International comparative study of mathematical modeling strategies* (수학적 모델링 전략 국제비교 연구). 2024 Spring conference for the Korean Society of Mathematical Education. Busan, South Korea.

Flavin, E., Flavin, M., Chung, M., Simeon, M., Marie, R.*, & Solari, M.* (2024, February 8-10). *Teaching mathematics at a Black immigrant church: Implications for mathematics teacher education* [Paper presentation]. Association of Mathematics Teacher Educators [AMTE] 2024 28th Annual Conference. Orlando, FL, United States.

Flavin, E., Lee, J., & Hwang, S. (2023, October 1-4). *Technology in mathematics education research: Analysis of the past four decades* [Poster presentation]. North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) 2023 45th Annual Conference. Reno, NV, United States.

Flavin, E. & Hwang, S. (2023, April 13-16). *A systemic review on mathematics education and technology* [Paper presentation]. American Educational Research Association [AERA] Annual Meeting. Chicago, IL, United States.

Flavin, E. (2023, February 24-26). *Racialized identities and mathematics teacher education: White preservice teachers' teaching practices* [Paper presentation]. American Association of Colleges for Teacher Education (AACTE) 2023 75th Annual Conference. Indiana, MN, United States.

Flavin, E. & Hwang, S. (2022, November 17-20). *What knowledge is needed for teaching mathematics? Using topic modeling* [Poster presentation]. North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) 2022 44th Annual Conference. Nashville, TN, United States.

Flavin, E. (2022, September 28-October 1). *Rich mathematical and computational tasks for grade 4-6 geometry: Using a language, Scratch* [Paper presentation]. National Councils of Teachers of Mathematics [NCTM] 2022 Annual Meeting & Exposition. Los Angeles, CA, United States.

Segel, M., **Cho, E.**, Hubacz, H., & Oliveira, G. (2022, April 21-26). *From gratitude to frustration: Two-way immersion parents' perceptions of school supports during COVID-19* [Paper presentation]. American Educational Research Association [AERA] Annual Meeting. San Diego, CA, United States.

Cho, E., Hwang, S., & Herosian, G.* (2022, April 6-8). *Three decades of research in mathematics teacher knowledge: Using text network modeling* [Paper presentation]. New England Educational Research Organization [NEERO] Annual Meeting. Portsmouth, NH, United States.

Cho, E. (2022, February 10-12). *Multilevel mediation structural modeling to assess whether attending a mathematics school can predict students' intention to pursue a mathematics-related field* [Manuscript Review Group]. Association of Mathematics Teacher Educators [AMTE] Annual Meeting. Henderson, NV, United States.

Cho, E., Hwang, S., & Herosian, G.* (2022, January 7). *Exploratory analysis on research in mathematics teacher knowledge* [Paper presentation]. National Councils of Teachers of Mathematics [NCTM] Research Conference. Virtual Meeting.

Cho, E., Hubacz, H., Oliveira, G. (2021, Apr 8-12). *School community members at odds in dual language program implementation* [Paper presentation]. American Educational Research Association [AERA] Annual Meeting, Virtual Meeting.

Oliveira, G., **Cho, E.,** et al. (2021, Feb 26-27). *Im/migrant children and families' experiences in dual language education in Massachusetts* [Paper presentation]. 2021 Ethnography in Education Research Forum, Virtual meeting.

Cho, E. (2020, Dec 12) *Understanding the development of multi-ethnic students' mathematics achievement motivation* [Paper presentation]. 2020 International Conference of the Korean Society of Mathematical Education, Virtual meeting.

Cho, E., Hwang, H., & Albert, L. (2020, Dec 12) *Understanding mathematics teachers' perception toward multicultural education* [Paper presentation]. 2020 International Conference of the Korean Society of Mathematical Education, Virtual meeting.

Chang-Bacon, C., **Cho, E.**, & Oliveira, G. (2020, Dec 2) *Community consciousness: Parallel parent and teacher perceptions of a two-way dual language immersion program* [Paper presentation]. Literacy Research Association (LRA) 70th Annual Conference, Virtual meeting.

Cho, E., Jeon, A. & Oliveira, G. (2020, Apr 17-21) *Promoting Latino family engagement in Catholic bilingual school* [Roundtable presentation]. AERA Annual Meeting. San Francisco, CA, United States. http://tinyurl.com/vpcyu4f

Chang-Chris, B., **Cho, E**., & Cruz, M, & Oliveira, G., (2020, Apr 17-21) *Parallel perceptions of two way immersion program implementation: How parents and teachers understand its merits* [Paper presentation]. AERA Annual Meeting San Francisco, CA, United States.

Cho, E & Hwang, S. (2019, April 25) *Why do multiethnic students in South Korea choose (not) to study mathematics over time?* [Paper presentation]. Lynch School of Education, Boston College, Chestnut Hill, MA, United States.

Hwang, S & **Cho, E**. (2019, April 5) *Exploring changes in multi-ethnic students' achievement motivation: A longitudinal study using expectancy-value theory* [Conference presentation]. Korean-American Educational Researchers Associations Annual Conference. Toronto, Canada.

Cho, E., & Hwang, S (2019, April 5) *Mathematics preservice teachers' culturally sustaining teaching strategies* [Conference presentation]. Korean-American Educational Researchers Associations Annual Conference. Toronto, Canada.

Kim, D., **Cho, E**., & Kim, S (2019, March 31-April) *Leveraging youth's diverse backgrounds to broaden participation in STEM through invention education* [Paper presentation]. NARST Annual International Conference. Baltimore, MD, United States.

Barnett, M., Kim, D., **Cho, E**., & Kim, S (2019, March 3) *Culturally relevant science: An invention program for middle school English Language Learners* [Paper presentation]. The American Association for Applied Linguistics [AAAL] Conference. Atlanta, GA, United States.

Kim, D., **Cho, E**., & Kim, S (2018, Oct 19) *Inventing the future: Leveraging cultural assets to create young STEM inventors (Culturally Relevant Science: English Language Learners' Experiences in a Modified Invention Science Curriculum)* [Paper presentation]. Diversity

Challenge (The Institute for the Study and Promotion of Race and Culture), Chestnut Hill, MA, United States.

Kim, D., **Cho, E**., Mannion, P., Long, Y., & Zhou, S. (2018, April 25) *Fostering English Language Learner's reflection through multimodal digital storytelling* [Paper presentation]. Graduate Research Symposium, Lynch School of Education, Boston College, Chestnut Hill, MA, United States. [***Awarded the 1st Best Student Presentation***]

Kim, D., Mannion, P., Long, Y., Zhou, S., & **Cho, E**. (2018, March 24). *Middle school English Language Learner's multimodal digital storytelling* [Paper presentation]. The American Association for Applied Linguistics Conference. Chicago, Illinois, United States.

Cho, E. & Won, M. (2015, December 23). *An Analysis on Bahrom Character Education III Learning outcomes related OECD key Competency.* [Paper presentation]. Seoul Women's University, Seoul, Korea

---

RESEARCH REPORT

Oliveira, G., Becker, M., **Cho, E**., Segel., M., Haylea, H., Barbieri, O., and Alex, V. (2020). *Report on school climate survey – Potter Rd. Elementary School – Framingham Public Schools.* The Framingham multilingual education department. (Presented at Potter Rd. Elementary School teacher meeting Jan 27, 2020)

Shirley, D., Kim, D., Wortham, S., **Cho, E**., Lee, J., Kang, Y., Agostinelli, A., Kim, H., Yang, S., & Pu, M. (2019). *Hyukshin schools in Seoul, South Korea: An interim report*. Seoul Metropolitan Office of Education.

Seo, D., Kim, E., **Cho, E**., & Lim., K. (2016). A study on job development and employment support for immigrant youth. Rainbow Youth Center. Retrieved from http://m.rainbowyouth.or.kr/bbs/board3/11024

OTHER ARTICLES

Cho, E. (2015). A study on current status and feature of a multicultural alternative school in Korea (국내 다문화 대안학교 현황과 특징에 관한 소고). *Korean Journal of Education Review*, 35, 227-253.

Cho, E. (2015). Sadang Dong +25: Poverty, culture, and research. *Korean Anthropology of Education Newsletter, 21*(4), 1-4.

Cho, E. (2014). Niki de Saintpale: Creative healing of suffering. *Korean Anthropology of Education Newsletter, 20*(1), 3-9.

INVITED TALKS

*Supporting immigrant students in schools and communities: Technology-integrated STEM Educatio*n. Johns Hopkins University, School of Education, December 4, 2023.

Korea's innovative (Hyukshin) School movement and curriculum. Deokseong women's university (Prof. So Yoon Kim), Oct 13 & Oct 15, 2020.

Current status of multiculturalism in Korea and understanding of multiculturalism. Seoul Women's University (Prof. Teresa Pyeon), May 11, 2017.

Research Project on Immigrant Education in South Korea. Seoul Women's University (Prof. Soo-Young Kim), May 17, 2016.

TEACHING EXPERIENCE

Georgia Institute of Technology

Mechatronics and Motivation (In-person) (Undergraduate and graduate, Spring 2025)

Stonehill College

Assistant Professor

Graduate Courses

EDU 609 (In-Person) – Educational Equity and Inclusivity (Graduate, Spring/Summer 2024)
EDU 610 (In-Person) – Contemporary Issues in Education (Graduate, Spring/Summer 2024)
EDU 621 (In-Person) – Teaching Math to Students with Disabilities (Graduate, Fall 2023)
EDU 623 (In-Person) – Teaching Content Math to Middle & High School Students with Disabilities (Graduate, Fall 2023)
EDU 655 (In-Person) – Mathematics Teaching and Learning in the Middle School
EDU 644 (In-person) – EDU 644: Graduate Practicum: GEMS (Math/Science 5-8) (Spring 2024) **Note*: As a program supervisor

Undergraduate Courses

EDU 301 (In-Person) – Assessment and Analysis in Education (Undergraduate, Fall 2021, Spring/Fall 2022, Spring/Fall 2023)
MTH 143 (In-Person) – Mathematical Reasoning for Education (Undergraduate, Spring/Fall 2022, Spring 2023)
EDU 320 (In-Person) – Teaching Mathematics, Science, and Technology (Undergraduate, Fall 2021, Spring/Fall 2022)
EDU 315 (In-Person) – Curriculum and Instruction (Undergraduate, Fall 2021)

EDU 435 (In-person) – Practicum: Elementary Education 1-6 (Undergraduate, Spring 2021) **Note*: As a program supervisor
Directed Study (In-person) – Data Science in Education (Undergraduate, Fall 2022)
Directed Study (In-person) – Teaching Mathematics, Science, and Technology [Secondary Education] (Undergraduate, Fall 2022)

Supervising

EDU 644 (In-person) – Graduate Practicum: GEMS (Math/Science 5-8)
EDU 435 (In-person) – Practicum: Elementary Education 1-6

Syllabus Development *(* Course number is under review)*

EDU 624: Mathematics Teaching & Learning in the Elementary Grades
EDU 625: Number and Operations
EDU 626: Functions and Algebra
EDU 627: Geometry and Measurement
EDU 628: Probability, Statistics, and Data Analysis

Boston College

Instructor

EDUC 7520 (Hybrid) – Mathematics and Technology: Teaching, Learning, Curriculum in the Elementary School (Graduate, Spring 2021)
EDUC 7301 (Online) – Teaching, Curriculum, and Learning Environments (Graduate, Fall 2020)
EDUC 7305 (Online) – Globalization, Migration, and Education (Graduate, Summer 2021)

Teaching Assistant

EDUC 7301 (Online) – Teaching, Curriculum, and Learning Environments (Graduate, 2018)
EDUC 9819 (In-person) – Educational Change: Communication of Innovations (Graduate, 2018)
Supervising Practicums (In-person) – Using a mixed-reality simulation program (Graduate, Fall 2017)

Korea National Open University

Lecturer

Life Development and Education (Undergraduate, 2015, 2016 *Lecture per one semester and mid-term exam evaluator)

PROFESSIONAL DEVELOPMENT

2019 Results from a survey on parental and teacher perception of Portuguese-English bilingual program. Potter Road Elementary School, Framingham, Massachusetts

2017 Collaborative coaching and learning program. Epiphany Middle School, Dorchester, Massachusetts

MENTORING and ADVISING

Mentoring Recognition

2024	Mentor nominee, 2024 Tri-Alpha inaugural induction ceremony and reception at Stonehill (Inductee, Marissa Solari)
2023	Supporting a mentee (RA) for the NCTM scholarship Link
	Selected mentor honoree, 2023 Senior class gift honoree at Stonehill Link
	Mentor nominee, 2023 Tri-Alpha inaugural induction ceremony and reception at Stonehill (Inductee, Gina Herosian)

Academic Advisor

2023 Fall – 2024 Spring	4 graduate advisees (Graduate Math/Science program) & all graduate students in grad teacher education program at Stonehill
2022 Fall – 2023 Spring	36 undergraduate advisees, Stonehill College
2021 Fall – 2022 Spring	19 undergraduate advisees, Stonehill College

Research Mentoring

2022-2023	2 research assistants and 2 teaching assistants, Stonehill College
2021-2022	2 research assistants, Stonehill College
2020-2021	Doctoral student mentor (1 doctoral student), Boston College
2019-2020	4 doctoral students and 3 undergraduate students for the Hyukshin school research project, Boston College
	1 graduate student in the survey team of G. Oliveira's research project

UNIVERSITY SERVICE

Stonehill College

2023-Present	Led development of two new mathematics education programs for teacher licensure in Massachusetts (Mathematics 1 – 6, Mathematics 5 – 8)
2023-Present	Diversity, Equity, and Inclusion Com
2021-Present	Affiliated Faculty, Faculty of Color Association

2022-Present	Faculty Advisor, Stonehill College Dance Club
2022-2023	Assistant Director of Accreditation and Assessment Search Committee, Education Studies Department
2022	Affiliated Faculty, Book Talk (Whistling Vivaldi: How stereotypes affect us and what we can do)

SERVICE TO THE PROFESSION

Committee

2024-2027	Research Committee, The Association of Mathematics Teacher Educators

Ad-Hoc Journal Reviewer

2022-Present	*Mathematics Teacher: Learning and Teaching PK-12*
2022- Present	*Education and Information Technologies*
2022	*Asia Pacific Journal of Education*
2022	*Research in Mathematical Education*
2021- Present	*Journal of Educational Research in Mathematics*

Ad-Hoc Conference Proposal Reviewer

2022	The Association of Mathematics Teacher Educators

Others

2018-2019	Chairperson, Boston College Korean Graduate Student Association
2008-2009	Chairperson, Multicultural Education Club (Activity: Tutoring and mentoring immigrant children), Daegu National University of Education

HONOR, AWARD, & SCHOLARSHIP

2023-Present	Awarded as an Early Career BIPOC Faculty Mentee, The Association of Mathematics Teacher Educators
2022	Selected Mentee, Manuscript Review Group, The Association of Mathematics Teacher Educators
2022 (March)	The "Professor of the Month" Award, National Residence Hall Honorary, Stonehill College, Easton, MA.
2018	The Best Student Presentation Award, Graduate Research Symposium, Lynch School of Education, Boston College, Chestnut Hill, MA
2017-2021	Fully Funded Ph.D. Scholarship — Stipend and Tuition Waiver, Boston College.
2018-2020	Travel Grants at Boston College

	(a) Lynch Doctoral Student Travel Grant 2020 ($500); 2019 ($500); 2018 ($400) (b) Boston College Graduate Student Association (GSA) 2021 ($130); (c) Boston College Graduate Education Association (GEA) 2021 ($125); 2018 ($120)
2011-2012	Superior Academic Performance, Seoul National University
2009-2010	Lecture & Research Scholarship, Seoul National University Superior Academic Performance Scholarship, Daegu National University of Education

CERTIFICATES

2021 (Jun 24-30)	Certificate of Achievement, Computer Science Crash Course 2021, Krause Center for Innovation at Foothill College
2020 (Feb 6-8)	Selected Attendee, 2020 National Assessment of Education Progress (NAEP) Data Training Workshop, American Institutes for Research (AIR)
2007	Teaching Certifications: Elementary School Teacher License, South Korea

PROFESSIONAL AFFILIATIONS

2022-Present	North American Chapter of the International Group for the Psychology of Mathematics Education [PME-NA] Note. Affiliated working group: Conceptualizing the role of technology in equitable mathematics classrooms (Math TechQuity)
2022-Present	American Association of Colleges for Teacher Education [AACTE]
2021-Present	The Association of Mathematics Teacher Educators [AMTE]
2021-Present	National Council of Teachers of Mathematics [NCTM]
2021-Present	Faculty of Color Association [FOCA], Stonehill College
2017-Present	American Educational Research Association [AERA], 2017-present