

Jiseung Yoo

INTERESTS	Teacher Education, Education Data Science, Natural Language Processing Policy analysis, AI for Education, Online Collaborative Learning, Mixed Methods	
EDUCATION	University of Maryland, College Park (UMD) Ph.D. student in Educational Policy and Leadership	Aug. 2023 - Present
	Ewha Womans University, South Korea Ph.D. candidate in Curriculum and Teacher Education	Mar. 2018 - Aug. 2023
	Ewha Womans University, South Korea M.A. in Elementary Education	Mar. 2015 - Feb. 2017
	Ewha Womans University, South Korea B.A. in Elementary Education	Mar. 2011 - Aug. 2014
RESEARCH	M-Powering Teachers (Aug. 2023-) Role: Research Assistant University of Maryland, College Park PI: <i>Dorottya Demszky</i> (Stanford Univ.), <i>Heather Hill</i> (Harvard Univ.), <i>Jing Liu</i> (UMD) · Developed the research/lab website M-Powering Teachers.com · Designing an NLP model to identify and measure teacher-student interaction in online tutoring	
	Artificial Intelligence Grading System for Science (Nov. 2022 - Sep. 2023) Role: Research Assistant Ministry of Education, Korea PI: <i>Minsu Ha</i> (Seoul National Univ.) <i>Jisun Park</i> (Ewha Univ.) · Deep Learning model for automated classification using LSTM, RNN, BERT · Designed supervised/unsupervised model scoring of free response answers from elementary students · Developed automated formative feedback system using TextRank algorithm	

Last updated on Jan 6, 2024

Youth Media Usage: Deep Learning for prediction, classification, and diagnosis (Mar. 2022 – Mar. 2023)

Role: Research Assistant

Ewha Womans University

PI: *Yoonjeong Choi (Ewha Univ. Dept of Communications)*

- Designed Machine Learning model to detect factors related to YouTube usage

2030 Future Education Report of Korea (2020 - 2021)

Role: Research Assistant

Ministry of Education, Korea

PI: *Hyun Hee Cho (HongIk Univ. Dept of Education)*

- Collected text and image data from Youtube to analyze issues of Future Education
- Designed LDA topic modeling and Sentimental Analysis

School Culture of Seoul Innovation School (2016 - 2018)

Role: Research Assistant

Seoul Metropolitan Office & Education (SMOE)

PI: *Jinyoung Choi (Ewha Univ.) & Kyumg-oh Song (Chosun Univ.)*

A Study on a Democratic and Collaborative Culture of Seoul Hyukshin School

- Analyzed teachers' practices in school reform using Grounded Theory
- Performed Regression analysis on data sets using SPSS to examine supportive factors and hindrances of organizational culture in school reform

PUBLICATIONS

Journal

Yoo, J., Choi, J. & Kim, M. (2023). Analyzing the impact of elementary school students' motivation to use YouTube on YouTube overdependence. *Journal of Education & Culture*, 29(6), 519-538.

Yoo, J. & Kim, M. K. (2023). Using natural language processing to analyze elementary teachers' mathematical pedagogical content knowledge in online community of practice. *Contemporary Educational Technology*, 15(3), ep438.

Yoo, J. & Choi, J. (2021). Analysis of the relationship between democratic and collaborative school culture and teachers' instructional reform: Focusing on the mediating and moderating effects. *Journal of Educational Innovation Research*, 31(4), 21-44.

Yoo, J. & Choi, J. (2017). Elementary teachers' use of an educative curriculum document to support teacher learning: Based on 2015 revised national social studies curriculum. *The Journal of Learner-Centered Curriculum and Instruction*, 17(20), 709-738.

Yoo, J., Park, J., Ha, M., & Darang, M. (in process). Exploring Pre-Service Teachers' Cognitive Processes and Calibration with an Unsupervised Learning-Based Automated Evaluation System

Roh, D., Yoo, J., & Ok, H. (in process). Comparative Study on National Language Curriculum Standards Using Keyword Network Analysis: Focusing on the Area of Digital Literacy.

Book

Cho, H., Cho, H., Um, S., Ko, Y., Yoo, J., & Nam, G. (2020). *2030 Future Education Report of Korea*. Seoul. ParkYoungStory.

PRESENTATION

Ha, M., Yoo, J., & Park, J. "Development automated assessment system using unsupervised learning", Australasian Science Education Research Association, Cairns, (2023, June)

Choi, N. & Yoo, J. "Deep understandings in multicultural education: Developing collaborative integrated curriculum on world music based on the backward design", APSMER, Singapore, (2017, July)

PROFESSIONAL SERVICE

Seoul Dong Gyo Elementary School
Teacher

Seoul, Republic of Korea
Mar. 2022 - present

Seoul Soong Shin Elementary School
Teacher

Seoul, Republic of Korea
Aug. 2015- Feb. 2022

HONORS & AWARDS

Ewha Research Excellence Scholarship (Ph.D.), Ewha Womans University, 2018 - 2022
Admissions Scholarship (full tuition for M.A), Ewha Womans University, 2015-2017
Magna Cum Laude, Ewha Womans University, 2014
Dean's List, Ewha Womans University, 2012, 2013, 2014
Honors Scholarship, Ewha Womans University, 2012, 2013, 2014
Admissions Scholarship (full tuition for B.A), Ewha Womans University, 2011-2014

TECHNICAL SKILLS

Data Science **Advanced** Python, R, SPSS, Gephi

Programming **Advanced** Javascript, node.js, Django
Novice Java, git