



# EAST TEXAS A&M

## Curriculum Vita September 2025

**Instructor:** Shifang Tang, Assistant Professor

**Academic Department:** Psychology and Special Education

**University Address:** Henderson Hall  
East Texas A&M University  
PO Box 3011  
Commerce, TX 75429-3011

**University Email Address:** shifang.tang@etamu.edu

**Faculty Web Page Address:** <https://www.etamu.edu/people/shifang-tang-ph-d/>

### EDUCATION

Ph.D., Educational Psychology,  
Texas A&M University, College Station, 2018

M.A., Linguistics and Applied Linguistics,  
Huazhong University of Science and Technology, 2007

B.A., Scientific English,  
Hubei University of Technology, 2002

Certifications:  
What Works Clearinghouse (WWC) Group Design Standards v4.1, Certified Reviewer, IES,  
U.S. Dept. of Education (2021)

### TEACHING EXPERIENCE

September 2022 – Present, Assistant Professor, Department of Psychology & Special Education,  
East Texas A&M University

2018 – 2022, Lecturer, Department of Educational Psychology, Texas A&M University

2013 – 2013, ESL Instructor (CNA Program), Omaha Opportunities Industrialization Center

2012 – 2013, ESL Instructor (New Immigrants and Refugees), Education Opportunity Center,  
Creighton University

2009 – 2012, Senior Lecturer (tenured), Foreign Language School, Hubei University of Technology

2003 – 2009, Lecturer (tenured), Foreign Language School, Hubei University of Technology

2002 – 2003, Lecturer (tenure-track), Foreign Language School, Hubei University of Technology

### **Course taught**

**East Texas A&M University** (5 undergraduate and 4 graduate courses)

#### ***Undergraduate***

Learning Processes and Development (PSY 300; online/face-to-face)

Semesters: Fall 2022; Spring 2023; Fall 2023; Spring 2024; Summer I 2024; Fall 2024

Diversity (PSY 211; online)

Semesters: Spring 2023; Spring 2024; Summer II 2024; Summer II 2025

Learning Theories and Process (PSY 341; online)

Semesters: Summer I 2023; Summer I 2025

Introduction to Psychology (PSY 2301; face-to-face)

Semesters: Spring 2024; Spring 2025

Evolutionary Psychology (PSY 325; online)

Semesters: Summer I 2024; Summer II, 2025

#### ***Graduate***

Introduction to Educational Psychology (PSY 505; online)

Semesters: Fall 2022; Fall 2023; Fall 2024

Multivariate Analysis (PSY 670; online)

Semesters: Summer II 2023; Summer I 2025

Research Lit & Techniques (PSY 595; online)

Semesters: Fall 2023

Nonparametric Statistics (PSY 610; online)

Semesters: Summer II 2024

Cognition and Instruction (PSY 625; online)

Semesters: Fall 2024

**Texas A&M University-College Station** (3 graduate courses)

Program Evaluation in School and Clinic (EPSY 631; online)

Semester: Fall 2020

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)

**Doctoral Advisor/Dissertation Chair** (current =5)

- Kevin Kramer – starting in fall 2022, *in progress*
- Lei Zhang – starting in fall 2023, *in progress*
- Chioma Emuka – starting in fall 2023, *in progress*
- Cihtlalli Perez – starting in fall 2024, *in progress*
- Emily Monroe – starting in fall 2025, *in progress*
- Youn Su Kang – incoming spring 2026

**Doctoral/Dissertation Committee Member** (current =2)

- Amanda Relf – *Graduated in 2024 (Chair: Peter Williams)*
- Halie Welsh – *in progress (Chair: Kendra Saunders)*
- Rachel Mathey – *in progress (Chair: Jessica Udry)*

**Student Mentoring**

- *Maya Haggerty – 2022-2023 Clinic Psychology Master's student.*

## PUBLICATIONS

**Refereed Journal Publications (n=35; \* with students; +joining East Texas A&M, n=15)**

+35) Jimenez, D.D., **Tang, S.**, Rivera, H., Chang H., & Zhu, Y. (accepted). A narrative literature review of classroom observation protocols in bilingual education: Bridging theoretical frameworks for practical implementation. *Journal of Latinos and Education*. **[2024 Impact Factor: 1.1; 2023 CiteScore: 2.4]**

+34) Welsh, H\*,., Saunders, K., Thompson, J., & **Tang, S.** (2025). Content Validity Study of a Subjective Well-being Measurement Tool for Early Childhood. *Early Years: Journal of Texas Association for the Education of Young Children*, 46(2), pp. 12-30.

+33) Vargas, M., Irby, B. J., Tong, F., Lara-Alecio, R., Jimenez, D. D., Gamez, Y., & **Tang, S.** (2025) An exploratory study on the effect of virtual professional development and virtual mentoring and coaching on teachers seeking bilingual certification. *NABE Journal of Research and Practice*, 1–19.

+32) **Tang, S.**, Wang, Z., Zhang, L\*,., & Jimenez, D. (2025). Multivariate analysis: Geography, demographics, and Texas' post-COVID education. *International Journal of Evaluation and Research in Education*. **[2023 CiteScore: 2.7]**

+31) Long, M., **Tang, S.**, Wang, Z., Sutton-Jones, K., & Tong, F. (2024). The impact of problem-based learning on Chinese college students' self-efficacy and achievement in English learning: A path analysis. *Pedagogy: An International Journal*. **[2023 Impact Factor: 0.8; 2023 CiteScore: 2.1]**

+30) **Tang, S.**, Wang, Z., Lu, X. Zhang\*, L. & Haggerty, M\*. (2024). Examining Motivation and Self-Regulated Online Learning Strategy Model: A Measurement Invariance Analysis among College Students in China during COVID-19. *Applied Cognitive Psychology*, 38(2), e4188. **[2023 Impact Factor: 2.1; 2023 CiteScore: 4.3]**

+29) **Tang, S.**, Wang, Z., Sutton-Jones, K, Tong, F., & Lu, X. (2024). Exploring the impact of an English talent program on college students' language proficiency: A mixed-methods study. *International Journal of Educational Research*, 125, 102362. **[2023 Impact Factor: 2.6; 2023 CiteScore: 6.2]**

+28) **Tang, S.**, Wang, Z., Zhang\*, L. & Jimenez, D. (2024). Understanding the Complexities of Student Learning Progress in Texas: A Study of COVID-19 and Rural vs. Non-Rural Districts. *Behavioral Sciences*, 14(5), 408. **[2023 Impact Factor: 2.6; 2023 CiteScore: 2.6]**

+27) Lucido, F., Jimenez, D. & **Tang, S.** (2024). Affirming Culture and Cultural Identity in the Bilingual/ESL Classrooms. *Frontier in Education*, 9, 1338671. **[2023 Impact Factor: 1.9; 2023 CiteScore: 2.9]**

+26) Plowman, D., Jimenez, D., & **Tang, S.** (2024) Impacts of Professional Development Experiences Designed to Develop Teachers' Empathy and Engagement with Emergent Bilinguals. *International Electronic Journal of Elementary Education*. [2023 Cite Score: 1.9; role: formal analysis; writing- original drafting and editing]

+25) Lara-Alecio, R., Irby, B.J., Tong, F., Sutton-Jones, K., Guerrero, C., **Tang, S.**, & Pan, H. (2024) A Randomized Control Trial Study: Evaluating Pedagogical Practices in Science Classrooms. *International Electronic Journal of Elementary Education*. [2023 Cite Score: 1.9; role: formal analysis; writing- original drafting and editing]

+24) Tong, F., Irby, B. J., Lara-Alecio, R. Guerrero, C., **Tang, S.**, Sutton-Jones, K., & Ross, M. (2023; online first). Designing and evaluating a complex clustered longitudinal randomized controlled trial in high-needs schools: An example of a funded research protocol based on What Works Clearinghouse standards. *Evaluation and Program Planning*. [2023 Impact Factor: 1.5; CiteScore: 3.1; role: formal analysis; writing- original drafting and editing]

+23) Wang, Z., **Tang, S.**, & Luo, F. (2023). A Comparative Study of Texas–Mexico Border vs. Non-Border Students' Achievement on High-Stakes State Test: A Propensity Score Matching Method. *Frontier in Education*. [2023 Impact Factor: 1.9; 2023 CiteScore: 2.9. role: formal analysis; writing- original drafting and editing]

+22) Vargas, M., Irby, B. J., Tong, F., Lara-Alecio, R., Jimenez, D. D., Gamez, Y., Choron, V, & **Tang, S.** (2023; online first). The Effect of Virtual Professional Development and Virtual Mentoring/Coaching on Teachers' Pedagogical Content Knowledge of ELs. *Teacher and Teacher Education*. [2023 Impact Factor: 4.0; 2023 CiteScore: 6.5; role: formal analysis; writing- original drafting and editing]

+21) Nafukho, F. Irby, B.J., Pashmforoosh, R. Lara-Alecio, R., Tong, F., Lockhart. M., El Mansour, W., **Tang, S.**, Etchells, M., & Wang, Z. (2022). Training Design in Mediating the Relationship of Participants' Motivation, Work Environment, and Transfer of Learning. *European Journal of Training and Development*. [2023 Impact Factor: 2.3; 2023 CiteScore: 5.1; role: formal analysis; writing- original drafting, reviewing, and editing].

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].

### Refereed Conference Publications (n=2)

- 2) **Tang, S.**, Lu, X., & Deng, H. (2011). Study on Chinese college students' beliefs and attitudes towards Autonomous Language Learning in the computer-assisted language learning environment. In *2011 International Conference on Mechatronic Science, Electric Engineering and Computer (MEC)* (pp. 2005-2009). [Indexed in **SCOPUS** and **IEEE**]
- 1) **Tang, S.**, Lu, X., & Deng, H. (2011). A study on Chinese students' beliefs and attitudes towards CALL. In *2011 International Conference on Mechatronic Science, Electric Engineering and Computer (MEC)* (pp. 2001-2004). [Indexed in **SCOPUS** and **IEEE**]

### Book Chapters (n=2)

- 2) Tong, F. & **Tang, S.** (2017). English-medium instruction in Chinese university science classroom: An observation study. In Q. Dixon, J. Zhao, & Y. Sun (Eds.), *English-medium instruction in Chinese Universities*. Routledge. [Indexed in **SCOPUS**; role: conceptualization (course paper), formal analysis, writing – original drafting]
- 1) Irby, B. J., Abdulrahman, N., **Tang, S.**, Yang, P., Phuong, T., Tong, F., & Lara-Alecio, R. (2017). Science achievement among economically challenged students in the United States: A scoping analysis. In S. Markic, & S. Abel (Eds.), *Science education towards inclusion*. New York, NY: Nova Science Publishers Inc. ISBN: 978-1-63485-381-1 [Indexed in **SCOPUS**; role: formal analysis, writing – original drafting]

### Technical Report

Lara-Alecio, R., Irby, B. J., Tong, F., & **Tang, S.** (2018). *A Content Validation Analysis: Frog Street Aim Birth-Age 5 Assessment. A report developed for Frog Street Press*. Center for Research & Development in Dual Language & Literacy Acquisition. Texas A&M University. [role: formal analysis; writing – original drafting]

### Manuscripts under Peer Review (n=1; \* with student)

- 1) Tang, S., Wang, Z., & Tong, F. Post-Pandemic Literacy Outcomes: Tracking Reading Achievement and Equity in Texas Elementary Schools

### Refereed Conference Presentations (n=53; +joining East Texas A&M, n=11)

+53) **Tang, S.**, Wang, Z., Zhang, L., & Jimenez, D. (2025). *Longitudinal Analysis of Reading Proficiency Among Texas Students Before and After the COVID-19 Pandemic: Impacts*

*and Implications.* Paper to be presented at the annual meeting of AERA, Philadelphia, PA.

- +52) **Tang, S.**, Wang, Z., Zhang, L., Jiang, M. & Jimenez, D. (2025). *Longitudinal Impact of COVID-19 on Reading Proficiency Among Texas Students: A Comparative Analysis.* Paper to be presented at the annual meeting of SERA, San Antonio, TX.
- +51) **Tang, S.**, Wang, Z., Zhang, L., Jiang, M. & Jimenez, D. (2025). *Comparing Student Performance in STAAR Reading Exams Before and After the COVID-19 Pandemic: Relative Risk Across Grade Levels.* Paper to be presented at the annual meeting of SERA, San Antonio, TX.
- +50) Jimenez, D., **Tang, S.**, & Wang, Z. (2024). *Examining the pedagogical practices of second-grade bilingual teachers and factors that impact the quality of instruction for English language learners.* Paper presented at the annual meeting of SERA, Arlington, TX.
- +49) Jimenez, D., **Tang, S.**, & Wang, Z. (2024). *Evaluating the impact of language of instruction and language content in a second-grade bilingual classroom.* Paper presented at the annual meeting of SERA, Arlington, TX.
- +48) **Tang, S.**, Wang, Z., Zhang, L., and Jimenez, D. (2024). *Navigating the landscape of social and emotional learning in K-12 education: A bibliometric analysis during and post-COVID-19.* Paper presented at the annual meeting of SERA, Arlington, TX.
- +47) **Tang, S.**, Wang, Z., Zhang, L., and Jimenez, D. (2024). *Geographical influence on educational outcomes: A multivariate analysis of academic achievement in post-COVID-19 Texas.* Paper presented at the annual meeting of SERA, Arlington, TX.
- +46) Wang, Z., **Tang, S.**, Jimenez, D., and Zhang, L. (2024). *Exploring the effectiveness of Milestone Tests in enhancing English Language Arts learning for third-grade students in Georgia's rural school districts.* Paper presented at the annual meeting of AERA, Philadelphia, PA.
- +45) Lara-Alecio, R., Irby, B., Tong, F., Guerrero, C., **Tang, S.**, Wang, Z., Xu, Y., and Ma, S (2023). *The impact of literacy-infused science intervention on students' science learning and motivation during COVID-19 crisis.* Paper presented at the annual meeting of AERA, Chicago, IL.
- +44) Tong, F., **Tang, S.**, Wang, Z., Irby, B., Lara-Alecio, R., Guerrero, C., and Aguila, P (2023). *Development and validation of an instrument to measure students' interests*

*and motivation in science learning.* Paper presented at the annual meeting of AERA, Chicago, IL.

- +43) **Tang, S.**, Lara-Alecio, R., Irby, B., Tong, F., Guerrero, C., Zhang, H., Ma, S., Xu, Y. (2023). A comparison study of teachers' pedagogical practices in online and in-person classes. Paper presented at the annual meeting of AERA, Chicago, IL.
- 42) Irby, B. J., Sutton-Jones, K., Pashmforoosh, R., **Tang, S.**, Etchells, M. J., Lara-Alecio, R., & Tong, F. (2022, April 21-26). Assessing the content validity of a massive open online professional individualized learning (MOOPIL) rubric [Paper presentation]. American Educational Research Association 2022 Annual Meeting, San Diego, CA, United States.
- 41) Tong, F., Irby, B. J., Lara-Alecio, R., Guerrero, C. L., **Tang, S.**, & Wang, Z. (2022, April 21-26). Longitudinal analysis of English learners' language development via Texas English Language Proficiency Assessment System [Paper presentation]. American Educational Research Association 2022 Annual Meeting, San Diego, CA, United States.
- 40) Lara-Alecio, R., Irby, B. J., Tong, F., Guerrero, C. L., **Tang, S.**, He, C., & Wang, Z. (2022, April 21-26). Science teachers' instructional behaviors and their students' science learning: a randomized controlled research study in schools [Paper presentation]. American Educational Research Association 2022 Annual Meeting, San Diego, CA, United States.
- 39) Tong, F., Irby, B. J., Lara-Alecio, R., Guerrero, C. L., **Tang, S.**, Zhen, F., & Wang, Z. (2022, April 21-26). The impact of virtual PD on science teachers' fidelity of implementation in a randomized study [Conference session]. American Educational Research Association 2022 Annual Meeting, San Diego, CA, United States.
- 38) **Tang, S.**, Guerrero, C., Tong, F., Irby, B., Lara-Alecio, R., Zhen, F., & Guo, W. (2021, April). *Teachers' perceptions of ongoing virtual professional development in a science-infused literacy intervention.* Presented at the annual meeting of the American Educational Research Association (Online conference).
- 37) Lara-Alecio, R., Tong, F., Irby, B., Guerrero, C., **Tang, S.**, Wang, Z., He, C., & Zhen, F. (2021, April). *Fifth grade science teachers' pedagogical approaches in a randomized controlled trial: A classroom observation study.* Presented at the annual meeting of the American Educational Research Association (Online conference).
- 36) Vargas, M., Gamez, Y., Choron, V., Jimenez, D., Lara-Alecio, R., Irby, B., Tong, F., & **Tang, S.** (2021, April). *Enhancing teachers' EL practices and knowledge through virtual professional development and mentoring and coaching.* Presented at the annual meeting of the American Educational Research Association (Online conference).

35) Perez-Cabrera, N., Jimenez, D., Vargas, M., **Tang, S.**, Sutton-Jones, K., Lara-Alecio, R., Irby, B., & Tong, F. (2021, April). *Language proficiency and EL pedagogical practices: Assessing teachers' self-efficacy after virtual professional development*. Presented at the annual meeting of the American Educational Research Association (Online conference).

34) Guerrero, C., **Tang, S.**, Lara-Alecio, R., Irby, B., Tong, F., & Wang, Z. (2020, April). *The impact of virtual PD on kindergarten bilingual teachers' instruction: Fidelity in a randomized study*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

33) Tong, F., **Tang, S.**, Guerrero, C., Zhen, F., Irby, B., & Lara-Alecio, R. (2020, April). *Validating a student science interest survey for economically-challenged middle school students from a randomized study*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

32) Guerrero, C., **Tang, S.**, Tong, F., Lara-Alecio, R., & Irby, B. (2020, April). *Fidelity of implementation in a randomized control trial study: The effect of virtual professional development*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

31) Jimenez, D., Sutton-Jones, K., **Tang, S.**, Lara-Alecio, R., Irby, B., Tong, F., Choron, V., & Vargas, M. (2020, April). *Assessing teachers' ESL pedagogical and content knowledge after participation in a virtual professional development program*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

30) Jimenez, D., Sutton-Jones, K., **Tang, S.**, Lara-Alecio, R., Irby, B., Tong, F. (2020, April). *Assessing the language of instruction and language content in a bilingual classroom*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

29) Esparza, A., Fleming, K., **Tang, S.**, Guerrero, C., Lara-Alecio, R., Irby, B., Tong, F., Wang, Z. (2020, April). *Science teachers' growth trajectory in engagement in continuous online PD: A large-scale RCT perspective*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

28) Vargas, M., Tong, F., Lara-Alecio, R., Irby, B., Jimenez, D., **Tang, S.** (2020, April). *The effect of virtual professional development and virtual mentoring/ coaching on teachers' pedagogical content knowledge of ELs*. Accepted by the annual meeting of the American Educational Research Association, San Francisco, CA. (Conference cancelled).

27) **Tang, S.**, Tong, F., Irby, B., & Lara-Alecio, R. (2019, April). *Bilingual teachers' application of cooperative/collaborative/peer-tutoring strategies in teaching CALP in a randomized control study*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

26) Wang, Z. & **Tang, S.** (2019, April). *Explore the effectiveness of Texas rural independent districts preparing 5th grade students' science learning through STAAR science test*.

Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

- 25) Tong, F., Lara-Alecio, R., Irby, B., **Tang, S.**, Guerrero, C., Wang, Z., Pashmforoosh, R., & Cajiao-Wingenbach, L. (2019, April). *Teachers' native language and their kindergarten ELs' English learning: A randomized controlled research in school*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 24) Irby, B., Tong, F., Lara-Alecio, R., **Tang, S.**, Guerrero, C., Cajiao-Wingenbach, L., Ross, S. M., Wolf, B., & Latham, G. (2019, April). *The effect of virtual PD on kindergarten bilingual teachers' implementation fidelity in a randomized study*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 23) Tong, F., Irby, B., Lara-Alecio, R., **Tang, S.**, Guerrero, C., Cajiao-Wingenbach, L., Wolf, B., & Ross, S. M. (2019, April). *The immediate and long-term impact of an English Literacy-and-Science-infused Intervention on English learners' science achievement*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 22) Lara-Alecio, R., Irby, B., Tong, F., Guerrero, C., **Tang, S.**, Wang, Z., & Zhen, F. (2019, April). *The impact of virtual PD on science teachers' fidelity of implementation in a randomized study*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 21) Sutton-Jones, K. L., Villarreal, E., **Tang, S.**, Jimenez, D. D., Lara-Alecio, R., Irby, B., & Tong, F. (2019, April). *The impact of virtual professional development on ESL teachers' self-efficacy toward teaching ELs*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 20) Jimenez, D. D., **Tang, S.**, Sutton-Jones, K. L., Villarreal, E., Lara-Alecio, R., Irby, B., & Tong, F. (2019, April). *The impact of virtual professional development on teachers' ESL pedagogical and content knowledge*. Presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 19) Guerrero, C., **Tang, S.**, Lin, S., Lopez T., Tong, F., Irby, B., & Lara-Alecio, R. (2018, April). *Establishing and monitoring inter-rater reliability of classroom observations in a large-scale randomized controlled trial*. Presented at the meeting of the American Educational Research Association, New York City, NY.
- 18) Min, Y., **Tang, S.**, Wang, Z., & Tong, F. (2018, April). *Explore the effectiveness of Texas-Mexico border independent school district preparing students' reading Literacy Proficiency*. Presented at the meeting of the American Educational Research Association, New York City, NY.
- 17) Sutton-Jones, K. L., **Tang, S.**, Villarreal, E., Lara-Alecio, R., Irby, B., & Tong, F. (2018, April). *Factors influencing teacher self-efficacy towards working with ELLs in an online*

*professional development program.* Presented at the meeting of the American Educational Research Association, New York City, NY.

- 16) Irby, B., Tong, F., Lara-Alecio, R., Guerrero, C., **Tang, S.**, Lin, S., Wang, Z., & Lopez T. (2018, April). *Hispanic kindergarten bilingual students' response to instructional intervention on English oral language and early literacy.* Presented at the meeting of the American Educational Research Association, New York City, NY.
- 15) Tong, F., Lara-Alecio, R., Irby, B., Guerrero, C., **Tang, S.**, Lin, S., Lopez, T., & Min, Y. (2018, April). *Instructional intervention and kindergarten bilingual students' English achievement: A randomized controlled trial in school.* Presented at the meeting of the American Educational Research Association, New York City, NY.
- 14) Tong, F., Irby, B., **Tang, S.**, Lara-Alecio, R., Guerrero, C., Lopez T., & Cajiao-Wingenbach, L. (2018, April). *Kindergarten bilingual teachers' pedagogical differences during ESL block in a randomized controlled trial study.* Presented at the meeting of the American Educational Research Association, New York City, NY.
- 13) Jimenez, D., **Tang, S.**, Sutton-Jones, K. L., Lara-Alecio, R., Irby, B., & Tong, F. (2018, April). *Observing second-grade bilingual teachers and the pedagogical practices that impact English learners.* Presented at the meeting of the American Educational Research Association, New York City, NY.
- 12) Min, Y., Wang, Z., & **Tang, S.**, (2018, February). *Investigating how well Texas-Mexico border elementary schools prepare advanced readers: A Growth hierarchical linear model.* Presented at the annual meeting of Southwest Educational Research Association, New Orleans, LA.
- 11) **Tang, S.**, Min, Y., Wang, Z., Tong, F., Lara-Alecio, R., & Irby, B. J., (2018, February). *English language proficiency, reading achievement, and instructional intervention among third grade English learners in a randomized controlled trial.* Presented at the annual meeting of Southwest Educational Research Association, New Orleans, LA.
- 10) Jimenez, D., Sutton-Jones, K. L., Lara-Alecio, R., Irby, B. J., Tong, F., **Tang, S.**, & Stackhouse, E. (2015, October). *Designing and supporting online professional development for ESL/Bilingual teachers.* Presented at the annual meeting of Texas Association of Bilingual Education, El Paso, TX.
- 9) Jimenez, D., Sutton-Jones, K. L., **Tang, S.**, Lara-Alecio, R., Irby, B. J., & Tong, F. (2017, April). *Factors influencing bilingual education teacher satisfaction with an online professional development program.* Presented at the meeting of the American Educational Research Association, San Antonio, TX.
- 8) **Tang, S.**, Guerrero, C., Lopez, T., Tong, F., Irby, B. J., Lara-Alecio, R., Lin, S., & Min, Y. (2017, April). *Fidelity of implementation in a randomized control trial study: The effect of virtual professional development.* Presented at the meeting of the American Educational Research Association, San Antonio, TX.

- 7) Tong, F., Irby, B., Lara-Alecio, R., Guerrero, C., **Tang, S.**, & Lopez, T. (2017 April). *First grade bilingual teachers' pedagogical differences during ESL block in a randomized control trial study*. Presented at the annual meeting of American Educational Research Association, San Antonio, TX.
- 6) Tong, F., Irby, B., **Tang, S.**, Lin, S., Guerrero, C., Lara-Alecio, R., & Lopez, T. (2017 April). *Indicators of inter-rater reliability for classroom observation instruments as fidelity of implementation in large-scale RCTs*. Presented at the annual meeting of American Educational Research Association, San Antonio, TX.
- 5) Lara-Alecio, R., Tong, F., Irby, B., Guerrero, C., Lopez, T., **Tang, S.**, & Lin, S. (2017). *Instructional intervention and bilingual students' English achievement: A randomized controlled trial in school*. Presented at the annual meeting of American Educational Research Association, San Antonio, TX.
- 4) Wang, Z., Lin, S., Min, Y., **Tang, S.**, Irby, B. J., Lara-Alecio, R. & Tong, F., (2017, November). *Impacts of English language proficiency on self-esteem of early childhood Hispanic school student*. Presented at the annual meeting of University Council for Educational Administration, Denver, CO.
- 2) Jimenez, D. D., **Tang, S.**, Sutton-Jones, K. L., Lara-Alecio, R., Irby, B. J., & Tong, F. (2016, July). *Teacher perceptions of online and professional development for bilingual education teachers*. Presented at the annual meeting of the National Council of Professors of Educational Administration, Detroit, MI.
- 2) Tong, F., Irby, B. J., Lara-Alecio, R., Guerrero, C., **Tang, S.**, & Lopez, T. (2016, April). *Second grade bilingual teachers' pedagogical differences during ESL block in a randomized control trial study*. Presented at the meeting of the American Educational Research Association, Washington, D.C.
- 1) Sutton-Jones, K., Jimenez, D., **Tang, S.**, Lara-Alecio, R., Irby, B. J., & Tong, F. (2016, April). *Online professional development for Texas ESL and bilingual education teachers*. Presented at the meeting of the American Educational Research Association, Washington, D.C.

## Invited Presentations (n=6)

- 6) **Tang, S.** (Octobor, 2023). What Works Clearing House Standards Group designs. Symposium for School Psycholgooy Program in Department of Psychology and Special Education, East Texas A&M University.
- 5) Tong, F., Lara-Alecio, R., Irby, B. J., **Tang, S.**, & Wang, Z. (March 11, 2021). Longitudinal analysis of English learners' language development. Invited presentation, Texas Education Agency.

- 4) **Tang, S.** (January, 2019). Examining the impact of virtual professional development and teachers' use of the cooperative/collaborative/peer-tutoring strategies on English learners' reading comprehension, oral reading fluency, and oral expression. School of Foreign Languages, Hubei University of Technology, Wuhan, Hubei Province, China
- 3) **Tang, S.** (April, 2018). Examining the impact of virtual professional development and teachers' use of the cooperative/collaborative/peer-tutoring strategies on English learners' reading comprehension, oral reading fluency, and oral expression. Graduate Student Research Panel, Literacy Study Group, Texas A&M University.
- 3) Guerrero, C., Cajiao-Wingenbach, L., **Tang, S.**, Pashmforoosh, R., Eljaouhari, N., Ireland, S., Lara-Alecio, R., Irby, B. J., & Tong, F., (October, 2017). *Enhancing graduate students' knowledge and skills through Project English Language and Literacy Acquisition-Validation (ELLA-V)*. Graduate Student Research Panel. Literacy Study Group, Texas A&M University.
- 1) Guerrero, C., Cajiao-Wingenbach, L., **Tang, S.**, Pashmforoosh, R., Eljaouhari, N., Ireland, S., Lara-Alecio, R., Irby, B. J., & Tong, F., (October, 2017). *Project English Language and Literacy Acquisition - Validation (ELLA-V)*. Center for Research and Development in Dual Language and Literacy Acquisition, Texas A&M University.

#### RESEARCH GRANTS AND AWARDS

##### **After joining East Texas A&M**

##### **Funded:**

2024–2029, LeoTeach Bilingual Educator Advancement and Certification Opportunity Network for Paraprofessionals in Texas (LeoTeach BEACON), U.S. Department of Education—Office of English Language Acquisition (OELA), \$2,701,808.19

2023–2024, A bibliometric analysis of studies on social and emotional learning, Presidential GAR Initiatives, East Texas A&M University, \$20,804

2023–2024, Social and Emotional Learning in K–12 School Settings During and After COVID-19 Pandemic: Trends and Ways Forward, Department of Psychology and Special Education, East Texas A&M University, \$1,500

##### **Under Review**

Project Strategic Machine Analytics for Readiness in Texas (SMART). Total Budget requested: \$399,933.20 over 4 years (2025-2029). Grant submitted to the U.S. Department of Education, Institute of Education Sciences (IES).

Investigators: Tang, S. (PI)

##### **Not Funded:**

Multi-level Assessment of Greater Houston Institutions and Community Colleges (MAGIC): Driving Postsecondary Success: \$150,000 (2025-2026). Grant submitted to Houston Endowment. Investigators: **Tang, S. (PI)**, Jiang, M. (Co-PI), Jimenez, D. (Co-PI), Garbrecht, L. (Co-PI), Wang, Z. (Co-PI).

Project Islander Educator Preparation for Teacher Candidates of Future Emergent Bilingual Students (Project I-PROFES). Total Budget requested: \$ 3,250,000.00 over 5 years (2024-2029). Grant submitted to the U.S. Department of Education, The Hawkins Program. Investigators: Jimenez, D. (PI), Tejeda-Delgado, C. (Co-PI), Robertson, P. (Co-PI), Lynch-Davis, K. (Co-PI), Watson, J. (Co-PI), **Tang, S. (external evaluator)**

***Roles and Responsibilities:*** *Proposal development team; External Evaluator*

Promoting Equity in Education: A Peer Mentoring Program for Hispanic Students in Bilingual Education/ESL and Psychology Programs (PHIBEP). Total Budget requested: \$350,000 over 5 years (2024-2029). Submitted to William T Scholar Award.

**Investigators: Tang, S. (PI).**

Empowering and Preparing Teachers of Future Emergent Bilingual Students (Project E-PROFES). Total Budget requested: \$ 3,500,000.00 over 5 years (2024-2029). Grant submitted to the U.S. Department of Education, Office of English Language Acquisition (OELA). Investigators: Jimenez, D. (PI), Tejeda-Delgado, C. (Co-PI), Robertson, P. (Co-PI), Lynch-Davis, K. (Co-PI), Watson, J. (Co-PI), **Tang, S. (external evaluator)**

***Roles and Responsibilities:*** *Proposal development team; External Evaluator*

### **Before joining East Texas A&M**

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. (Co-PI), Nafukho, F. (Co-PI), Alexander, J. (Co-I), Webb, G. (Co-I), Fahrenwald, C. (Co-I), & Holley, S. (Co-I).

***Roles and Responsibilities:*** *Proposal development team (2022).*

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:*** *Proposal development team(2022)*

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.*

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.

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

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

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.

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-PI), 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*

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.

### **Competitive Graduate Research and Travel Scholarships**

- 2018 EPSO Travel Grant (\$500), Department of Educational Psychology, College of Education and Human Development, Texas A&M University.
- 2017 CEHD Graduate Travel Grant (\$500), College of Education and Human Development, Texas A&M University.
- 2017 EPSO Travel Grant (\$500), Department of Educational Psychology, College of Education and Human Development, Texas A&M University.
- 2016 CEHD Research Scholars Grant (\$500), College of Education & Human Development, Texas A&M University.
- 2016 EPSO Travel Grant (\$500), Department of Educational Psychology, College of Education and Human Development, Texas A&M University.
- 2013 EPSY Graduate School Grant (\$1,000), Department of Educational Psychology, College of Education and Human Development, Texas A&M University.
- 2013 Lechner Graduate Program Award (\$250), College of Education and Human Development, Texas A&M University.
- 2012 Study Abroad Research Grant for Early Career Faculty (\$3,500), Department of Education, Hubei Province, China.

## SERVICE

### External Service

#### Federal Grant Review

Reviewer for both content and methodology and evaluation, Developing Hispanic-Serving Institutions (DHSI) Program, *Office of Postsecondary Education Program, Department of Education (2025; 7 proposals reviewed)*

*Reviewer for National Science Foundation (NSF), focusing on measurement development (2025; 6 proposals reviewed)*

Reviewer for methodology and evaluation – Early-phase, *Education Innovation and Research (EIR), Department of Education (2024; 9 proposals reviewed)*

Reviewer for both content and methodology and evaluation, *Postsecondary Student Success Grant (PSSG) Program, Department of Education (2023; 12 proposals reviewed)*

#### Peer-Reviewed Journals

Reviewer, *International Journal of Educational Research (since 2019)*

Reviewer, *Studies in Educational Evaluation (since 2019)*

Reviewer, *Sustainability (since 2019)*

Reviewer, *Social Sciences (since 2019)*

Reviewer, *Education Sciences (since 2019)*

Reviewer, *Behavioral Sciences (since 2019)*

Reviewer, *International Journal of Environmental Research and Public Health (since 2020)*

Reviewer, *Sage Open (since 2020)*

Reviewer, *Children (since 2022)*

Reviewer, *European Journal of Investigation in Health, Psychology and Education (since 2023)*

Reviewer, *TESOL Journal (since 2023)*

#### Editorial Service

Associate editor, *Frontier in Education* (since 2024)

Article editor, *Sage Open* (2021)

Guest editor, *Sustainability* (2021-22)

*Guest editor, Education Sciences* (2023-2025)

### **Other Review Activities**

Proposal reviewer, American Education and Research Association (AERA)  
Conference, 2023, 2024

Proposal reviewer, University Council of Educational Administration (UCEA)  
Conference, 2017, 2018

Proposal reviewer, Southwest Educational Research Association (SERA)  
Conference, 2016, 2017, 2023, 2024

### **Volunteer in Local School**

Guest Speaker, Chinese Culture and Food, Ross Elementary School, Bryan  
Independent School District, TX

### **Internal Service**

Faculty mentor (2024-present), Psi Chi, the International Honor Society in  
Psychology, East Texas A&M University

Committee member (2024-present), Traffic Appeal Hearing Committee, East Texas  
A&M University

Committee member, Scholarship Committee (2022), Department of Psychology and  
Special Education, East Texas A&M University

Committee member, Curriculum Change (2022), Department of Psychology and  
Special Education, East Texas A&M University

Interpreter, Overseas Study Program in the USA for University Leaders in Chinese,  
Central and West Regions (2015), Texas A&M University

### **Service to Professional Organizations**

Secretary/Treasurer, *Classroom Observation SIG, American Education Research  
Association (AERA)*, 2019-2021; 2024 to present

Treasurer and board member, *TAMU Chinese School*, (since 2019)

### **Professional Affiliations**

- American Educational Research Association, 2015-present  
Divisions: H: Research, Evaluation, & Assessment in Schools
- SIGs: Classroom Observation
- Southwest Educational Research Association, 2016-present
- Military Child Education Coalition, 2016-2017

## **SKILLS**

### **Analytic Skills**

#### **Single Level**

t-test, ANOVA, ANCOVA, MANOVA, MANCOVA, Chi-square, Multiple Regression, Binomial Logistic Regression, Ordinal Logistic Regression, Dichotomous Moderator, Cronbach's alpha, Inter-rater Reliability (Gwet's AC<sub>1</sub>, ICC), Odds Ratio

#### **Multilevel**

Hierarchical Linear Modeling (two-level, three-level, growth model, binomial dependent variable)

#### **Factor Analysis**

Exploratory Factor Analysis, Principal Components Analysis, Confirmatory Factor Analysis, Structural Equation Modeling

#### **Other**

Propensity Score Matching; Effect Size (single-level and multilevel analysis; power/sample size estimation for both single-level and clustered design)

### **Computer Skills**

#### **Quantitative Analytic Software**

Statistics: Fluent in SPSS

Structural Equation Modeling: STATA, MPlus

Multilevel: HLM, SAS (PROC MIXED), Stata (xtmixed)

Prosperity Score Matching: R

#### **Qualitative Analytic Software**

NVIVO

## **Testing Design**

Teleform Modules (designer, automerge, scan station, verifier, publisher)

## **Data Visualization**

Excel, Tableau, PowerBI

## **Office**

Microsoft Office Suite, Survey Monkey, Google SuitE

## **SPECIALIZED TRAINING AND CERTIFICATIONS**

### **What Works Clearinghouse (WWC) Group Design Standards Version 4.1 Certified**

**Reviewer**, Institute for Education Sciences (IES), U.S. Department of Education, August 2021

### **What Works Clearinghouse (WWC) Single Case Design Standards Version 4.1**

**Certification** (in progress, passed the exam), Institute for Education Sciences (IES), U.S. Department of Education, September 2021

### **Quantitative Tools for Qualitative Data Analysis: A Truly Equal Status Data Science**

**Design for Transparency, Rigorosity, and Storytelling**. American Educational Research Association (AERA), June, 2025.

### **Artificial Intelligence (AI) Uses in Education Research**, American Educational Research Association (AERA), June, 2024.

### **Text Classification for the Pursuit of Truth with Qualitative Evidence: No-Code Machine**

**Learning Via Latent Code Identification**, American Educational Research Association (AERA), July 2023.

### **An Introduction to Social Network Analysis and Education Research: Core Concepts and Applications with R**, American Educational Research Association (AERA), August 2023.

### **Qualitative Meta-Synthesis as a Means to Interrogate Education Research and Achieve Equity**, American Educational Research Association (AERA), September 2023.

### **Using R Software for Item Response (IRT) Model Calibrations**, American Educational Research Association (AERA), June 2021.

### **Analyzing Large-Scale Assessment Data Using R**, American Educational Research Association (AERA), June 2021.

### **Multimodal Analysis and Social Semiotics for Qualitative Analysis in Educational Research**, American Educational Research Association (AERA), June 2021.

**Teaching and Learning Qualitative Research Methods Principles Through Popular Film Clips**, American Educational Research Association (AERA), April 2021.

**Advanced Meta-Analysis**, American Educational Research Association (AERA), April 2021.

**Multilevel Modeling with International Large-Scale Assessment Databases Using the HLM Software Program**, American Educational Research Association (AERA), April 2021.

**Advancing Qualitative and Mixed Methods Data Collection and Analysis with Visual Displays**, American Educational Research Association (AERA), April 2021.

**Empowerment Evaluation**, American Educational Research Association (AERA), August 2020.

**How to Write About Qualitative Research**, American Educational Research Association (AERA), July 2020.

**Summer Leadership Institute II, Engaging in Critical Dialogues, Certificate of Completion (45 hours)**, SBEC Continuing Education Provider #021-501, College Station, Texas, July 2020.

**Summer Leadership Institute III, Family Engagement for PK-6th Grade, Certificate of Completion (15 hours)**, SBEC Continuing Education Provider #021-501, College Station, Texas, July 2020

**Summer Leadership Institute VI, Professional Learning Communities, Certificate of Completion (5 hours)**, SBEC Continuing Education Provider #021-501, College Station, Texas, July 2020.

**Analyzing NAEP Process Data Using R**, American Educational Research Association (AERA), June 2020.

**Introduction to Systematic Review and Meta-Analysis**, American Educational Research Association (AERA), June 2020.

**Teaching English to Speakers of Other Languages (TESOL) Training, Certificate of Completion**, Center for Research & Development in Dual Language & Literacy Acquisition, Texas A&M University, 2019.

**What Works Clearinghouse (WWC) Group Design Standards Version 4.0 Training, Certificate of Completion**, Institute for Education Sciences (IES), U.S Department of Education, May 2018

**Designing Adequately Powered Cluster Randomized Trials to Detect Main Effects, Moderation, and Mediation**, American Educational Research Association (AERA), April 2018

**CITI Training in Human Research (Social and Behavioral Research), Texas A&M University.** August 2018

**Stata workshop, College of Education and Human Development, Texas A&M University.** March 2016

**NVIVO Training (Advanced), QSR International, March 2017**

**NVIVO Training (Beginner), QSR International, March 2016**

**Teacher Certificate (Highest level, K-16), Ministry of Education of the People's Republic of China, 2002**