Biyao Liang 梁碧瑶

Assistant Professor
The University of Hong Kong
Teacher Education and Learning Leadership | Faculty of Education

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WORK EXPERIENCE

2022-present	Assistant Professor	The University of Hong Kong
2021-2022	Postdoctoral Fellow	The Chinese University of Hong Kong
2020-2021	Graduate Teaching Assistant	University of Georgia, Athens, GA, USA
2015-2021	Graduate Research Assistant	University of Georgia, Athens, GA, USA
2019-2020	Instructor of Record	University of Georgia, Athens, GA, USA
2015	SAT Mathematics Teacher	Dongguan Foreign Language School, China

EDUCATION

2021-2022 **Postdoctoral Fellow (Funded by RGC)**
The Chinese University of Hong Kong, Hong Kong SAR, China
Supervisor: Oi-Lam Ng

2015-2021 **Ph.D. in Mathematics Education**
University of Georgia, Athens, GA, U.S.A.
Dissertation: *Learning About and Learning From Students: Two Teachers' Constructions of Students' Mathematical Meanings Through Student-Teacher Interactions* [PDF]
Committee Members: Kevin C. Moore (Chair); Amy Ellis, Cameron O'Neill Byerley, Jaime Marie Diamond, Carlos Castillo-Garsow

2012-2013 **Non-degree/International Exchange, Secondary Mathematics Education**
Kansas State University, Manhattan, KS, U.S.A.
Mentors: Andrew Bennett, Carlos Castillo-Garsow, Sherri Martinie

2010-2015 **B.S. in Mathematics and Applied Mathematics**
South China Normal University, Guangzhou, China
Teaching Certificate: Chinese Secondary Mathematics Teacher License
Thesis (Outstanding Thesis Award): *A Review of Quantitative Reasoning Theory: From Word Problems to Mathematical Modeling* [PDF]
Thesis Advisor: Xiaoya He

RESEARCH INTERESTS AND EXPERTISE

- Teacher Knowledge of Students' Mathematical Meanings
- Student-Teacher Interactions, Student-Student Interactions
- Students and Teachers' Mathematical Cognition (Algebra, Geometry, Pre-calculus, STEM)
- Quantitative and Covariational Reasoning, Computational Thinking
- Professional Development, Teacher Change
- Radical Constructivism, Piagetian Theories
- Constructivist Teaching Experiment, Clinical Interview, Video-Stimulated Recall Interview

RESEARCH EXPERIENCE

Supporting Hong Kong Ethnic Minority Learners' Multimodal Mathematics Learning Through Responsive Teaching in Technology-Enhanced Environments GRF #14603521, P.I.: Oi-Lam Ng	2021-2022
Mathematical Problem Solving through Digital Making: Envisioning a Computationally Enhanced Mathematics Curriculum in Hong Kong's Primary and Secondary Schools GRF #14603720, P.I.: Oi-Lam Ng	2021-2022
Advancing Secondary Mathematics Teachers' Quantitative Reasoning (website) NSF #1350342, P.I.: Kevin C. Moore, University of Georgia	2015-2021
Generalization Across Multiple Mathematical Areas (GAMMA) NSF #1419973, P.I.: Amy Ellis, University of Georgia	2016-2017
Diagnosing Chinese In-service Teachers' Multiplicative Reasoning (website) Led by Rui Kang, Georgia College & State University	2017-2020
Eye-tracking Dynamic Geometry Proofs Mentors: Andrew Bennett & Carlos Castillo-Garsow, Q-Center at Kansas State University	2012-2013
Technology-Assisted Problem Solving on Conic Sections P.I.: Biyao Liang, undergraduate research grant funded by South China Normal University	2012-2013

PUBLICATIONS (* indicates corresponding author)

Refereed Journal Articles

1. **Liang, B.*** & Moore, K. C. (2021). Figurative and operative partitioning activity: Students' meanings for amounts of change in covarying quantities. *Mathematical Thinking and Learning*, *23*(4), 291-317. https://doi.org/10.1080/10986065.2020.1789930

2. **Liang, B.*** & Castillo-Garsow, C. (2020). Undergraduate students' meanings for central angle and inscribed angle. *The Mathematics Educator, 29*(1), 53-84. https://openjournals.libs.uga.edu/tme/article/view/2093/2599

3. Moore, K. C.*, Stevens, I. E., Paoletti, T., Hobson, N. L. F., & **Liang, B.** (2019). Pre-service teachers' figurative and operative graphing actions. *The Journal of Mathematical Behavior*, 56, Article 100692. https://doi.org/10.1016/j.jmathb.2019.01.008

Book Chapters

1. Ng, O.*, **Liang, B.** & Leung, A. (in press). Using first- and second-order models to characterise in-service teachers' video-aided reflection on teaching and learning with 3D Pens. In A. Clark-Wilson, O. Robutti, & N. Sinclair (Eds.), *The Mathematics Teacher in the Digital Era* (2nd ed.). Springer.

2. Moore, K. C.*, **Liang, B.**, Stevens, I. E., Tasova, H., & Paoletti, T. (in press). Abstracted quantitative structures: Using quantitative reasoning to define concept construction. In G. K. Akar, İ. Ö. Zembat, S. Arslan, & P. W. Thompson (Eds.), *Quantitative Reasoning in Mathematics and Science Education*. Springer.

Published Curricula (Online)

1. Moore, K. C., **Liang, B.**, Tasova, H. I., & Stevens, I. E. (2019). *Advancing reasoning covariationally (ARC) curriculum*. Athens, GA. [Link]

In-Progress Work

1. **Liang, B.**, Ng, O.*, & Chan, Y. (2022). Seeing the continuity behind "double discontinuity": Investigating Hong Kong prospective mathematics teachers' secondary–tertiary transition [Manuscript submitted for publication].

2. Moore, K. C.*, Stevens, I., Tasova, H., & **Liang, B.** (2022). Operationalizing figurative and operative framings of thought [Manuscript submitted for publication].

3. Ye, H., **Liang, B.**, & Ng, O.* (2022). Integration of computational thinking in K-12 mathematics education: A systematic review on CT-based mathematics instruction and student learning [Manuscript submitted for publication].

4. **Liang, B.*** (2022). Mental processes underlying teachers' learning from student thinking [Manuscript submitted for publication].

5. Ng, O., **Liang, B.***, Chan, A., Ho, T. C., Lam, L. P., Law, M. H., Li, E. M., Lu, T. Y (2022). A collective reflection on the transition from secondary to university mathematics through the lens "double discontinuity" by Felix Klein [Manuscript submitted for publication].

6. Ng, O.*, Sinclair, N., Ferrara, F. & **Liang, B.** (2022). Transforming arithmetic through digital resources [Manuscript submitted for publication].

7. **Liang, B.*** & Moore. K. C. (2022). A theoretical and empirical account to mathematics teachers' productive struggles with student thinking [Manuscript in preparation].

8. **Liang, B.*** & Moore. K. C. (2021). Learning through learners: Infusing students' mathematics into mathematics content courses [Manuscript in preparation].

Refereed Conference Proceedings

1. Ye, H., Ng, O., & **Liang, B.** (under review). What is a triangle? Children's conception of triangle from a realistic mathematics education perspective. In ==EDITORS== (Eds.), *Proceedings of the 43rd Annual Conference of the Mathematics Education Research Group of Australiasia.* Launceston, Australia. [PDF]

2. **Liang, B.** & Moore, K. C. (2021). Theorizing teachers' learning of students' mathematical thinking in the context of student-teacher interaction. *Paper presented at the 14th International Congress on Mathematics Education (ICME). Shanghai, China.* [PDF]

3. **Liang, B.** (2020). Theorizing teachers' mathematical learning in the context of student-teacher interaction: A lens of decentering. In S. S. Karunakaran, Z. Reed, & A. Higgins (Eds.), *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 733-742). Boston, MA. [PDF]

4. **Liang, B.**, Ying, Y., & Moore, K. C. (2020). A conceptual analysis for optimizing two-variable functions in linear programming. In S. S. Karunakaran, Z. Reed, & A. Higgins (Eds.), *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 374-381). Boston, MA. [PDF]

5. Moore, K. C., **Liang, B.**, Stevens, I. E., Tasova, H. I., Paoletti, T., & Ying, Y. (2020). A quantitative reasoning framing of concept construction. In S. S. Karunakaran, Z. Reed, & A. Higgins (Eds.), *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 743-752). Boston, MA. [PDF]

6. Tasova, H., **Liang, B.**, & Moore, K. C. (2020). The role of lines and points in the construction of emergent shape thinking. In S. S. Karunakaran, Z. Reed, & A. Higgins (Eds.), *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 562-570). Boston, MA. [PDF]

7. Moore, K. C., **Liang, B.**, Tasova, H. I., & Stevens, I. E. (2019). Abstracted quantitative structures. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the 41st Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1879-1883). St. Louis, MO. [PDF-Long] [PDF-Short]

8. **Liang, B.** (2019). A radical constructivist model of teachers' mathematical learning through student-teacher interaction. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the 41st Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1814-1819). St. Louis, MO. [PDF-Long] [PDF-Short]

9. **Liang, B.** (2019). Construction and application perspective: A review of research on teacher knowledge relevant to student-teacher interaction. In A. Weinberg, D. Moore-Russo, H. Soto & M. Wawro (Eds.), *Proceedings of the Twenty-Second Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education* (pp. 35-43). Oklahoma City, OK. [PDF]

10. Tasova. H., **Liang, B.**, & Moore, K. C. (2019). Generalizing actions of forming: Identifying patterns and relationships between quantities. In A. Weinberg, D. Moore-Russo, H. Soto & M. Wawro (Eds.), *Proceedings of the Twenty-Second Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education* (pp. 602-610). Oklahoma City, OK. [PDF]

11. **Liang, B.**, Stevens, I. E., Tasova. H., & Moore, K. C. (2018). Magnitude reasoning: Characterizing a pre-calculus student's quantitative comparison of covarying magnitudes. In T. Hodges, G. J. Roy & A. M. Tyminski (Eds.), *Proceedings of the 40th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 608-611). Greenville, NC: University of South Carolina & Clemson University. [PDF]

12. **Liang, B.** & Moore, K. C. (2018). Figurative thought and a student's reasoning about "amounts" of change. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education* (pp. 271-285)*.* San Diego, CA. [PDF]

13. **Liang, B.** & Castillo-Garsow, C. (2018). Themes in undergraduate students' conceptions of central angle and inscribed angle. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, and S. Brown (Eds.), *Proceedings of the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education* (pp.549-556). San Diego, CA. [PDF]

14. **Liang, B.** & Moore, K. C. (2017). Reasoning with change as it relates to partitioning activity. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 303-306). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators. [PDF]

15. Stevens, I. E., Paoletti, T., Moore, K. C., **Liang, B.** & Hardison, H. (2017). Principles for designing tasks that promote covariational reasoning. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro & S. Brown (Eds.), *Proceedings of the Twentieth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education* (pp. 928-936). San Diego, CA. [PDF]

Published Abstracts

1. Moore, K. C., Stevens, I. E., **Liang, B.**, & Tasova, H. I. (2019). Concept construction and abstracted quantitative structures. In C. D. Savage, G. Benkart, B. D. Boe, M. L. Lapidus, & S. H. Weintraub. *Abstracts of Papers Presented to the American Mathematical Society*, 40(1), 421. [PDF]

2. Tasova, H. I., **Liang, B.**, Stevens, I. E., & Moore, K. C. (2019). Characterizing two undergraduate students' quantitative comparisons of covarying quantities' magnitudes. In C. D. Savage, G. Benkart, B. D. Boe, M. L. Lapidus, & S. H. Weintraub. *Abstracts of Papers Presented to the American Mathematical Society*, 40(1), 421. [PDF]

3. **Liang, B.** & Moore, K. C. (2017). Rate of change as a feature of partitioning activity: The case of Lydia. In C. D. Savage, G. Benkart, B. D. Boe, M. L. Lapidus, & S. H. Weintraub. *Abstracts of Papers Presented to the American Mathematical Society*, 38(1), 462. [PDF]

4. **Liang, B.** & Castillo-Garsow, C. (2017). Pre-service secondary teachers' understandings of central angle and inscribed angle. In C. D. Savage, G. Benkart, B. D. Boe, M. L. Lapidus, & S. H. Weintraub. *Abstracts of Papers Presented to the American Mathematical Society* 38(1), 465 [PDF]

PRESENTATIONS

Research Presentations

1. Ye, H., Ng, O., & **Liang, B.** (2022, July 3). *What is a triangle? Children's conception of triangle from a realistic mathematics education perspective* [Poster Presentation]. The 43rd

Annual Conference of the Mathematics Education Research Group of Australiasia. Launceston, Australia. [PDF]

2. Tsoi, D., Chan, A., Law, M., Liu, A., Ho, T., **Liang, B., &** Ng, O. (2022, Feburary 12). *Integration of programming, problem solving and recreational mathematics for a computationally enhanced mathematics education* [PowerPoint Slides]. Hong Kong Mathematics Education Conference 2021/22, Hong Kong SAR, China. [Slides]

3. **Liang, B.** (2021, December 18). 因材施教，我们做到了吗？——谈谈激进建构主义对数学教学和教研的启示. 第八届新青年数学教师发展云论坛 [Slides]

4. **Liang, B.** (2021, Oct. 20). *Constructivist approaches to mathematics education research* [Research Seminar]. The Chinese University of Hong Kong, Hong Kong SAR, China. [Slides]

5. **Liang, B.** (2021, July 15). *Learning through learners: Theoretical and methodological advancements for studying teachers' learning of students' mathematical thinking* [Research Seminar]. University of Hong Kong, Hong Kong SAR, China. [Slides]

6. **Liang, B**. & Moore, K. (2021, July 13). *Theorizing teachers' learning of students' mathematical thinking in the context of student-teacher interaction* [Paper Presentation]. The 14th International Congress on Mathematics Education (ICME). Shanghai, China. [Slides]

7. **Liang, B.** (2021, April 9). *Learning about and learning from students: Two teachers' constructions of students' mathematical meanings though student-teacher interactions* [PowerPoint Slides]. Department of Mathematics and Science Education, University of Georgia. [Slides]

8. **Liang, B.** (2020, December). 数学教师在师生互动中对学生数学认知的建构 [Mathematics teachers' constructions' of students' mathematical thinking through student-teacher interactions]. 北京师范大学珠海校区青年学者论坛未来教育学院分论坛 [Slides]

9. **Liang, B.** (2020, February). *Theorizing teachers' mathematical learning in the context of student-teacher interaction: A lens of decentering*. Paper presented at the Twenty-Third Annual Special Interest Group of the Mathematical Association of America Conference on Research in Undergraduate Mathematics Education. Boston, MA. [Slides]

10. **Liang, B.**, Ying, Y., & Moore, K. C. (2020, February). *A conceptual analysis for optimizing two-variable functions in linear programming*. Paper presented at the Twenty-Third Annual Special Interest Group of the Mathematical Association of America Conference on Research in Undergraduate Mathematics Education. Boston, MA. [Slides]

11. Moore, K. C., **Liang, B.**, Stevens, I. E., Tasova, H. I., Paoletti, T., & Ying, Y. (2020, February). *A quantitative reasoning framing of concept construction*. Paper presented at the Twenty-Third Annual Special Interest Group of the Mathematical Association of America Conference on Research in Undergraduate Mathematics Education. Boston, MA. [Slides]

12. Tasova, H., **Liang, B**., & Moore, K. C. (2020, February). *The role of line and points in the construction of emergent shape thinking*. Paper presented at the Twenty-Third Annual Special Interest Group of the Mathematical Association of America Conference on Research in Undergraduate Mathematics Education. Boston, MA. [Slides]

13. **Liang, B.** (2019, November). *A radical constructivist model of teachers' mathematical learning through student-teacher interaction*. Paper presented at the 41st Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. St. Louis, MO. [Slides]

14. Moore, K. C., **Liang, B.**, Tasova, H. I., & Stevens, I. E. (2019, November). *Abstracted quantitative structures*. Paper presented at the 41st Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. St. Louis, MO. [Slides]

15. **Liang, B.** (2019, February). *Construction and application perspective: A review of research on teacher knowledge relevant to student-teacher interaction*. Paper presented at the Twenty-Second Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education. Oklahoma City, OK. [Slides]

16. Tasova. H., **Liang, B.,** & Moore, K. C. (2019, February). *Generalizing actions of forming: Identifying patterns and relationships between quantities*. Paper presented at the Twenty-Second Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education. Oklahoma City, OK. [Slides]

17. Moore, K. C., Stevens, I. E., **Liang, B.**, & Tasova, H. I. (2019, January). *Concept construction and abstracted quantitative structures*. Abstract of paper presented to the American Mathematical Society. Baltimore, MD. [Slides]

18. Tasova, H. I., **Liang, B.**, Stevens, I. E., & Moore, K. C. (2019, January). *Characterizing two undergraduate students' quantitative comparisons of covarying quantities' magnitudes*. Abstract of paper presented to the American Mathematical Society. Baltimore, MD. [Slides]

19. **Liang, B.**, Stevens, I. E., Tasova. H., & Moore, K. C. (2018, November). *Magnitude reasoning: Characterizing a pre-calculus student's quantitative comparison of covarying magnitudes*. Paper presented at the 40th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Greenville, NC. [Slides]

20. **Liang, B.** & Moore, K. C. (2018, February). *Figurative thought and a student's reasoning about "amounts" of change*. Paper presented at the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education. San Diego, CA. [Slides]

21. **Liang, B.** & Castillo-Garsow, C. (2018, February). *Themes in undergraduate students' conceptions of central angle and inscribed angle*. Paper presented at the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education. San Diego, CA. [Slides]

22. **Liang, B.**, Stevens, I. E., & Tasova, H. I. (2018, March). *Documenting college students' meanings for partitioning activity.* Poster presented at the 2018 College of Education Research Conference at University of Georgia. Athens, GA. [Poster]

23. **Liang, B.** & Moore, K. C. (2017, September). *Reasoning with change as it relates to partitioning activity*. Paper presented at the 39th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Indianapolis, IN. [Slides]

24. Stevens, I. E., Paoletti, T., Moore, K. C., **Liang, B.** & Hardison, H. (2017, February). *Principles for designing tasks that promote covariational reasoning*. Paper presented at the Twentieth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education. San Diego, CA. [Slides]

25. **Liang, B.** & Moore, K. C. (2017, January). *Rate of change as a feature of partitioning activity: The case of Lydia*. Abstract of paper presented to the American Mathematical Society. Atlanta, GA. [Slides]

26. **Liang, B.** & Castillo-Garsow, C. (2017, January). *Pre-service secondary teachers' understandings of central angle and inscribed angle*. Abstract of paper presented to the American Mathematical Society. Atlanta, GA. [Slides]

27. Stevens, I. E. & **Liang, B.** (2016, October). *Exploring the mathematics of Ferris Wheel.* Presentation at the 10th Georgia Association of Mathematics Teacher Educators (GAMTE) Annual Conference. Eatonton, GA. [Slides]

Professional Development

1. Tasova. H. I. & **Liang, B.** (2019, October). *Reinventing the wheel: Trigonometric functions*. Presentation at the 60th Georgia Mathematics Conference (GMC). Eatonton, GA. [Slides]

2. Stevens, I. E. & **Liang, B.** (2017, October). *Exploring linear equations using various coordinate systems*. Presentation at the 58th Georgia Mathematics Conference (GMC). Eatonton, GA. [Slides]

3. Stevens, I. E. & **Liang, B.** (2016, October). *Exploring mathematical relationships of an amusement park ride*. Presentation at the 57th Georgia Mathematics Conference (GMC). Eatonton, GA. [Slides]

CLASSROOM EXPERIENCE

The University of Hong Kong

EDUC 6718 Method course: Mathematics (Secondary)   (Upcoming) Fall 2022

EDUC 6790 Professional Practicum   (Upcoming) Fall 2022

The Chinese University of Hong Kong

Instructor of Record

BMED 3091 Contemporary Issues in Mathematics Education   Fall 2021

Internship

BMED 3021 Mathematics Curriculum and Teaching: Instructional Technology
and Design of STEM Learning Activities   Fall 2021

University of Georgia

Instructor of Record

EMAT 4810 Connections in Secondary Mathematics I [Evaluation: 4.5/5]   Spring 2020
- First content course offered to prospective secondary teachers; focused on functions, trigonometry, and graphing

MATH 1113 Precalculus   Fall 2019
- Offered to undergraduate students by the mathematics department; focused on linear, quadratic, exponential, logarithmic, trigonometric, and inverse functions

<u>Teaching Assistant</u>

EMAT 3410 Mathematics Teaching and Curriculum in PreK-5th Grade   Spring 2021
- TA for Jamie Diamond
- Second content/pedagogy course offered to prospective elementary teachers; focused on rational number, geometry, measurement, data analysis, and algebra

EMAT 7460 Student Teaching in Secondary School Mathematics   Fall 2020
- Student Teaching Coordinator: Kelly Edenfield
- Supervisor of one MAT student's student teaching in Algebra 2 classrooms

EMAT 3400 Children's Mathematical Learning   Fall 2020
- TA for Megan Wongkamalasai
- First content/pedagogy course offered to prospective elementary teachers; focused on number system, counting, and arithmetic

EMAT 3700/4810 Connections in Secondary Mathematics I   Fall 2015, Spring 2016, 17, 18, 19
- TA for Kevin Moore and Irma Stevens
- First content course offered to prospective secondary teachers; focused on functions, trigonometry, and graphing

<u>Internship</u>

EMAT 4910 Connections in Secondary Mathematics III   Spring 2021
- Intern for Cameron Byerley
- Third content course offered to prospective secondary teachers; focused on similarity, transformations, probability, statistics, geometry, and measurement

EMAT 3800/4860 Connections in Secondary Mathematics II   Spring 2016, Fall 2017, 20
- Intern for Andrew Izsák and Cameron Byerley
- Second content course offered to prospective secondary teachers; focused on fractions, ratios, proportions, and measurement

EMAT 4800/4800L Teaching Secondary School Mathematics   Spring 2018
- Intern for Jonathan Foster
- First pedagogy course offered to prospective secondary teachers (accompanied by a practicum component); focused on learning, student thinking, and task design

MATH 5020 Arithmetic for Middle School Teachers   Fall 2017
- Intern for Sybilla Beckmann
- First content course offered to prospective middle grades teachers; focused on numbers and arithmetic

K-12 Classroom Experience

SAT Mathematics Teacher   Spring 2015
Dongguan Foreign Language School, Dongguan, Guangdong, China

Student Teacher, 10th Grade Mathematics   Fall 2014
Dongguan High School, Dongguan, Guangdong, China

Practicum in Algebra 1, Geometry, Algebra 2, AP Statistics, AP Calculus   Spring 2013
Manhattan High School, Manhattan, KS, USA

Practicum in Integrated Mathematics 2, Integrated Mathematics 4   Spring 2013
Wamego High School, Wamego, KS, USA

Practicum in 7th Grade Middle Math & Algebra 1   Fall 2012
Eisenhower Middle School, Manhattan, KS, USA

Math and Science Tutor in 7th Grade and 8th Grade after-school program   Fall 2012
Anthony Middle School, Manhattan, KS, USA

HONORS, AWARDS, FUNDING

The Chinese University of Hong Kong Research Fellowship Scheme	2021/22
2021 AMTE Susan Gay Travel Scholarship	2020
Graduate Education Advancement Board Fellowship	2020
University of Georgia Dissertation Completion Award (Departmental Nominee)	2020
2020 NAEd/Spencer Dissertation Fellowship (Applicant)	2019
Mathematics and Science Education Travel Award	2018, 2019
Graduate School Student Domestic Travel Award	2017, 2019, 2020
Dr. Thomas Cooney Graduate Student Travel Award	2017, 2018, 2019, 2020
Denise Spangler's Professional Endowment	2018
100 Honor Graduates of South China Normal University (Class of 2015)	2015
Meritorious Winner of the International Mathematical Contest in Modeling (MCM)	2013
First Prize, Mathematics Teaching Competition of School of Mathematical Sciences at South China Normal University	2012, 2014

PROFESSIONAL SERVICES

Journal Reviewer

- *The Mathematics Educator*	2017-present
- *The Journal of Mathematical Behavior*	2021-present
- *Educational Studies in Mathematics*	2022-present
- *Digital Experiences in Mathematics Education*	2022-present

Conference Proposal Reviewer, *PME-NA, SIGMAA-RUME*   2017-present

Book Chapter Reviewer, Leatham, K. R. (2019). *Designing, Conducting, and
Publishing Quality Research in Mathematics Education*. Switzerland: Springer   2019

Colloquium Chair, *Mathematics Education Student Association (MESA) at UGA*   2018-2019
- recruited mathematics education researchers to present their work in colloquium format at UGA campus
- made arrangements for a speaker's travel and accommodations in association with a colloquium

LANGUAGE PROFICIENCY

Cantonese (native), Mandarin (native), English

REFERENCES

Kevin Moore, Professor, Department of Mathematics and Science Education, University of
Georgia, 105 Aderhold Hall, Athens, GA, USA, 30602, kvcmoore@uga.edu

Carlos Castillo-Garsow, Associate Professor, Department of Mathematics, Eastern Washington University, 216 Kingston Hall, Cheney, WA, USA, 99004, ccastillogarsow@ewu.edu

Amy Ellis, Professor, Department of Mathematics and Science Education, University of Georgia, 105 Aderhold Hall, Athens, GA, USA, 0602, amyellis@uga.edu

Oi-Lam Ng, Assistant Professor, Department of Curriculum and Instruction, The Chinese University of Hong Kong, 311 Ho Tin Building, Shatin, Hong Kong SAR, China, oilamn@cuhk.edu.hk