

**He Sun, PhD (Sabrina)**

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## **EDUCATION**

### **Doctoral degree, Applied Linguistics**

Rijksuniversiteit Groningen (University of Groningen, the Netherlands), PhD dissertation: Predictors and Stages of child EFL learners' English development in China, Supervisors: Prof. Kees de Bot and Prof. Rasmus Steinkrauss, October 15, 2015

### **Master of Arts, Linguistics and Applied Linguistics**

北京语言大学(Beijing Language and Culture University, China), June 22, 2011

### **Master of Arts, Applied Linguistics**

Ohio University, Athens, USA (*GPA 3.97/4*), June 12, 2010

### **Bachelor of Arts, English Language and Literature**

大连理工大学 (Dalian University of Technology, China), July 11, 2008

## **PROFESSIONAL EXPERIENCE**

### **Research scientist, since March 2016**

Center for Research in Child Development, Office of Education Research, National Institute of Education, Nanyang University of Technology, Singapore

### **Post-doctoral research associate, Nov. 2015 – Mar. 2016**

Language Acquisition and Multilingualism, Department of Linguistics, University of Erfurt, Germany

Research project: Chinese-German Bilingual Children's Language Proficiency and Social-Emotional Wellbeing

Supervisor: Prof. Annick De Houwer

## **RESEARCH GRANTS**

### **Projects as Principal Investigator**

*2022- 2024* The Instrument Pilot Study for Research on Early Education and Development in Singapore (REEDS-Pilot); Grant # CRCD 02/22 SH (**\$1,353,549**)

**Project introduction:** REEDS-Pilot has two purposes. The first goal is to validate teacher-completed instruments for tracing children's development in fundamental skills and competencies from ages 3 to 7. The second goal is to create a website to recruit participants and disseminate findings for the upcoming large-scale longitudinal study Research on Early Education and Development in Singapore (REEDS).

*2021- 2022* A Systematic Review of International ECE Projects; Grant # CRCD 01/21 SH (**\$63,218**)

**Project introduction:** The current project has two purposes. The first goal is to conduct a systematic review on large-scale early childhood education (ECE) projects worldwide in order to explore the research foci and the instruments adopted in these studies. The developmental patterns of children's skills and dispositions, as well as the instruments the researchers have employed will

be summarized. Effect sizes of the home and school related moderators will be analyzed. The second goal is to compose a research proposal on early education and development in Singapore (REEDS). The results of the systematic review will provide the basis for the writing of REEDS.

2020- 2023 A Study on Children's Home ICT Use on their Language and Development (CHILD); Grant # SMF-CHILD 6/20 SH (\$699,067.78)

**Project introduction:** The purpose of this study is to understand young children's (ages 4 to 6) pattern of ICT use, that is their interaction with digital mobile devices, and its relationship with parenting styles, across socioeconomic status (SES). The study also examines the impact of young children's use of *digital* mobile device on their bilingual learning, socioemotional wellbeing and brain development over a 3-year period, as they progress from Kindergarten 1 (K1) to Primary 1 (P1) in Singapore.

2020- 2023 Mandarin eBook App and Singaporean Bilingual Children's Home Reading Quantity, Quality, and Emergent Literacy Outcomes  
Grant # OER 13/19 (\$347,033)

**Project introduction:** The purpose of this study is three-fold. We intend to explore: 1) whether the eBook App would promote children's total reading amount at home; 2) whether the scaffolding tips on literacy, cognitive, affective, and technic scaffolding improve the quality of parents' interaction while conducting shared book reading; and 3) whether the eBook App and literacy tips promote children's emergent language and literacy outcomes. The findings will inform us about the efficacy of eBook App on MTL development and the types of literacy tips we should provide to parents and early educators for better scaffolding children during joint reading. Moreover, it will provide schools and policymakers insights into whether or not to promote such literacy learning devices. Furthermore, it will offer suggestions to eBook App designers to improve their products and optimize the learning result for the children.

2018- 2020 Preschooler's School Engagement to Teacher's Questions during Interactive Book Reading: A Child-Centered Approach using Electro-Dermal Bracelet  
Grant # OER 17/17 (\$99,995)

**Project introduction:** The current study intends to explore: 1) whether questions indeed attract more classroom engagement from children; 2) which type of questions works better on children's classroom engagement; 3) how children's language ability may influence their classroom engagement over multiple readings of the same story; and 4) whether classroom engagement would function as a mediator between teachers' language practice and children's learning outcomes, namely reading comprehension, story retell and vocabulary acquisition. Children's classroom engagement will be assessed using electro-dermal bracelets, which are more objective and reliable as a measure compared to traditional approaches such as classroom observation. The current study has strong science and social relevance. Worldwide, it will be one of the first studies that adopt electro-dermal technology to do research on children's classroom engagement in response to teacher's reading instruction, providing an objective measure to quantify the effectiveness of children's learning experience in real time. The findings will inform us about the mechanism of teachers' interactive questions on children's classroom engagement, and such findings will probably provide educators and parents with specific pedagogical suggestions on how to improve language practice to better engage individual children and optimize their learning outcome.

2017- 2019 Animated electronic storybook and children's mother tongue development: tracing the process and the outcome with eye-tracking  
Grant # OER 13/16 (\$99,668)

**Project introduction:** The current study will explore the efficacy of animated e-storybooks on Singapore children's MTL learning (4-5 years old). The relation between features of the animated e-storybook (i.e., motion, sound and background music) and children's visual fixation (as measured with eye tracking equipment) will be explored from the perspective of the theory of Complex

Dynamic Systems. The findings of the project will inform us about the nature of animated e-book learning and its advantages on children's language development, and provide parents and educators with pedagogical suggestions. Moreover, it will offer suggestions to e-learning designers to improve their products and optimize the learning result for the children.

2016- 2017    Develop a Reliable Coding Scheme for Instructional Strategies and Linguistic Features Used in Shared Book Reading  
Grant # OER 02/16 (**\$\$17,744,**)

**Project introduction:** The current study will zoom in on the Shared Book Reading (SBR) sessions in Singapore preschools and explore the instructional strategies teachers use and the linguistic features they have. The first objective of the study is to compose a coding scheme that could comprehensively describe Singapore preschool teacher's bilingual instructional strategies and linguistic features based on the literature. Instructional strategies (e.g., comments and questions) will be categorized based on their cognitive demands (high to low), while linguistic features (e.g., lexicon and syntax) will be summarized based on their frequency and complexity. Reliability of this two-set coding scheme will be calculated on each level. The second objective is to explore the inner structure of teachers' instructional strategies and linguistic features with nonlinear time series techniques. The results of this study could potentially 1) inform us about effective bilingual instructional strategies and linguistic features in SBR language practice, 2) facilitate the design of language interventions that aim at improving teachers' language quality at preschool, and 3) provide an outline for teachers' language evaluation in class.

### **Projects as Co-PI or Collaborator**

- 2021-2025    Growth in Bilingual & Biliteracy Proficiency: Environmental, Individual & Experiential Factors (GIBBER) OER 13/21 OBA (**Co-Lead PI, S\$4,239,352**)
- 2021-2023    Randomised Pilot Control Trial for Reducing Anxiety Problems among Children indicated to have Developmental Language Disorder (RAP-iDLLD) RP 2/21 SG (**Co-PI, S\$79,888.71**)
- 2020- 2023    BEdok-Punggol Ongoing Singaporean study beginning in Infancy: Twenty-first century skills, Individual differences, and Variance in the Environment (BE POSITIVE Study) CRCD 01/19 AR (**Co-PI, \$3,020,561, ongoing**)
- 2019- 2021    Understanding the role of caregiver-child pedagogical questioning in Singaporean children's school readiness and achievement OER 10/19 YY (**Co-PI, S\$143,124**)
- 2019- 2021    Improving early number word learning: Examining the role of input OER 05/18 PC (**Co-PI, S\$149,999**)
- 2017- 2020    Syntactic Resonance in Child-Caretaker Interaction and Children's Peer Talk #OER 05/17 KYH (**Co-PI, S\$99,716**)
- 2017- 2019    Investigating Chinese Syntactic Knowledge of Bilingual Singaporean Primary 1 Students Grant # OER SUG 15/17 YB (**Co-PI, S\$19,611**)
- 2014- 2019    Singapore Kindergarten Impact Project (SKIP) Grant # OER 09/14 RB (**Collaborator, S\$5,887,535**)

## PUBLICATIONS

### Journal Articles (refereed)

- Steinkrauss, R., Green, C., Verspoor, M., & Sun\*, H. (accepted, 2023). A Dynamic Usage Based Perspective of Child Bilinguals' English Development. *International Journal of Complexity in Education*.
- Sun\*, H., Low, J. M., & Chua, C. (2022). Maternal Language Proficiency and Bilingual Children's Heritage Language Learning. *International journal of Bilingual Education and Bilingualism*. <https://doi.org/10.1080/13670050.2022.2130153>
- Ng, S. C., & Sun\*, H. (2022). Promoting Social Emotional Learning through Shared Book Reading in Kindergarten Classrooms. *Early Education and Development*, 33(8), 1326-1346. <https://doi.org/10.1080/10409289.2021.1974232>
- Sperry, D., Driscoll, P., Colunga, E., Song, L., Sun, H. (2022). Editorial: The Role of Experience in Children's Language Development: A Cultural Perspective. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.964602>
- Sun\*, H., & Batra, R. (2022). Contextualized and decontextualized questions on bilinguals' heritage language learning and reading engagement. *Reading and Writing: An Interdisciplinary Journal*. <https://doi.org/10.1007/s11145-022-10332-z>
- Sun\*, H., Lim, V., Low, J., & Kee, S. (2022). The Development of a Parental Questionnaire (QQ-MediaSEED) on Bilingual Children's Quantity and Quality of Digital Media Use at Home. *Acta Psychologica*, 229, 103668. <https://doi.org/10.1016/j.actpsy.2022.103668>
- Sun\*, H., & Verspoor, M. (2022). Mandarin vocabulary growth, teacher qualifications and teacher talk in child heritage language learners. *International Journal of Bilingual Education and Bilingualism*, 25(6), 1976-1991, DOI: 10.1080/13670050.2020.1835813
- Sun\*, H., Waschl, N., & Veera, R. (2022). Language Experience and Bilingual Children's Heritage Language Learning. *Studies in Second Language Acquisition*, 1-28. doi:10.1017/S0272263121000942
- Sun\*, H., Roberts, A. C., & Bus, A. (2022). Bilingual children's visual attention while reading digital picture books and story retelling. *Journal of Experimental Child Psychology*, 215, 105327. <https://doi.org/10.1016/j.jecp.2021.105327>.
- Sun\*, H., & Ng, E. (2021). Home and School Factors in Early English Language Education. *Asian Pacific Journal of Education*, 41(4), 657-672, <https://doi.org/10.1080/02188791.2021.1932742>
- Sun\*, H., Bornstein, M.H., & Esposito, G. (2021). The Specificity Principle in Young Dual Language Learners' English Development. *Child Development*, 92(5), 1752-1768. <https://doi.org/10.1111/cdev.13558>
- Sun\*, H., Yussof, N., Mohamed, M., Rahim, A., Bull, R., Cheung, W. L., & Cheong, S. A. (2021). Bilingual language experience and social-emotional well-being: A cross-sectional study of Singapore pre-schoolers. *International Journal of Bilingual Education and Bilingualism*, 24(3), 324-339. <https://doi.org/10.1080/13670050.2018.1461802>

- Green\*, C., & Sun, H. (2021). Global estimates of syntactic alignment in adult and child utterances during interaction: NLP estimates based on multiple corpora. *Language Sciences*, 85. <https://doi.org/10.1016/j.langsci.2020.101353>
- Sun\*, H., Cheong, S.A., Yen, T. W, Koh, E. Kwek, D., & Tan. J. (2020). Network Science Approaches to Education Research. *International Journal of Complexity in Education*, 1(2), 121-150. <https://complexityineducation.com/index.php/ljce/VOLUME1>
- Sun\*, H. (2020). When the East Meets the West in Singapore: Introduction to the Proceedings of the Fourth CCS Satellite Symposium on Complex Systems and Education: Applications in language pedagogy, assessment, and complexity learning. *International Journal of Complexity in Education* 1(2), 91-94. <https://complexityineducation.com/index.php/ljce/VOLUME1>
- Sun\*, H., & Yin, B. (2020). Multimedia Input and Bilingual Children’s Language Learning. *Frontiers in Psychology*, 11(2023). doi:10.3389/fpsyg.2020.02023
- Vijayakumar, P., Steinkrauss, R., Sun\*, H. (2020). Entering into the Weak Version of Translanguaging: Teachers’ English Use in Children’s Tamil Language Classes in Singapore. *Journal of Multilingual and Multicultural Development*. <https://doi.org/10.1080/01434632.2020.1808003>
- Sun\*, H., Toh, W. M., & Steinkrauss, R. (2020). Instructional strategies and linguistic features of kindergarten teachers’ shared book reading: the case of Singapore. *Applied Psycholinguistics*, 41(2), 427-456. <https://doi.org/10.1017/S0142716420000053>
- Sun\*, H., Ng, S. C., O’Brien, B.A., & Fritzsche, T. (2020). Child, Family, and School Factors in Bilingual Preschoolers’ Vocabulary Development in Heritage Languages. *Journal of Child Language*, 47(4), 817-843. <https://doi:10.1017/S0305000919000904>
- Yusof, N. T., & Sun\*, H. (2020). Mismatches between teacher beliefs, practices and reasons for English use in preschool Malay language classrooms. *Language and Education*, 34 (4), 363–382. <https://doi.org/10.1080/09500782.2020.1720230>
- Sun\*, H., Yusof, N., Vijayakumar, P., Lai, G., O’Brien, B. A., & Ong, Q.H. (2020). Teacher's code-switching and bilingual children's heritage language learning and cognitive switching flexibility. *Journal of Child Language*, 47(2), 309-336. <https://doi.org/10.1017/S030500091900059X>
- Rifkin-Graboi\*, A., Khng, F., Cheung, P., Tsotsi, S., Sun, H., Kwok, F., Yu, Y, Xie, H., Yang, Y, & Chen, M. (2019). Will the future BE POSITIVE? How Early Life Parenting Signals the Developing “Pre” School Brain. *Learning: Research and Practice*, 5(12), 99-125. <https://doi.org/10.1080/23735082.2019.1674907>
- Sun\*, H. (2019). Home Environment, Bilingual Preschooler’s Receptive Mother Tongue Language Outcomes, and Social-Emotional and Behavioral Skills: One Stone for Two Birds? *Frontier in Psychology*. 10:1640. DOI: 10.3389/fpsyg.2019.01640.
- Sun\*, H., Loh, J. Y., & Roberts, A. C. (2019). Motion and sound in animated storybooks for preschooler’s total fixation time and mandarin language learning: an eye-tracking study with Singaporean bilingual children. *AERA Open* 5(2), 1-19. <https://doi.org/10.1177/2332858419848431>

- Sun\*, H.,** Yin, B., Amsah, F., & O'Brien, B. A. (2018). Differential effects of internal and external factors in early bilingual vocabulary learning: the case of Singapore. *Applied Psycholinguistics*, 39(2), 383-411. <https://doi.org/10.1017/S014271641700039X>
- Sun\*, H.,** Steinkrauss, R., Wieling, M., & de Bot, K. (2018). Individual differences in very young Chinese children's English vocabulary breadth and semantic depth: Internal and external factors. *International Journal of Bilingual Education and Bilingualism*, 21(4), 405-425. <https://doi:10.1080/13670050.2016.1178706>
- Sun\*, H.,** Steinkrauss, R., van der Steen, S., Cox, R., & de Bot, K. (2016). Foreign language learning as a complex dynamic system: a microgenetic case study of a Chinese child EFL learner. *Learning and Individual Differences*, 49, 287-296. <https://doi.org/10.1016/j.lindif.2016.05.010>
- Sun\*, H.,** Steinkrauss, R., Tendeiro, J., & de Bot, K. (2016). Individual differences in very young children's English acquisition in China: Internal and external factors. *Bilingualism: Language and Cognition*, 19(3), 550-566. <https://doi.org/10.1017/S1366728915000243>
- Sun\*, H.,** de Bot, K., & Steinkrauss, R. (2015). A multiple case study on the effects of temperamental traits in Chinese preschoolers learning English. *The International Journal of Bilingualism*, 19(6), 703-725. <https://doi.org/10.1177/1367006914534332>

### **Books & Book chapters**

- Sun\*, H.,** Ng, S. C., & Peh, A. (2022). Shared book reading and children's social-emotional learning in Asian Schools. In King, R., Caleon, I., & Bernardo, A. (Eds.), *Positive Psychology and Positive Education in Asia: Understanding and Fostering Well-Being in Schools* (pp. 1-18). Singapore: Springer.
- Sun, H.** (2022). Harmonious Bilingual Development: The Concept, the Significance, and the Implications. In O. S. Tan, K. K. Poon, B. A. O'Brien, & A. Rifkin-Graboi (Eds.), *Early Childhood Development and Education in Singapore* (pp. 261-280). Singapore: Springer Singapore. [https://doi.org/10.1007/978-981-16-7405-1\\_13](https://doi.org/10.1007/978-981-16-7405-1_13)
- Sun, H.,** & Cheong, S. A. (2021) Dynamical Motifs in Temporal Networks. In: Bui-Tien T., Nguyen Ngoc L., De Roeck G. (eds) *Proceedings of the 3rd International Conference on Sustainability in Civil Engineering. Lecture Notes in Civil Engineering*, vol 145. Springer, Singapore. [https://doi.org/10.1007/978-981-16-0053-1\\_2](https://doi.org/10.1007/978-981-16-0053-1_2)
- Sun\*, H.,** & Yin, B. (2020). Vocabulary development in early language education. In M. Schwartz (Eds.), *International handbook on early language education* (pp.1-26). Cham, Switzerland: Springer. [https://doi.org/10.1007/978-3-030-47073-9\\_3-1](https://doi.org/10.1007/978-3-030-47073-9_3-1)
- Sun, H.** (2015). *Predictors and stages of very young child EFL learners' English development in China*. (Ph.D. Dissertation), University of Groningen, Groningen.

### **WORKSHOPS & CONFERENCE PRESENTATIONS**

#### **Invited Workshop, Panel Discussion, and Presentations**

- Sun, H.** (2022, Dec. 17th). 用阅读点亮童年：绘本的挑选及阅读. Keynote speech presented at *Preschool Education Colloquium in Southeast Asia* (东南亚学前教育专题学术研讨会), Ningbo, China.

**Sun, H.** (2022, Nov. 10th). Parental Bilingual Perception and Proficiency in Child Language Environment and Wellbeing: The Case of Singapore. Invited talk presented at Department for German Language and Linguistics, Humboldt-University Berlin, Germany.

**Sun, H.** (2022, Sep. 28th). Internal and External Factors in Early Bilingualism: An Individual Difference Approach. Invited talk presented at Department of English Studies, University of Cyprus, Cyprus.

**Sun, H.** (2022, Sep. 26th). Harmonious Bilingual Experience and Child Wellbeing: The Case of Singapore. Invited talk presented at *MECED Talk Series, Singapore University of Social Sciences*, Singapore.

**Sun, H.** (2022, July 18th). Harmonious Bilingualism in Singaporean Children's Language and Social-Emotional Development (和谐双语的概念对新加坡儿童语言及社会情感发展的启示). Invited talk presented at *四方会议*, Singapore.

**Sun, H.** (2022, June 30th). Eye tracker and skin conductance in bilingual children's heritage language reading process. Invited talk presented at Wollongong–Singapore Psychology Research Seminar, Singapore

**Sun, H.** (2022, May 13th). Harmonious Bilingual Experience and Family Wellbeing. Invited talk presented at *HaBiNet*, Brussels, Belgium

**Sun, H.** (2022, Mar. 22nd). Picture book reading and early bilingualism in Singapore, invited speech by NTUC Singapore (online)

**Sun, H.** (2022, Mar. 18th). Individual Differences Matter: Internal and External Factors in Early Language Learning, invited 50th Anniversary Linguistics Colloquium speech presented at the Linguistics Department, Ohio University, US (online)

**Sun, H.** (2022, Mar. 15). Language use and bilingual children's heritage language learning and social emotional wellbeing at the broadcast "*Raising Multilinguals Live*" (online)

**Sun, H.** (2022, Mar. 12). 挑选绘本和阅读绘本的家庭小技巧, invited speech presented at the 2022 年儿童阅读节, 行知文教中心(online)

**Sun, H.** (2022, Feb. 16). Promoting Early Mandarin Learning with Paper Book and eBook Reading: Insights from Three Projects, invited speech presented at the Research Colloquium "*Online Workshop: Current and future research directions in Singapore Mandarin*", NUS FASS and NTU BLIP (online)

**Sun, H.** (2021, Dec. 10). Multimedia Exposure in Early Second and Foreign Language Learning, Keynote speech presented at the Research Colloquium "*Advances in Language Research in an Interconnected World: Sustaining Vitality, Relevance and Rigor*", Mindanao State University, Philippines (online)

**Sun, H.** (2021, Nov. 30). Language Use in Early Mother Tongue Language Learning: Insights from Three Studies, invited speech presented at *OER PD Seminar*, NIE, NTU, Singapore (online)

**Sun, H.** (2021, Nov. 22). Use Picture Book Reading to Enhance Early Second and Foreign Language Learning: Implications from an Eye-tracking Study, invited speech presented at *Academy of Future Education*, Xi'an Jiaotong-Liverpool University, China (online)



- Sun, H.** (2021, 27th Sep 2021). Enhanced eBooks and Early Mother Tongue Language Learning: Implications from an Eye-tracking Study, invited speech presented at *MM SIG Professional Learning Seminar*, NIE, NTU, Singapore (online)
- Sun, H.** (2021, 3rd April 2021). Enhanced eBooks and Early Language Learning: Implications from an Eye-tracking Study, Plenary speech presented at the *4<sup>th</sup> English Language at Literature International Conference (ELLiC 2021)*, Universitas Muhammadiyah Semarang, Indonesia (online)
- Sun, H.** (2020, November). Individual differences in bilingual children's English language development. Invited talk presented at Languages and Literature Department, Eastern Visayas State University, Philippines (online)
- Sun, H.** (2020, October). An Introduction to the Common Statistics in Quantitative Research. Invited talk presented at *The Graduate Research and Academic Development (GRAD) Centre*, NIE, NTU, Singapore
- Sun, H.** (2020, July). Individual Differences in Early Bilingualism/Early Foreign Language Learning. Invited webinar presented at *Schools of Chinese as a Second Language*, Peking University, China (online)
- Sun, H.** (2020, July). Education and Digitalization. Invited plenary discussion presented at *IC Cafe*, Singapore (online)
- Sun, H.** (2020, April). An Introduction to the Common Statistics in Quantitative Research. Invited talk presented at *The Graduate Research and Academic Development (GRAD) Centre*, NIE, NTU, Singapore
- Sun, H.** (2019, October). eBooks and children's early bilingual language development: attention and attainment. Invited talk presented at *LMS TGIF talk*, NTU, Singapore
- Sun, H.** (2019, August). Bilingualism and children's social-emotional and behaviour skills. Invited talk presented at *Global Perspectives: Can Early Language Contribute to Mental Health in Singapore & United Kingdom*, Singapore
- Sun, H.** (2019, January). The animated features of eBooks and bilingual children's mandarin learning. Invited talk presented at *Early Childhood and Special Needs Education*, National Institute of Education, Nanyang Technological University, Singapore
- Sun, H.** (2018, August). Interactive book reading strategies at home and at school. Invited panel discussion at *Mother Tongue Languages Symposium 2018*, Ministry of Education, Singapore
- Sun, H.** (2018, May). The influence of teacher's SBR language quality on bilingual preschooler's second language learning: the process and the outcome. Invited talk presented at *HaBiNet*, Brussels, Belgium
- Sun, H.** (2018, May). Bilingual children's second language and literacy environment at home and their second language and social-emotional skills: one stone for two birds? Invited talk presented at *HaBiNet*, Brussels, Belgium
- Sun, H.** (2018, May). Teacher's Language in Shared Book Reading and Bilingual Preschooler's Mandarin Language Development. Invited talk presented at *NIE Post-Graduate Fair*, Nanyang University of Technology, Singapore



**Sun, H.** (2018, March). Teacher's Language in Shared Book Reading and English-Mandarin Preschooler's Early Literacy Development: The Case of Singapore. Invited talk presented at *Brown Bag seminar*, National University of Singapore, Singapore

**Sun, H.** (2018, March). How could we use shared book reading to promote early literacy development? Perspectives from teacher's language and children's individual characteristics. Invited workshop presented at *Sparkle Tots, Preschool by PAP Community Foundation*, Singapore

**Sun, H.** (2018, February). Use share book reading to promote bilingual preschoolers' language and literacy development. Invited talk presented at *National Institute of Education*, Nanyang Technological University, Singapore

**Sun, H.** (2017, October). Cognitive Engagement and Electrodermal Activity. Invited talk presented at *eduLab, National Institute of Education*, Nanyang Technological University, Singapore

**Sun, H.** (2017, September). Animated Electronic Storybook and Mandarin Learning: Tracing the Process and the Outcome. Invited talk presented at *Singapore University of Technology and Design*, Singapore

**Sun, H.** (2015, February). Invited talk presented at *LANSPAN Colloquia*, University of Groningen, Groningen, the Netherlands

**Sun, H.** (2014, April). Temperament and children's early language learning behavior. Invited talk at *the symposium of Micro-developmental Research in Educational Studies*, Department of Developmental Psychology, University of Groningen

### **Conference presentations**

**Sun, H.** (2022, June). Output and Bilingual Children's Heritage Language Learning. Paper presentation at *Future Challenges in Early Language Learning and Multilingual Education (ELLME2022)* in Granada, Spain.

**Sun, H.** (2022, June). Artificial Intelligence and Early Language Instruction: A Meta-Analysis. Paper presentation at *Future Challenges in Early Language Learning and Multilingual Education (ELLME2022)* in Granada, Spain.

**Sun, H.** (2022, March). What and when individual differences matter: the specificity principle in young dual language learners' English development. Colloquium presentation at the 2022 *American Association for Applied Linguistics Conference* in Pittsburgh, Pennsylvania, USA.

\*The colloquium *Individual Differences in Early Bilingual, Second and Foreign Language Learning: Internal and External Factors* is organized by He Sun and Vanessa De Wilde.

**Sun, H.** (2021, July). Motion and Sound in Animated Storybooks for Preschooler's Visual Attention and Mandarin Language Learning: An Eye-Tracking Study with Bilingual Children. Poster presented at *15th International Congress for the Study of Child Language*, online

**Sun, H.** (2021, July). Child, Family, and School Factors in Bilingual Preschoolers' Vocabulary Development in Heritage Languages. Poster presented at *15th International Congress for the Study of Child Language*, online

**Sun\*, H., & Bus, A.** (2021, July). Eye tracker and Skin Conductance in Bilingual Children's Heritage Language Reading Process. Paper presented at *Society for the Scientific Study of Reading*, online

- Sun, H.** (2021, July). Exploring Bilingual Children's Heritage Language Reading Process with Physiological Data. Paper presented at *the 13th International Symposium on Bilingualism*, Warsaw, Poland (online)
- Sun, H.** (2021, July). Maternal heritage language proficiency and child bilingual's heritage language learning. Paper presented at *the 13th International Symposium on Bilingualism*, Warsaw, Poland (online)
- Ng, S. C., & **Sun, H.** (2021, July). Promoting Social Emotional Learning through Shared Book Reading: Examining Teacher's Strategies and Children's Responses in Kindergarten Classrooms. Paper presented at *Society for the Scientific Study of Reading*, online
- Sun, H.** (2021, Apr. 8). The Differential Effects of Teachers' Questions in Bilingual children's Reading engagement and Learning Outcomes. Poster presented at *The Society for Research in Child Development Biennial Meeting*, online
- Sun, H.** (2021, Mar. 6). Teachers' Questions in Bilingual Children's Mandarin Reading Engagement. Poster presented at *Association for Reading and Writing in Asia*, online
- Sun, H.** (2021, Mar. 5). Shared Book Reading and Asian Children's Language and Literacy Skills: A Meta-Analysis. Paper presented at *Association for Reading and Writing in Asia*, online
- Sun, H.** (2020, December). Early language development could be considered a self-organizing process. Paper presented at *5th CCS Satellite Symposium on Complex Systems and Education*, Online
- Sun, H.** (2020, October). Language Output and Child Mandarin Heritage Language Maintenance in Singapore. Paper presented at *Instructed Second Language Acquisition Forum*, Shanghai, China
- Sun, H.** (2020, September). Animated eBooks and Bilingual Children's Mandarin Language Learning: An Eye-Tracking Study. Paper presented at *Association for Reading and Writing in Asia*, Beijing & Hong Kong, China
- Sun, H.** (2019, October). The dynamics of teachers' questions and comments and bilingual preschooler's Chinese learning process and outcome in Singapore. Paper presented at *4th CCS Satellite Symposium on Complex Systems and Education*, Singapore
- Sun, H.** (2019, September). How animated eBooks could help children learn their mother tongue better? Evidence from an eye-tracking study. Paper presented at *Asian Festival of Children's Content*, Singapore
- Goh, S. & **Sun, H.** (2019, July). Dual language learners: Latent classes of vocabulary growth associate with variation in hyperactivity-inattention. Paper presented at *14th International Conference on Child and Adolescent Psychopathology*, London, Britain
- Sun, H.** (2019, April). Teachers' questions and comments and bilingual preschooler's Chinese learning: a complex dynamic system perspective. Paper presented at *AERA*, Toronto, Canada
- Sun, H.** & Williams, D. (2019, March). What and when individual differences matter: bio-ecological influences in early language and literacy development. Poster presented at *The Society for Research in Child Development Biennial Meeting*, Baltimore, USA

- Sun, H.,** Yussof, N., Vijayakumar, P., Lai, G., Ong, Q.H., & O'Brien, B. A. (2019, March). Teacher's Codeswitching and Bilingual Children's Mother Tongue Language Learning and Cognitive Switching Flexibility. Poster presented at *The Society for Research in Child Development Biennial Meeting*, Baltimore, USA
- Lim, N., O'Brien, B. A., & **Sun, H.** (2019, March). Exploring the Relationship between the Development of English and Chinese Vocabulary Skills in Bilingual Children from Kindergarten 1 to Primary 1. Poster presented at *International Symposium on Cognition and Neuroscience 2019*, Singapore
- Sun, H.** (2018, October). The efficacy of animated e-books in fostering Singaporean kindergartener's Mandarin lexical learning. Presentation at *ABC'18: a Showcase of Infancy Research in the Asia-Pacific*, Singapore
- Sun, H.** (2017, July). Bilingual language experience and social-emotional wellbeing: A cross-sectional study of Singapore pre-schoolers. Poster presented at *14th International Congress for the Study of Child Language*, Lyon, France
- Sun, H.** (2017, May). Instructional strategies and linguistic features of preschool teacher's shared book reading: variation, effectiveness and teacher's characteristics. Paper presented at *Redesigning Pedagogy International Conference*, Singapore
- Sun, H.** (2017, April). Differential effects of internal and external factors in early bilingual vocabulary learning: the case of Singapore. Poster presented at *The Society for Research in Child Development Biennial Meeting*, Austin, USA
- Sun, H.** (2017, February). Cognitive and environmental factors in early bilingual vocabulary learning: the case of Singapore. Paper presented at *Association for Reading and Writing in Asia*, Hong Kong, China
- Sun, H.** (2016, October). Foreign language learning as a complex dynamic process: A microgenetic case study of a Chinese child's English learning trajectory. Paper presented at *Focus on the learner: Contributions of individual differences to second language learning and teaching*, Konin, Poland
- Sun, H.** (2016, September). Individual differences in children's early English acquisition in China: internal and external factors. Paper presented at *2016 Second Language Research Forum (SLRF)*, New York, United States
- Sun, H.** (2016, May). Individual Differences in Early Foreign Language Development: From Linear and Nonlinear Perspectives. Paper presented at *Seminar of National Institute of Education*, Nanyang Technological University, Singapore
- Sun, H.** (2015, March). Individual differences in very young children's English acquisition in China: Internal and external factors. Poster presented at *The Society for Research in Child Development Biennial Meeting*, Philadelphia, USA
- Sun, H.** (2014, October). English lexical knowledge development of young English learners in China: internal and external predictors. Paper presented at *International Conference on Child Foreign Language Acquisition*, Vitoria, Spain
- Sun, H.** (2014, June). A multiple case study on the effects of temperamental traits in Chinese preschoolers learning English. Paper presented at *the 35th TABU Dag*, Groningen, the Netherlands

**Sun, H.,** de Bot, K. (2013, June). When English Knocks at Chinese Children's Mind: Input and English Vocabulary. Paper presented at *the 9th International Symposium on Bilingualism*, Singapore, Singapore

**Sun, H.** (2013, March). Preschooler's Speech and Behavior Development in a TPR English classroom. Paper presented at *The Anéla/VIOT Juniorendag 2013*, Groningen, the Netherlands

**Sun, H.** (2012, January). Chinese children's early English learning at private institute. Talk presented at *The LOT Winter School 2012*, Tilburg, the Netherlands

**Sun, H.** (2010, June). EFL learners' "get done" usage in narratives. Paper presented at *The 55th International Language Association Annual Conference*, New York, USA

## **TEACHING EXPERIENCE AT NANYANG TECHNOLOGICAL UNIVERSITY,** **SINGAPORE**

### **Seminars**

*Psycholinguistics (AAC33B)* at the Asian Language and Culture Academic Group, National Institute of Education, Aug.-Nov. 2019, 2020, 2021, 2022

*Trends in Early Childhood Education (MEC 902)* at the Early Childhood and Special Needs Education Academic Group, National Institute of Education, Sep. 2019

*Educational Inquiry* at National Institute of Education, Nanyang Technological University, Jan.-Apr. 2017, and Jan.- Apr. 2018

*Theory of Second Language Development* at Applied Linguistics Department, University of Groningen, Sep. 2015- Jan. 2016

*Research Methodology* at Applied Linguistics Department, University of Groningen, Sep. 2015- Jan. 2016

### **Guest seminars**

*Individual Differences (MDP 905)*, Psychological Studies Academic Group, National Institute of Education, Oct. and March 2019

*Child Development (MEC 901)* and *Learning Disabilities (MSE911/MPS908)*, Early Childhood and Special Needs Education Academic Group, National Institute of Education, Jan. and March 2019

*Multilingualism across the Lifespan (HG4013)*, Division of Linguistics and Multilingual Studies, add date

*Psycholinguistics*, English Language and Literature Academic Group, National Institute of Education, Nov. 2017 and Jan. 2018

## **STUDENT SUPERVISION AND EVALUATION**

### **PhD & Master candidature thesis review & defense 2018-2022**

English Language and Literature, National Institute of Education, Singapore

### **Master thesis co-supervision**

English Language and Literature, National Institute of Education, Singapore, *Aug 2018 – 2019* (with Dr. Clarence Green)

Dept. of Psychology, University of Groningen, the Netherlands, *Oct. 2015 - Jan. 2016*

(with Dr. Ralf Cox)

### **External master thesis evaluation**

2019 Master thesis review for Macquarie University, Australia

2018 Master thesis review for NUS Speech and Language Pathology program, Singapore

## **EDITORSHIPS & REVIEWING**

### **Editorial role**

Associate Editor for journal – *Journal for the Study of Education and Development*

Associate Editor for journal – *Journal of Child Language*

Associate Editor for journal – *Asia Pacific Journal of Education* (Mar 2019 to Mar 2021)

### **Guest Editor (2018-2021)**

Special issue of *Frontiers in Psychology*, International Mother Language Day: Enhancing Home Language Development from a Young Age

<https://www.frontiersin.org/research-topics/32123/international-mother-language-day-enhancing-home-language-development-from-a-young-age>

Special issue of *Frontiers in Psychology*, The Role of Experience in Children's Language Development: A Cultural Perspective

<https://www.frontiersin.org/research-topics/12064/the-role-of-experience-in-childrens-language-development-a-cultural-perspective?fbclid=IwAR35c1muHgojVIPOv-Dzf9mMf9-Je0AuHgnZ1eDm1Wb1XZK33t0Fstprbb4>

Guest editor of *SingTeach* on “Bilingualism”

<https://singteach.nie.edu.sg/2019/01/29/issue67-bigidea/>

### **Reviewing**

#### *Journals*

2022 Research Methods in Applied Linguistics; International Journal of Behavioral Development; Applied Psycholinguistics; Educational Technology & Society; Bilingualism: Language and Cognition

2021 Bilingualism: Language and Cognition; Language Learning; Asia Pacific Journal of Education (X2); Studies in Second Language Learning and Teaching; Early Education and Development (x2); Reading and Writing (X2); Parenting: Science and Practice; International Journal of Bilingual Education and Bilingualism (X2); the International Journal of Behavioral Development

2020 Frontiers in Psychology; Asia-Pacific Journal of Research in Early Childhood Education; International Journal of Complexity in Education; Early Education and Development; International Journal of Bilingual Education and Bilingualism; Science Progress

2019 American Educational Research Association Open; Applied Linguistics; Applied Psycholinguistics; Bilingualism: Language and Cognition; Developmental Psychology; International Journal of Bilingual Education and Bilingualism; Journal of Child Language; Journal of Computers in Education; Parenting: Science and Practice

2018 Asia Pacific Journal of Education; International Journal of Bilingualism; Journal of English for Academic Purposes

2017 International Journal of Bilingual Education and Bilingualism

#### *Book proposals*

Routledge; Unipress Verlag; Springer

### *Conferences*

- 2022** The Redesigning Pedagogy International Conference, Singapore  
**2021** Program Committee Member of 13 International Symposium of Bilingualism, Poland  
**2019** International Symposium on Bilingualism 12, Alberta, Canada  
**2019** Conference on Complex System Satellite conference on complexity and education, Singapore  
**2018** International Congress for School Effectiveness and Improvement, Singapore  
**2015** The 35th TABU Dag, Groningen, the Netherlands

### *Grant proposals for funding bodies*

- 2022** Research Grants Council, Hong Kong, China  
**2021** 5TRF Grant Call, Singapore  
**2020** 5TRF Grant Call, Singapore  
**2019** Nanyang Technological University, Singapore  
**2018** Temasek Foundation Innovates (9th Singapore Millennium Foundation Grant Call)

### **PROFESSIONAL MEMBERSHIPS**

HaBilNet	Harmonious Bilingualism Network, Supporting Member
ELLRA	Transitional Committee Board, Member
IASCL	International Association for the Study of Child Language, Member
AERA	American Educational Research Association, Member
SRCD	Society for Research on Child Development, Member
SSSR	Society for the Scientific Study of Reading, Member
AI-LC	Ministry of Education Singapore AI Learning Companion Work Group, Member (by 2022 March)

### **MEDIA COVERAGE OF MY RESEARCH**

- 2022**, TV Interview  
"Mother Tongue: How Can We Get It Right?" (TV: Channel News Asia; Channel 5, Talking Point)  
18 August 2022  
<https://www.youtube.com/watch?v=k7k-YLOwJQ0>  
[https://www.channelnewsasia.com/cna-insider/mother-tongue-parents-help-children-fluent-home-exposure-schools-2889121?cid=FBcna&fbclid=IwAR1CdtmmOn-1ijaBVUZQc\\_cCPEtR8sv5nGLldrYVd3tdiE2bfyJ\\_DiHiWc](https://www.channelnewsasia.com/cna-insider/mother-tongue-parents-help-children-fluent-home-exposure-schools-2889121?cid=FBcna&fbclid=IwAR1CdtmmOn-1ijaBVUZQc_cCPEtR8sv5nGLldrYVd3tdiE2bfyJ_DiHiWc)
- 2022**, Webinar Interview  
"Language Experience and Early Heritage Language Learning" 15 Mar 2022  
[https://www.youtube.com/watch?v=\\_Hh7BR4f3II](https://www.youtube.com/watch?v=_Hh7BR4f3II)
- 2021**, Webinar Interview  
"Raising a Bilingual Reader: Top Practical Tips for Parents" (MOE MTL symposium) 28 Aug 2021  
<https://www.mtls.edu.sg/eng/dr-sabrina-sun-he-and-ms-diana-ser/?fbclid=IwAR1jz7yYn3o8Jrpsvadx8U8SiNaC0a8V8FVFr1e20cOB1FsfI7erixpzYk>
- 2021**, Radio Interview  
"Book reading in early childhood" (Radio: Capita 958) 18 May 2021
- 2020**, Radio Interview  
"MTL learning and early Bilingualism" (Radio: Channel News Asia; 938) 13 August 2020
- 2020**, Newspaper Interview  
"研究：授课掺英语次数与幼童学母语无甚关联" (newspaper: Lianhezaobao) 24 July 2020  
<https://www.zaobao.com.sg/news/singapore/story20200727-1072175>
- 2020**, Online News

“Dr Sun He Publishes Articles on Bilingualism and Language Development”

<https://www.nie.edu.sg/about-us/news-events/news/news-detail/dr-sun-he-publishes-articles-on-bilingualism-and-language-development>

**2019**, TV Interview

"MTL learning and social emotional wellbeing" (TV: Channel News Asia; Channel 5) 08 September 2019

<https://www.channelnewsasia.com/news/singapore/conversational-mother-tongue-language-classes-brings-students-11885388>

**2019**, TV Interview

"How can we encourage bilingualism in children?" (TV: Channel News Asia; Channel 5) 09 June 2019

<https://www.channelnewsasia.com/news/singapore/how-can-we-encourage-bilingualism-in-children-video-11610236>

**2019**, Newspaper Interview

"Exposure at home key to kids picking up mother tongue" (newspaper: Straits Times) 04 June 2019

**2019**, Newspaper Interview

"Animated ebooks can help lift language skills: Study" (newspaper: Straits Times) 04 June 2019

**2019**, Newspaper Interview

"家中营造听讲读环境更有利幼童学母语" (newspaper: Lianhezaobao) 04 June 2019

**2017**, News Report

学龄前儿童外语学习的效果和什么因素相关? (What affect preschooler's foreign language education?) [http://www.sohu.com/a/135029753\\_154345](http://www.sohu.com/a/135029753_154345)

**2015**, Journal Interview

Hoe vroeg kun je met Engels beginnen? (How early should your child start to learn English?)

<https://www.nemokennislink.nl/publicaties/hoe-vroeg-kun-je-met-engels-beginnen/>

### **Conference/meeting organizer**

CCS Satellite conference on complexity and education, Singapore, 2019

The 35th TABU Dag conference, Groningen, 2014

Seminars of Center for Research in Child Development, National Institute of Education

PhD support group meeting at Linguistics Department, University of Groningen

### **Skills**

#### **Data analysis**

Mixed-effect model, recurrence quantification analysis, Bayes factor analysis, cross validation, multiple regression analysis, structural equation model, factor analysis, cluster analysis

#### **Technical skills**

Proficient user of SPSS, R, CHILDES tools (CLAN), Media Coder and Microsoft Office Suite  
Notions of the use of Mplus, E-prime, Tobii Eye tracker, and Shimmer (skin conductance)

#### **Languages**

Native Mandarin Chinese, good English skills (oral and written)

November 2022