



**Curriculum Vita
September 2022**

Instructor: Shifang Tang, Assistant Professor

Academic Department: Psychology and Special Education

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Texas A&M University-Commerce
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EDUCATION

<i>Ph.D. in Educational Psychology – ESL/Bilingual Education</i>	
Texas A&M University, College Station	2018
<i>M.A. in Linguistics and Applied Linguistics</i>	
HuaZhong University of Science and Technology (HUST)	2007
<i>B.A. in Scientific English</i>	
Hubei University of Technology	2002

TEACHING EXPERIENCE

2022-Present, Assistant Professor, Texas A&M University-Commerce (1 graduate and 1 undergraduate course)

Learning Processes and Development (PSY 300; online)
Semesters: Fall 2022

Introduction to Educational Psychology (PSY 505; online)
Semesters: Fall 2022

2018-2022, Visiting Lecturer, Texas A&M University-College Station (3 graduate courses)

Bilingual Assessment and Monitoring Students (BIED 610; online)

Semesters: Spring 2019 (Course Evaluations: 4.81 out 5), Spring 2021, Spring 2022
 ESL for International and Intercultural Settings (EDCI 614; face-to-face)
 Semester: Spring 2020 (Course Evaluations: 4.64 out 5)
 Program Evaluation in School and Clinic (EPSY 631; online)
 Semester: Fall 2020

2002-2011, Senior Lecturer, Hubei University of Technology (11 EFL undergraduate courses)
 College English (face to face; hybrid)
 Semesters: Fall and Spring, 2002-2011
 Testing in Applied Linguistics (face-to-face)
 Semester: Spring 2007
 Oral English (face-to-face)
 Semesters: Fall 2005, Spring 2006, Fall 2006, Spring 2007
 Japanese I (face-to-face)
 Semester: Fall 2005

PUBLICATIONS

- 20) **Tang, S.**, Irby, B., Tong, F., & Lara-Alecio, R. (2021). The effects of the cooperative/collaborative/peer-tutoring strategies on English learners' reading and speaking proficiency in an English-medium context: A research synthesis. *Sage Open*. [SSCI, 2021 Impact Factor: 2.032]
- 19) **Tang, S.**, Tong, F., Irby, B, Lara-Alecio, R. (2021). Bilingual teachers' application of the cooperative/collaborative/peer-tutoring strategies in teaching cognitive content in a randomized control study. *International Journal of Bilingual Education and Bilingualism*. [SSCI, 2021 Impact Factor: 3.165]
- 18) Guo, H., Tong, F., Wang, Z., **Tang, S.**, Yoon, M., Ming, Y., & Yu, X. (2021). Examining self-regulated learning strategy model: A measurement invariance analysis of MSLQ-CAL among college students in China. *Sustainability*, 10(11), 4230. [SCI, 2021 Impact Factor: 3.251; role: data curation; formal analysis; methodology; writing- original drafting, reviewing and editing].
- 17) Irby, B. J., Tong, F., Lara-Alecio, R., **Tang, S.**, Guerrero, C., Wang, Z., & Zhen, F. (2021). Investigating the impact of literacy-infused science intervention on economically challenged students' science achievement: A case study from a rural district in Texas. *Science Insights Education Frontiers*, 9(1), 1123-1141. [role: formal analysis; writing- original drafting, reviewing, and editing]
- 16) **Tang, S.**, Wang, Z., & Sutton-Jones, K. (2021). A multi-level analysis of upper elementary students' performance on the STAAR reading exam: Comparing growth trajectories of rural and non-rural school districts. *Educational Studies*. [SSCI, 2021 Impact Factor: 1.5]

- 15) **Tang, S.,** Wang, Z., & Sutton-Jones, K. (2021). An exploratory study of the impact of district-level characteristics on Texas student growth trajectories on a high-stakes math exam. *Mathematics Education in Science, Technology and Engineering: Exploring Research and Scholarship of the Student and Staff Experience* [Special issue]. *Mathematics*, 9 (8). [**SCI, 2021 Impact Factor: 2.592**]
- 14) Lara-Alecio, R., **Tang, S.,** Sutton-Jones, K., Irby, B. J., Tong, F., Jimenez, D., & Villarreal, E., (2021). The Impact of Virtual Professional Development on Teachers' ESL Pedagogical and Content Knowledge. *International Journal of Virtual and Personal Learning Environments*, 11(1), 64-86. [indexed in **SCOPUS, Cite Score: 1.5**; role: formal analysis; writing- original drafting, reviewing, and editing].
- 13) **Tang, S.,** Long, M., Tong, F., Wang, Z., Zhang, H., Sutton-Jones, K. (2020). A comparative study of problem-based learning and traditional approaches in College English classrooms: Analyzing pedagogical behaviors via classroom observation. *Behavioral Sciences*, 10 (6), 105. [Indexed in **SSCI, 2021 Impact Factor: 2.286**].
- 12) Tong, F., Wang, Z., Min, Y., & **Tang, S.** (2020). A systematic literature synthesis of 18 years of post-secondary Chinese-English bilingual education in mainland China: Where does the academic discourse stand?. *Sage Open*, 10(2), 2158244020926510. [**SSCI, 2021 Impact Factor: 2.032**; role: writing- original drafting, reviewing, and editing].
- 11) Tong, F., **Tang, S.,** Irby, B. J., Lara-Alecio, R., & Guerrero, C., (2020). Inter-rater reliability data of classroom observation: fidelity in large-scale randomized research in education. *Data in Brief*, 29, 105303. [Indexed in **SCOPUS, Cite Score: 2.4**; role: conceptualization; formal analysis; writing- original drafting, reviewing, and editing].
- 10) **Tang, S.,** Tong, F., Irby, B. J., Lara-Alecio, R., & Guerrero, C., (2020). Fidelity of implementation in a randomized controlled trial study: The effect of virtual professional development on bilingual teachers. *Bilingual Research Journal*, 43(1), 111-124. [Indexed in **SCOPUS, Cite Score: 2.5**].
- 9) Tong, F., **Tang, S.,** Irby, B. J., Lara-Alecio, R., & Guerrero, C., (2020). The determination of appropriate coefficient indices for inter-rater reliability: Using classroom observation instruments as fidelity measures in large-scale randomized research. *International Journal of Educational Research*, 99, 101514. [**SSCI, 2021 Impact Factor: 2.845**; role: conceptualization; formal analysis; writing- original drafting, reviewing, and editing].
- 8) **Tang, S.,** Tong, F., Lu, X., (2019). Gifted and talented services for EFL learners in China: A step-by-step guide of propensity score matching analysis in R. *Data*, 4(3), 119. [Indexed in **Scopus, Cite Score: 4.8**]
- 7) Tong, F., **Tang, S.,** Irby, B. J., Lara-Alecio, R., Guerrero, C., & Lopez, T. (2019). A process for establishing and maintaining inter-rater reliability for two observation instruments as a fidelity of implementation measure: A large-scale randomized controlled trial perspective. *Studies in Educational Evaluation*, 62, 18-29. [**SSCI, 2021 Impact Factor: 2.704**; role: conceptualization; formal analysis; writing- original drafting,

reviewing and editing].

- 6) **Tang, S.**, Wang, Z., & Min, Y. (2019). Texas–Mexico border vs. non-border school districts’ growth trajectory of high-stakes reading performance: A multi-level approach. *Education Sciences*, 9(1), 38. [Indexed in **SCOPUS**, **Cite Score: 2.9**]
- 5) **Tang, S.** (2019). An exploratory study of the cultural impact on middle school students’ collaborative problem-solving learning. *Educational Research Quarterly*, 42(4), 41-59. [Indexed in **EBSCOhost**].
- 4) Wang, Z., **Tang, S***, & Sutton-Jones, K. (2019). Texas rural vs. non-rural school district student growth trajectories on a high-stakes science exam: A multi-level approach. *Social Sciences*, 8(6), 166. [Indexed in **SCOPUS**, **Cite Score: 3.4**; role: *corresponding author; conceptualization, methodology, investigation, data formal analysis, writing—original draft]
- 3) Guo, H., Tong, F., Wang, Z., Min, Y., & **Tang, S.** (2018). English-vs. Chinese-medium instruction in Chinese higher education: A quasi-experimental comparison. *Sustainability*, 10(11), 4230. [**SSCI**, **2021 Impact Factor: 3.251**; role: formal analysis, writing-reviewing, and editing].
- 2) Tong, F., Irby, B. J., Lara-Alecio, R., Guerrero, C., **Tang, S.**, & Sutton-Jones, K. L. (2018). The impact of professional learning on in-service teachers’ pedagogical delivery of literacy-infused science with middle school English learners: A randomized controlled trial study in the US. *Educational Studies*, 45(5), 533-553. [**SSCI**, **2021 Impact Factor: 1.5**; role: writing – original drafting].
- 1) **Tang, S.** (2006). Gender differences in EFL learning strategies. *Journal of Huazhong Normal University*, S1, 101-104. [Indexed in **CNKI China Academic Journals**].

RESEARCH GRANTS AND AWARDS

Active

Virtually-Infused Collaborations for Teaching and Learning Opportunities for Rural Youth: Implementation and Evaluation of Online and Face-to-Face Delivery in High-Needs Schools (Project VICTORY)

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI)

Role: *Testing and Data Analysis Coordinator (2020-2022)*

Administrative Responsibilities: *Supervised a group of graduate assistants and student workers focusing on data management, processing, and analysis.*

Research Responsibilities: *Collected and coded classroom observation data and oversaw inter-rater reliability; designed testing material via Teleform (a highly*

intelligent data capture system); processed student consent forms; supervised data management and analysis of student achievement, teacher pedagogical practices, and fidelity of implementation data; designed student science learning interest survey and fidelity of implementation rating rubric; disseminate the findings to schools and districts; worked with the project principal investigators to prepare government reports, conference proposals and presentations, technical reports, journal papers, and book chapters.

Literacy-Infused Science Using Technology Innovation Opportunity (LISTO). (Grant Award No. U411B160011). Grant funded by the U.S. Department of Education, Investing in Innovation (i3). Funded for \$12,000,000 for 5 years (2017-2021).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI), Jones, R. (Co-PI), Capraro, R. (Co-PI), & Capraro, M. M. (Co-PI).

Role: Testing and Data Analysis Coordinator (2017-2022)

Administrative Responsibilities: Supervised a group of graduate assistants and student workers focusing on data management, processing, and analysis.

Research Responsibilities: Collected and coded classroom observation data and oversaw inter-rater reliability; designed testing material via Teleform (a highly intelligent data capture system); processed student consent forms; supervised data management and analysis of student achievement, teacher pedagogical practices, and fidelity of implementation data; designed student science learning interest survey and fidelity of implementation rating rubric; disseminate the findings to schools and districts; worked with the project principal investigators to prepare government reports, conference proposals and presentations, technical reports, journal papers, and book chapters.

Completed

Empowering Teachers of English Language Learners (ETELL). (Grant Award No. T365Z160229). Grant funded by U.S. Department of Education, National Professional Development Program. Funded for \$2,750,000 for 5 years (2016-2021).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), & Tong, F. (Co-PI).

Roles: Consultant

Responsibilities: provided suggestions for research methodology and data management and analysis; oversaw inter-rater reliability of classroom observation coding; data analysis; preparing conference proposals and journal papers.

Accelerated Preparation of Leaders for Underserved Schools (A-PLUS): Building Instructional Capacity to Impact Diverse Learners. (Grant Award No. #U423A170053). Grant funded by U.S. Department of Education, Office of Innovation and Improvement (OII). Funded for \$ 13,692,601 over 3 years (2017-2020).

Investigators: Irby, B. J. (PI), Tong, F. (Co-PI), Torres, M. (Co-PI), & Lara-Alecio, R. (Co-PI).

Roles: *Consultant*

Responsibilities: *provided suggestions for research methodology and data management and analysis; oversaw inter-rater reliability of classroom observation coding; data analysis; preparing conference proposals and journal papers.*

Massive Open Online Professional Informal Individual Learning (MOOPIL) for bilingual and ESL teachers, paraprofessionals, administrators, and families. (Grant Award No. T365Z170192). Grant funded by U.S. Department of Education, Office of English Language Acquisition (OELA). Funded for \$2,687,272 over 5 years (2017-2022).

Investigators: Irby, B. J. (PI), Tong, F. (Co-PI), Torres, M. (Co-PI), & Lara-Alecio, R. (Co-PI).

Roles: *Consultant*

Responsibilities: *provided suggestions for research methodology and data management and analysis; oversaw inter-rater reliability of classroom observation coding; data analysis; preparing conference proposals and journal papers.*

Preparing Academic Leaders: Teachers of English learners building instructional capacity — Project PAL. (Grant Award No. T365Z170192). Grant funded by U.S. Department of Education, Office of English Language Acquisition (OELA). Funded for \$2,567,821 over 5 years (2017-2022).

Investigators: Irby, B. J. (PI), Tong, F. (Co-PI), & Lara-Alecio, R. (Co-PI)

Roles: *Consultant*

Responsibilities: *provided suggestions for research methodology and data management and analysis; oversaw inter-rater reliability of classroom observation coding; data analysis; preparing conference proposals and journal papers.* English Language and Literacy Acquisition-Validation (ELLA-V). (Grant Award No. U411B120047). Grant funded by the U.S. Department of Education, Investing in Innovation (i3). Funded \$15,000,000 for 5 years (2013-2018).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), & Tong, F. (Co-PI).

Roles: *Graduate Research Assistant (January 2014- March 2017), Testing and Data Analysis Coordinator (April 2017-August 2018);*

Administrative Responsibilities: Supervised a group of graduate assistants focusing on data management, processing, and analysis.

Research Responsibilities: Collected and coded classroom observation data and oversaw inter-rater reliability; designed testing material via Teleform; supervised data management and analysis of student achievement, teacher pedagogical practices, and fidelity of implementation data; designed the fidelity of implementation rating rubric; analyzed qualitative data (teacher and principal focus group interview); disseminate the findings to schools and districts; worked with the project principal investigators to prepare government reports, technical reports, conference proposals and presentations, journal papers, and book chapters.

Establishing a data warehouse focusing on military children. Grant funded by Catapult Grant, College of Education and Human Development, TAMU. Funded for \$20,000 for 2 years (2016-2017).

Investigators: Muller, R. (PI), & Tong, F. (Co-PI).

Roles: Statistician

Responsibilities: Conduct large dataset analysis and drafted report.

Under Review

PreK Let's Let Science (PkLTS): Building an Inclusive and Innovative Science Base for Diverse Early Learners. Grant submitted to U.S. Department of Education, Office of Elementary and Secondary Education. Total budget requested: \$3,999,990+400,000 (private match) over 4 years (2023-2027).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI), Guerrero, C. (Co-PI), & Tang, S. (Co-I).

Roles and Responsibilities: Co-I; Methodologist -design, analytical procedure, and evaluation

Improving Student Achievement via Classroom Observations Utilizing Artificial Intelligence: Project Artificial Intelligence Observer (AIO). Grant submitted to U.S. Department of Education, Office of Elementary and Secondary Education. Total budget requested: \$3,999,995+400,000 (private match) over 4 years (2023-2027).

Investigators: Irby, B. J. (PI), Lara-Alecio, R. (Co-PI), Tong, F. (Co-PI), de Miranda, M. (Co-PI), Song, D. (Co-PI), Huang, R. (Co-PI), & Kong, S. (Co-PI).

Roles and Responsibilities: Methodologist -design, analytical procedure, and evaluation

Research-based Strategies and Artificial Intelligence for School Enhancement: Turning Around Schools (RAISE). Grant submitted to U.S. Department of Education, Office of Elementary

and Secondary Education. Total budget requested: \$14,999,990+\$3,255,460 (private match) over 5 years (2023-2028).

Investigators: Irby, B. J. (PI), Lara-Alecio, R. (Co-PI), Tong, F., Nafukho, F. (Co-PI), Alexander, J. (Co-I), Webb, G. (Co-I), Fahrenwald, C. (Co-I), & Holley, S. (Co-I).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation.*

Science-Infused Literacy (SIL): Building Early Learners' Academic English Language. Grant submitted to U.S. Department of Education, Office of Elementary and Secondary Education. Total budget requested: \$8,000,000+\$800,000 (private match) over 5 years (2023-2028).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), & Tong, F. (PI).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

Developing and Enhancing Academic Language for Underserved Students (DEAL). Grant submitted to U.S. Department of Education, Office of Elementary and Secondary Education. Total budget requested: \$12,422,009+\$4,141,146 (private match) over 3 years (2022-2025).

Investigators: Irby, B. J. (PI), Lara-Alecio, R. (Co-PI), Tong, F., Nafukho, F. (Co-PI), Alexander, J. (Co-P), Webb, G. (Co-I), Fahrenwald, C. (Co-I), & Holley, S. (Co-I).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

Preparing Academic Instructional Leaders for Underperforming Schools: A Turnaround Program for Building Instructional Capacity to Impact Diverse Learners (PALS). Grant submitted to U.S. Department of Education, Office of Elementary and Secondary Education. Total budget requested: 7,830,802+2,613,209 (private match) over 3 years (2022-2025).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), & Tong, F. (Co-PI).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

Let's Talk Science: Multifaceted Virtual PD and Virtual Mentoring and Coaching to Improve Academic Language Instruction for Young Emergent Bilinguals (Project LTS). Grant submitted to the U.S. Department of Education, Office of English Language Acquisition (OELA). Total Budget Request: \$3 million over 5 years (January 2023-December 2027).

Investigators: Tong, F. (PI), Irby, B. J. (Co-PI), & Lara-Alecio, R. (Co-PI).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

Bilingual/ESL Education Teacher Residency Plus (BETR+). Grant submitted to the U.S. Department of Education, Office of English Language Acquisition (OELA). Total Budget Request: \$3 million over 5 years (January 2023-December 2027).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), & Tong, F. (Co-PI).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

Project Enhancing Quality Teacher Preparation Through Research-based Instructional Best Practices for Bilingual and English Learners (EBEST). Total Budget Request: \$3 million over 5 years (January 2023-December 2027).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), & Tong, F. (Co-PI).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

LEADER+ Program for Bilingual and ESL Teachers, Paraprofessionals, Administrators, and Families. Total Budget Request: \$3 million over 5 years (January 2023-December 2027).

Investigators: Irby, B. J. (PI), Lara-Alecio, R. (Co-PI), & Tong, F. (Co-PI).

Roles and Responsibilities: *Methodologist -design, analytical procedure, and evaluation*

Project Bilingual Education Advocacy and Preparation of Academic Leaders (BE-A-PAL).

Grant submitted to the U.S. Department of Education, Office of English Language Acquisition (OELA). Total Budget Request: \$3 million over 5 years (January 2023-December 2027).

Investigators: Tong, F. (PI), Irby, B. J. (Co-PI), & Lara-Alecio, R. (Co-PI).

Roles and Responsibilities: *Proposal development team.*

Unfunded

Working All Together: A Three-Component Dual Language NPD Project. Grant submitted to the U.S. Department of Education, Office of English Language Acquisition (OELA). Total Budget Request: \$2,999,827 over 5 years (January 2022-December 2027).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI), & Hill- Jackson, V. (Co-PI).

Roles and Responsibilities: *Proposal development team.*

Enhancing Literacy-Infused STEM in Texas High-Need Coastal Schools. Grant submitted to the U.S. Department of Education, Education Innovation and Research (EIR) Program. Total Budget Request: \$2,455,310 over 4 years (January 2022-December 2026).

Investigators: Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI), Da Silva, D. (Co-PI), Chakravorty, D. (Co-PI), & Schulze, A. (Co-PI).

Roles and Responsibilities: *Proposal development team.*

Further Validation of a Classroom Pedagogical Observation Instrument for Improving Instruction for Teachers of English Learner. Grant submitted to the U.S. Department of Education, the Institute of Education Sciences (IES). Total Budget Request: \$2,000,000 over 2 years (September 2022-August 2024).

Investigators: Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI), & Walker, D. (Co-PI).

Roles and Responsibilities: Proposal development team.

Building Out Opportunities in STEM for Teachers: Impacting Instructional Capacity for Diverse Learners in High-Needs Schools. Grant submitted to the U.S. Department of Education, Office of Innovation and Improvement. Total Budget Request: \$17,978,494 over 3 years (September 2018-August 2021).

Investigators: Lara-Alecio, R. (PI), Irby, B., & Tong, F. (Co-PI).

Roles and Responsibilities: Proposal development team.

Improving K-12 Bilingual/ESL Instruction via Classroom Observations Utilizing Sensing and Artificial Intelligence. Grant submitted to the X-Grant Program, Division of Research, Texas A&M University. Total budget requested: \$1.5 million over 3 years (2021-2024).

Investigators: Lara-Alecio, R. (PI), Irby, B. J. (Co-PI), Tong, F. (Co-PI), Jiang, A. (Co-PI), De Miranda, M. A. (Co-PI), Hammond, T. (Co-PI), Huang, R. (Co-PI), Quek, F. (Co-PI), Song, D. (Co-PI), Walker, D. (Co-PI), Gutierrez-Osuna, R. (Co-PI), Guerrero, C. (Mem.), Sutton-Jones, K. L. (Mem.), & Tang, S. (Mem.).

Roles and Responsibilities: Proposal development team.