# **Young Hee Lee**



Assistant Professor in Science Education (Biology)
Graduate School of Education
Dankook University

### **EDUCATION**

- Ed. D. in Curriculum and Instruction, College of Education, University of Houston, Main Campus, 2007
- Concentrations: Science Education, Curriculum and Instruction
- Dissertation: How Do The High School Biology Textbooks Introduce The Nature of Science?
- Advisor: Dr. Eugene Chiappetta
- M.A. in Science Education, School of Education, Ewha Womans University, Seoul, Korea, 2001
- Concentrations: Science Education, Biology Emphasis
- School of Education Scholarship recipient.
- B.A. in Biology Education, School of Education, Dankook University, Seoul, Korea, 1993

#### PROFESSIONAL EXPERIENCE

- Assistant Professor, 2014 Spring- Present, Graduate School of Education, Dankook University, R. O. Korea
- Chair of Biology Education Department in Graduate School of Education, 2015- Present
- Teaching Science Education Courses for Biology, Chemistry, Gifted and Talented Education Programs in College of Education and Graduate School of Education
- Advising Graduate School Students for Certificate Program in Science Education
- Developing the Curriculum and Instruction in Biology Major of Graduate School of Education
- Assistant Professor, 2013 Spring 2014 Fall, College of education, Texas Southern University, U. S. A
- Taught Methodology Course for Pre-Service Teachers in Math and Science Education

#### **Programs**

- Coordinating Program for Science Teachers Certificate in Texas
- Advising Teacher Education Program Candidates in College of Education
- Visiting Assistant Professor, 2008 Fall 2012 Spring, College of Education, University of Houston, U. S. A
- Teaching a Science Method Course of Quest 2 Program in four district clusters
- Teaching Excellence Award Recipient, College of education, University of Houston, 2010
- Developed and implemented science content preparation program for EC-4, 4-8 and 8-12 science TExES exam
- Teaching pre-service teachers TExES exam review sessions for EC-6, 4-8 science and 8-12 biology
- Developed and implemented Course Package for ELED4312 Teaching Science Elementary Schools course as a course required-text
- Program Facilitator, 2008 Spring, College of Education, University of Houston, U. S. A
- Instructed adjunctively a Science Method Course of QUEST 2 Program (The QUEST Program was honored as the Distinguished Program in Teacher Education by the Association of Teacher Educators in 2007.)
- Facilitated in e-classrooms discussion forum for the science method course
- Taught pre-service teachers TExES exam review sessions for EC-4, 4-8, and 8-12 science
- Teaching Assistant, 2005- 2007, College of Education, University of Houston, U. S. A
- Assisted Dr. Wingfield on a Science Method Course of QUEST 2 Program
- Advised pre-service elementary teachers in field experience in the program
- Designed and implemented science content review program for preparing the TExES exam of pre-service elementary teachers
- Impacted greatly on the course development by adding content review program
- Facilitated e-classrooms discussion and students evaluation for the course
- Participated in students portfolio evaluation presentation for the program
- Research Assistant, Fall 2005, Humble School District, Texas, U. S. A
- Participated in field-based Elementary Science Program Evaluation
- Conducted science classroom observation extensively
- Collected and analyzed survey data, using the SPSS program
- Teaching Assistant, Summer 2005, College of Education, University of Houston, U. S. A
- Assisted Dr. Chiappetta on Chemicals and the Environment course to conduct program evaluation
- Collected and analyzed survey data, using the SPSS program
- Public High School Biology Teacher, 1999-2002, Yongin Information & Industrial High School, Yongin City, R. O. Korea
- Taught seniors and juniors for a total of 22 hours of class per week
- Integrated the CAI (Computer Assisted Instrument) program to the curriculum

- Developed an education plan especially suited for the information & industrial high school curriculum
- Received general science teacher certificate issued by the Ministry of Education
- Full Time Instructor, 1993-1999, Jongro Academic Institute, Seoul, R. O. Korea
- Taught biology and general science for a total of 29 hours per week (Jongro Academic Institute is the Korea's Largest academic institution that specializes in preparing high school seniors for the college entrance exam)

#### **PUBLICATIONS**

- Philips, M. C., Vowell, J. E., **Lee**, **Y. H**., & Plankis, B. J. (2015). How do elementary science textbooks present the nature of science? *The Educational Forum*, 79(2), 148-162.
- Lee, Y. H., Moon, S., & Son, Y. A. (2015). Analysis of middle school environmental education textbooks using the environmental literacy based on the four themes of scientific literacy. *Journal of the Korean Society for Environmental Education*, 28(1), 1-14.
- Lee, Y. H. (2015). An analysis of the primary examination for selecting secondary school science teachers in Korea using the US science teachers preparation standards. *Journal of Curriculum Study in Education*, 19(1), 113-136.
- Lee, Y. H. (2014). What do scientists think about the nature of science? exploring views of the nature of science of Korean scientists related with life science area. *Journal of the Korean Association for Science Education*, 34(7), 677-691.
- Lee, Y. H. (2014). Comparative analysis of the presentation of the nature of science [NOS] in Korea and US elementary science textbooks. *Journal of the Korean Association for Science Education*, 34(3), 207-212.
- Lee, Y. H., Son, Y., & Kim, K. (2014). Analysis of the presentation for the nature of science in elementary science textbooks using the four themes of scientific literacy. *Journal of Korean Elementary Science Education*, 33(2), 367-385.
- Lee, Y. H. (2014). Comparative analysis of the presentation of the nature of science in US high school biology and Korea high school science textbooks. *National Teacher Education Journal*, 7(2), 11-20.
- Lee, Y. H. (2013). A mixed-methods analysis of the presentation about the nature of science (NOS) in high school biology textbooks: using both quantitative and qualitative analysis. *National Teacher Education Journal*, 6(1), 85-100.
- Lee, Y. H. (2013). A proposal of inclusive framework of the nature of science (NOS) based on the 4 themes of scientific literacy for K-12 school science. *Journal of the Korean Association for Science Education*, 33(3), 553-569.
- Lee, Y. H. (2013). Nature of science (NOS) presentation in the introductory chapters of Korean high school life science I textbooks using a qualitative content analysis. *Journal of Curriculum Study in Education*, 17(1), 173-197.

- Lee, Y. H. (2012). A review of elementary science textbook analysis research conducted over the past three decades in the United States and analysis of the nature of science in the introductory chapter of U.S. elementary science textbooks. *Journal of Korean Elementary Science Education*, 31(3), 367-385.
- Lee, Y. H. (2004). The bank of biology knowledge, 5<sup>th</sup> ed. Doosan Dong-A Publishing Company, Seoul: Korea.
- Lee, Y. H., Lee, J. S., Kim, E. K., Lee, J. Y., & No, H. J., (2001). Storage of Knowledge (General Science). Doosan Dong-A Company, Seoul, Korea

#### **PRESENTATIONS**

- An analysis of the primary examination for selecting secondary school science teachers in Korea using the US science teachers preparation standards. Paper Presented at the Conference of Korean Association for Science Education, Daejeon, Korea, 2015.
- What do scientists think about the nature of science? exploring views of the nature of science of Korean scientists related with life science area. Paper Presented at the Conference of Korean Association for Science Education, Chunchen, Korea, 2014.
- A proposal of inclusive framework of the nature of science (NOS) based on the 4 themes of scientific literacy for K-12 school science. Paper Presented at the Conference of Korean Association for Science Education, Gwangju, Korea, 2013.
- Nature of science (NOS) presentation in the introductory chapters of Korean high school life science I textbooks using a qualitative content analysis. Paper Presented at the Conference of Korean Association for Science Education, Gwangju, Korea, 2013.
- Preparing technology-integrating educators: Implications for educator preparation programs. Paper Presented at the Conference of Critical Questions in Education Annual Meeting, San Antonio, TX, 2013.
- Effects of use of online forum for problem-solving skills and collaborative construction of knowledge in student teaching. Paper Presented at the Conference of American Educational Research Association Annual Meeting, Orlando, FL, 2013
- How Do Elementary Science Textbooks Present the Nature of Science? Paper Presented at the Conference of National Association for Research in Science Teaching meeting. Indianapolis, IN, 2012
- What level of understanding of the nature of science should we encourage K-12 students to possess? Paper Presented at the Conference of Pacific Circle Consortium 36<sup>th</sup> Annual Conference. Seoul, Korea, 2012
- A vision for new K-12 science education standards: changes from NSES to NGSS. Paper Presented at the International Seminar for Theory and Practice of STEAM Integrated Education. Seoul, Korea, 2012
- How do the U.S. high school biology textbooks introduce the nature of science? Paper

- Presented at the Conference of Korean Association for Science Education. Chunchean, Korea, 2012
- How Do Elementary Science Textbooks Present the Nature of Science? Paper Presented at the Conference of National Association for Research in Science Teaching meeting. Orlando, FL, 2011
- Comparative Analysis of the Presentation of the Nature of Science in U.S. High School Biology and Korea High School General Science Textbooks. Paper Presented at the Conference of National Association for Research in Science Teaching meeting. Philadelphia, PA, 2010
- How Do the High School Biology Textbooks Introduce the Nature of Science. Paper Presented at the Conference of National Association for Research in Science Teaching meeting. Garden Grove, CA, 2009
- Teaching the Nature of Science As Inquiry. Paper Presented at the Conference of Science Teachers Association. Houston, TX, 2005
- Examination of Science Textbooks Published Over The Past 100 Years In The United States.
   Paper Presented at the Conference of National Association for Research in Science Teaching meeting. San Francisco, CA, 2006
- Are You Teaching Authentic Science? Presented at the Metropolitan Association for Teachers of Science Conference. Houston, TX, 2007
- Integrating Literature into your Environmental Science Lessons Presented at the Metropolitan Association for Teacher of Science Conference. Houston, TX, 2008

#### AWARDS AND HONORS

- **Teaching Excellence Award**, College of education, University of Houston, 2010
- NARST Jhumki Basu Equity and Ethics Scholarship Award, National Association for Research in Science Teaching, 2010
- Outstanding Paper Award, National Association for Research in Science Teaching, 2007

## PROFESSIONAL MEMBERSHIPS

- The Korean Association for Science Education (KASE)
- The Korean Society for Environmental Education (KSEE)
- The Korean Society for Biology Education (KSBE)
- National Association for Research in Science Teaching (NARST)
- National Science Teacher Association (NSTA)