

Byoung-gyu Gong

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EDUCATION	<p>PH.D, EDUCATIONAL POLICY AND EVALUATION, MAY 2021 (Expected) Mary Lou Fulton Teachers College, Arizona State University</p> <ul style="list-style-type: none"> ○ Committee: Iveta Silova (Chair), Ruth Wylie, Sherman Dorn, Yi Zheng ○ Dissertation: [Tentative title] Learning without Human? Reconsidering Education in the Rise of New Machine Era <p>M.A., GLOBAL EDUCATION COOPERATION, FEBRUARY 2015 School of Education, Seoul National University</p> <p>B.A., ENGLISH EDUCATION, FEBRUARY 2011 Teachers college, Hankuk University of Foreign Studies</p>
AREAS OF INTEREST	<ul style="list-style-type: none"> ○ Technological change and education ○ Educational big data analytics ○ Online learning data analytics ○ Comparative and international education ○ Environmental education ○ Large-scale international assessment and its analysis ○ Structure of pedagogic knowledge and discourse
AREAS OF ANALYTIC EXPERTISE	<p>NETWORK ANALYSIS</p> <ul style="list-style-type: none"> ○ Measuring the structural distance between documents ○ Measuring network features of centrality, diameter, and homophily ○ Extracting hot topics and cold topics in a time series text network <p>*Online workshop lecture videos for the conference: (1) https://youtu.be/o5-o1EPSWZg, (2) https://youtu.be/aw--pR-WhA</p> <p>*Online workshop lecture Github repository: https://github.com/Arizonagong/vCIES2020_Network-Analysis</p> <p>TEXT MINING</p> <ul style="list-style-type: none"> ○ Web scraping: Collecting web-based large text data ○ Topic modeling: Latent Dirichlet Allocation (LDA) modeling ○ Word embedding: Word2Vec, Text2Vec ○ Natural language processing: Descriptive statistics of big text data <p>ADVANCED STATISTICS</p> <ul style="list-style-type: none"> ○ Multilevel modeling ○ Factor analysis, including Principal Component Analysis (PCA) ○ Multiple regression ○ Experimental research

ANALYTIC SKILLS	<ul style="list-style-type: none"> ○ Advanced knowledge and skill in R programming language ○ Familiarity with Python and SQL language ○ Ability to visualize data for communication ○ Experience with big data management ○ Experience with data pre-processing
PROFESSIONAL EXPERIENCE	<p>LECTURER (Designated) <i>Center for Advanced Studies in Global Education, Arizona State University, January 2021 – May 2021</i></p> <ul style="list-style-type: none"> ○ Teaching online remote course of statistics and data analytics for the staffs of Pratham, an Indian education NGO <p>RESEARCH ASSISTANT <i>Mary Lou Fulton Teachers College, Arizona State University, August 2016 –Present</i></p> <ul style="list-style-type: none"> ○ A multilevel analysis of the OECD PISA data (Current) ○ Program evaluation of the ASU teacher education program ○ Program evaluation of the Saudi Arabian teachers’ professional development program with an experimental design <p>TEACHING ASSISTANT <i>Mary Lou Fulton Teachers College, Arizona State University, January 2020 – May 2020</i></p> <ul style="list-style-type: none"> ○ Taught doctoral student class of EPE 691 - Research Design <p>RESEARCH ASSISTANT <i>Korea Research Institute of Vocational Education and Training (KRIVET), April 2013 – June 2016</i></p> <ul style="list-style-type: none"> ○ Designed curriculum of the technical colleges of Botswana and Uzbekistan <p>RESEARCH ASSISTANT <i>Korea Educational Development Institute (KEDI), October 2011 – July 2012</i></p> <ul style="list-style-type: none"> ○ Planned national strategy for the international education cooperation
SERVICE	<p>STUDENT PLANNING AND SUPPORT COMMITTEE Conference of the Comparative and International Education Society 2020 (CIES 2020) <i>July 2019 – March 2020</i> Site URL: https://cies2020.org/</p> <p>VALUNTEER Conference of Learning Analytics, Spring 2019 Site URL: https://lak19.solaresearch.org/</p>

SECTION EDITOR

Current Issues of Education (CIE), August 2018 - May 2019

Site URL: <https://cie.asu.edu/ojs/index.php/cieatasu>

PLANNING AND SUPPORT COMMITTEE

Symposium of Global Learning Metrics, Fall 2016, 2018

Site URL: <https://education.asu.edu/faculty-and-research/centers-and-more/casge-home/global-learning-metrics>

PUBLICATIONS

*Indicates first author

JOURNAL PAPERS

[J.3] **Gong, B.***, Zheng, Y. (under review). Exploring relationship between environmental knowledge, attitude, and ecological footprint: Multilevel analysis. *Education Policy Analysis Archive*.

[J.2] Amrein-Beardsley, A., **Gong, B.**, Collins, C., Demps, D., Ikegwuonu, E., Salinas, S., & Santa-Ramirez, S. (accepted). Supporting student teachers for student-to-teacher success: An evaluation of a large, college of education's student support process. *Action in Teacher Education*.

[J.1] Yoo, S and **Gong, B.** (2015). A Study on critical issues of higher education academic degree recognition between Korea and Russia, *Korean Comparative Education Society*, 25 (3), 285-317 (published in Korean).

MANUSCRIPT IN PREPARATION

[P.1] GONG, B. (60% drafted). Purpose of education: Text mining and topic modeling of American schools' mission statement. Will be submitted to *Educational Administration Quarterly*.

BOOK AND MEDIA REVIEW

Chachkhiani, K., Goebel, J., **Gong, B.** Palandjian, G., Pretti, E., Silova, I., & Vitrukh, M. (2020). Film Review: Meriesonne, E. (Producer), & Terranova, F. (Director). (2016). Donna Haraway: Story Telling for Earthly Survival [Motion picture]. USA: Icarus Films. Accepted for publication in *Comparative Education Review* (November 2019).

BOOK CHAPTER

[B.1] **Gong, B.** (2020). Middlemen in the global education marketplace: The role of South Korea in Uzbekistan's education transformations. In Iveta Silova (Ed.), *Globalization on the Margins: Education and Postsocialist Transformations in Central Asia*. Charlotte: Information Age Publishing.

CONFERENCE PRESENTATIONS

[C.8] **Gong, B.** (2020, May) We are all machines: Reconsidering education in the rise of new machine era. Paper presented for presentation at the Annual Meeting of the Comparative & International Education Society (CIES), Miami, FL.

[C.7] Yi Zheng & **Gong, B.** (2020, April) Applying data science to educational and psychological measurement. Paper presentation at the WIDS Conference, Tucson, AZ.

[C.6] **Gong, B.***, Collins, C., Amrein-Beardsley, A., & Khan, R. (2020, May). A program evaluation of an international collaboration to better train, support, and prepare teachers in Saudi Arabia. Paper presentation at the Annual Meeting of the Comparative & International Education Society (CIES), Miami, FL.

[C.5] **Gong, B.** (2019, April), The question of translatability of education in comparative and international education studies, *Round table session presented at the annual conference of Comparative International Education Society*, San Francisco (CIES), CA.

[C.4] **Gong, B.** (2017, May), From independence to dependency: Critical incident analysis of a senior government official of Botswana, *Paper session presented at the annual conference of International Conference of Qualitative Inquiry*, Urbane-Champaign, IL.

[C.3] **Gong, B.** (2017, March), Hidden agents and dimensions of education: Revisiting and reinterpreting Botswana education, *Paper session presented at the annual conference of Comparative International Education Society (CIES)*, Atlanta, GA.

[C.2] **Gong, B.** (2015, October), Local dynamics of policy borrowing practice: Formulation of 'cross-national attraction' in a borrowing process of the Botswana Technical Education Program, *Paper session presented at the annual conference of International Conference on Education Research*, Seoul, South Korea.

[C.1] Jung, Kim, Seo and **Gong, B** (2015, October). A customized project approach for the UNESCO BEAR Project in Botswana: Lessons learned, *Paper session presented at the annual conference of Korea Association of International Development and Cooperation 2015*, Seoul, Korea (published in Korean).

WORKSHOP PRESENTATION

Gong, B. (April, 2020). We are all connected: Network data analysis and visualization. Workshop proposal accepted for the Annual Meeting of the Comparative & International Education Society (CIES), Miami, FL.

Gong, B. (November 16, 2018) Mixed methods: A student-led workshop. Workshop hosted by Teachers College Doctoral Student Council (TCDC), Tempe, AZ.

ESSAY AND OPINION

Gong, B. (2015). Promoting Korean experience in the absence of international narratives on educational development, *NORRAG News* 52, 41-42
