# Jeanne Sinclair

jeanne.sinclair@mail.utoronto.ca

#### **EDUCATION**

April 2019 PhD

(anticipated) Language and Literacies Education Program

Department of Curriculum, Teaching and Learning Ontario Institute for Studies in Education (OISE)

University of Toronto

Dissertation: Applying machine learning to assessment for language acquisition and reading exceptionality supports

Committee members: Dr. Eunice Eunhee Jang (Chair), Dr. Jim Hewitt,

Dr. Frank Rudzicz, and Dr. Earl Woodruff

Research specializations: language and literacy assessment validation,

innovations in assessment, language and assessment policies

2014 MA

Bicultural-Bilingual Studies, concentration in Bilingual Teacher Education

University of Texas at San Antonio

Thesis: A literacy profile of majority-language dual-immersion participants

Supervisor: Dr. Howard Smith

2009 Texas Educator Alternative Certification Program

Region 4 Education Service Center, Houston, Texas

2000 BA

Gallatin School of Individualized Study

New York University

## **CERTIFICATIONS**

2014–2016, 2018–present TESL Ontario. English as a Second Language Theory Instructor

2009–2016 Texas Educator. Certified for Early Childhood–Grade 8 Bilingual,

ESL, Generalist, and Gifted

# EMPLOYMENT HISTORY

Higher Education Experience

9/2018-present	Teacher education program assistant (practicum supervision support) for the MA in Child Study and Education. Dr. Eric Jackman Institute of Child Study and Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education
9/2018-present	Research fellow. Precision Education: The Virtual Learning Lab, University of Florida
2/2018-present	Program evaluation theme leader. Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education
2015–2018	Research project manager. Blended assessment of literacy and numeracy in computerized environments (BALANCE), Ontario Institute for Studies in Education
2016–2018	Research assistant. Learning environments across disciplines (LEADS), McGill University
2016–2017	Research assistant. Improving International English Language Testing System reading test score interpretations and utilization through cognitive diagnostic modeling skill profiling, Ontario Institute for Studies in Education
2016–2017	Research assistant. Revision of Optometric English Language Proficiency Exam, contract with Touchstone Institute, Toronto, Ontario
2016–2017	Teaching assistant. APD1227 (Professional Practice Project), Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education
2016–2017	Research assistant. Assessing and supporting Aboriginal children's oral language and writing development through play in classrooms, daycares, and homes in northern communities, Ontario Institute for Studies in Education
2015–2017	Research assistant. Disciplinary literacy and resilient readers, contract with the Ontario Ministry of Education
2014–2015	Research assistant. Pragmatics instruction in vocational ESL settings, Ontario Institute for Studies in Education
K–12 Experience	
2012–2014	Full-time two-way bilingual teacher (second grade). Carl Schurz Elementary School, New Braunfels Independent School District, New Braunfels, Texas

2010–2012	Full-time one-way bilingual teacher (fourth grade). Morningside Elementary School, Comal Independent School District, New Braunfels, Texas
2009–2010	Full-time one-way bilingual teacher (fourth grade). Camino Real Elementary School, Hays Consolidated School District, Niederwald, Texas
2009	Bilingual part-time assistant kindergarten teacher. Travis Elementary School, Houston ISD, Houston, Texas

## **GRANTS AND FELLOWSHIPS**

2018–2019	Ontario Graduate Scholarship (\$15,000)
2018	OISE Graduate Students Conference Travel Program (\$750)
2017–2018	OISE Fellowship (\$23,694)
2017	OISE Graduate Students' Association Conference Funding Program (\$250)
2017	OISE Graduate Students Conference Travel Program (\$750)
2016	OISE Graduate Students' Association Conference Funding Program (\$277)
2016	Dean's Office Student Travel Grant (\$498)
2016–2017	OISE/University of Toronto Graduate Funding (\$22,604)
2015	University of Toronto School of Graduate Studies Conference Grant (\$740)
2015–2016	OISE/University of Toronto Graduate Funding (\$21,551)
2014–2015	OISE/University of Toronto Graduate Funding (\$20,579)

# **AWARDS**

2018	Learning Environments Across Disciplines Student Travel Award (McGill University)
2018	University of Toronto Three-Minute Thesis Competition Finalist
2018	Honorable Mention for Distinguished Paper Award, American Educational Research
	Association Classroom Assessment SIG (http://www.aera.net/SIG018/Awards)
2017	Best Short Paper Award for 7 <sup>th</sup> Annual Learning Analytics and Knowledge
	Conference

## **PUBLICATIONS**

Refereed Journal Articles

**Sinclair**, **J.**, Larson, E. J., & Rajendram, S. (Accepted). "Be a machine": International graduate students' narratives around high-stakes English proficiency tests. *Language Assessment Quarterly*.

**Sinclair**, **J.**, Jang, E. E., & Vincett, M. (2018). Investigating linguistically diverse adolescents' literacy trajectories using latent transition modeling. *Reading Research Quarterly*. DOI 10.1002/rrq.220. (5-year Impact Factor: 4.496).

- **Sinclair, J.** & Lau, C. (2018). Initial assessment for K-12 English language support in six countries: Revisiting the validity-reliability paradox. *Language & Education*, 32(3), 257-285. DOI 10.1080/09500782.2018.1430825.
- Jang, E. E., & **Sinclair**, **J.** (2017). Ontario's educational assessment policy and practice: A double-edged sword? *Assessment in Education: Principles, Policy & Practice*. DOI 10.1080/0969594X.2017.1329705.
- **Sinclair, J.** (2016). "Starving and suffocating": Evaluation policies and practices during the first 10 years of the U.S. Bilingual Education Act. *International Journal of Bilingual Education and Bilingualism*, 21(6), 710–728. DOI 10.1080/13670050.2016.1210565
- **Sinclair, J.** (2014). Literacy achievement in two-way immersion: A focus on majority language speakers. *Journal of Bilingual Education Research & Instruction*, 16(1), 17-45.

Published Conference Proceedings

- **Sinclair, J.**, Jang, E. E., Azevedo, R., Lau, C., Taub, M & Mudrick, N. (2018). Changes in emotion and their relationship with learning gains in the context of MetaTutor. In Nkambou R., Azevedo R., & Vassileva J. (Eds.), *Lecture notes in computer science: Intelligent tutoring systems 2018* (pp. 202-211). Cham: Springer. DOI 10.1007/978-3-319-91464-0.
- Lau, C., **Sinclair, J.**, Taub, M., Azevedo, R., & Jang, E. E., (2017). Transitioning self-regulated profiles in hypermedia learning environment. In Wise, A. (Ed.), *Proceedings of the seventh International Conference on Learning Analytics and Knowledge*. New York: Association for Computing Machinery. DOI 10.1145/3027385.3027443. (Received Best Short Paper Award at the 2017 Learning Analytics and Knowledge Conference.)

Technical and Research Reports

- Jang, E. E., **Sinclair**, **J.**, Park, G., & Vincett, M. (2017). Advancing Ontario adolescent students' disciplinary literacy competencies: A field research report. Prepared for the Ontario Ministry of Education, Toronto, Ontario.
- Jang, E. E., **Sinclair, J.**, & Larson, E.J. (2017). Final report of Optometric English Language Proficiency Exam test renewal and validation project. Prepared for Touchstone Institute Competency Evaluation, Toronto, Ontario.
- **Sinclair, J.** (2016). Students' and teachers' perceptions of effectiveness of instructed reading strategies. In Jang, E. E., and Stille, S., (Eds.), Collaborative inquiry into pathways to adolescents' reading resilience: A field research report. Prepared for the Ontario Ministry of Education, Toronto, Ontario.
- Jang, E. E., **Sinclair, J.**, & Larson, E. (2016). Optometric English Language Proficiency Exam Speaking and Writing Test Specifications. Prepared for Touchstone Institute Competency Evaluation, Toronto, Ontario.

Jang, E. E., **Sinclair, J.**, & Larson, E. (2016). Optometric English Language Proficiency Exam Speaking and Writing Tests: Assessor Guidebook. Prepared for Touchstone Institute Competency Evaluation, Toronto, Ontario.

Manuscripts under Review

Kerekes, J. & **Sinclair**, **J.** The role of soft skills in vocational ESL and Canadian workplaces: Its potential to (dis)empower employment seekers. In Angouri, J., Kerekes, J., & Suni, M. (Eds.), *Migrants in working life*. Multilingual Matters.

**Sinclair, J.**, Kim, H., & Jang, E. E. Examining the Ontario Secondary School Literacy Exam for testlet- and test-level differential functioning using three English language indicators.

Manuscripts in Preparation

**Sinclair, J.**, Jang, E. E., & Vincett, M. Formative assessment of disciplinary literacy: Aligning constructs, evidence, and pedagogy.

**Sinclair, J.,** Vincett, M., Kim, H., Lau, C., & Larson, J. How simple is the simple view? Probing the connection between reading and listening comprehension skills.

#### INVITED LECTURES AND WORKSHOPS

Kerekes, J. & Sinclair, J. (2018, September). Pragmatics research in vocational ESL settings. Department meeting, Curriculum, Teaching and Learning, Ontario Institute for Studies in Education, Toronto, Ontario.

**Sinclair, J.** (2018, March). Mixed methods in educational research. Lecture presented to APD2293, Interpretation of Educational Research. Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education, Toronto, Ontario.

**Sinclair, J.** (2018, March). Pre-conference workshop break-out session leader. 18<sup>th</sup> Annual OISE Graduate Student Research Conference, Toronto, Ontario.

**Sinclair, J.** (2018, January). Workshop on modeling confirmatory factor analysis in R. Department of Applied Psychology and Human Development, Ontario Ministry of Education, Toronto, Ontario.

**Sinclair, J.** (2017, November). Applications of latent transition modeling in MPlus. Lecture presented to APD6001, Multivariate Statistical and Psychometric Applications in Education and Psychology. Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education, Toronto, Ontario.

Jang, E. E., **Sinclair**, **J**., Park, G., & Vincett, M. (2017, November). Advancing Ontario adolescent students' disciplinary literacy competencies: Findings from field research. Ontario Ministry of Education, Toronto, Ontario.

- Jang, E. E., **Sinclair**, **J**., & Vincett, M. (2017, February). Collaborative inquiry into pathways to adolescents' reading resilience. Ontario Ministry of Education, Toronto, Ontario.
- **Sinclair, J.**, Jang, E., Stille, S., Vincett, M. & Park, G. (2016, November). Students' perceptions of reading: Factors associated with strategies, stamina, and resilience. Ontario Ministry of Education, Toronto, Ontario.
- **Sinclair, J.** (2016, November). Classical test theory. Department of Applied Psychology and Human Development, Ontario Institute for Studies in Education, Toronto, Ontario.
- Jang, E. E., **Sinclair, J.**, & Larson, E. (2016, September). Optometric English Language Proficiency Exam item writing workshops. Touchstone Institute Competency Evaluation, Toronto, Ontario.
- Jang, E. E., & Sinclair, J. (2016, March). Culturally responsive pedagogy. First Nations, Metis, and Inuit (FNMI) Collaborative Inquiry Workshop, Sudbury, Ontario.
- Jang, E., **Sinclair**, **J.**, Park, G., Lau, C., & Bo, B. (2016, February). Assessment design primer: How to design a good test/assessment. University of Toronto Second Language Teaching & Learning Workshops, Toronto, Ontario.
- Jang, E., Stille, S., Vincett, M., Park, G., & Sinclair, J. (2015, November). Adolescent reader project: Promoting resilience for struggling readers. Ontario Ministry of Education, Toronto, Ontario.

## REFEREED CONFERENCE PRESENTATIONS

- **Sinclair, J.,** Vincett, M., Kim, H., McCormick, S., Barron, C., & Jang, E. E. (Accepted). Probing the relationship between reading profiles and lexical speech features using machine learning. Annual Meeting of the National Council on Measurement in Education.
- Butler, Y. G., Papageorgiou, S., Wolf, M. K., Jang, E. E., & **Sinclair**, **J.** (Accepted). Assessing young learners' English language proficiency. American Association for Applied Linguistics 2019 Conference.
- McCormick, S., Kim, H., Lau, C. Vincett, M., Barron, C., & **Sinclair**, **J.** (Accepted). Talk2Me Jr: A pre-diagnostic digital language and literacy assessment tool. Annual meeting of the Language Testing Research Colloquium.
- **Sinclair, J.**, Jang, E. E., & Vincett, M. (2018, April). Investigating adolescents' literacy skill trajectories using latent transition modeling. Annual Meeting of the American Educational Research Association, New York, New York.
- Jang, E.E., **Sinclair, J.** Lau, C., Vincett, M., Kim, H., Barron, C., & McCormick, S. (2018, April). Promoting young readers' self-regulated literacy competence development through scenario-based literacy assessment design. Annual Meeting of the American Educational Research Association, New York, New York.

- Kim, H., Jang, E. E., & Sinclair, J. (2018, April). Investigating DIF due to cultural familiarity on reading achievement test: Does length of residence matter? Annual Meeting of the American Educational Research Association. New York, New York.
- **Sinclair, J.**, Lau, C., & Jang, E. E. (2017, September). An exploration of DIF based on language background: The case of the 2014 Ontario Secondary School Literacy Test. Center for Culturally Responsive Evaluation and Assessment Annual Conference, Chicago, Illinois.
- **Sinclair, J.** (2017, September). "A polite device for a stab in the back": Evaluation policies and practices under the U.S. Bilingual Education Act, 1968-1978. Center for Culturally Responsive Evaluation and Assessment Annual Conference, Chicago, Illinois.
- **Sinclair, J.** & Aquil, A. (2017, August). "The quality of their education must be protected": Bill 80 and strategies of persuasion. Multidisciplinary Approaches to Language Policy and Planning Conference, Toronto, Ontario.
- Rajendram. S., Larson, E., **Sinclair, J.** (2017, August). Gatekeepers of academia: University admissions policies and English language proficiency tests. Multidisciplinary Approaches to Language Policy and Planning Conference, Toronto, Ontario.
- Jang, E.E., Strachan, A., **Sinclair, J.**, Larson, E. J., & Gallo, J. (2017, July). Influence of contextual specificity on interaction between language ability and specific-purpose content knowledge: The case of OELPE ESP Test. Language Testing Research Colloquium, Bogotá, Colombia.
- **Sinclair, J.** & Jang, E. E. (2017, May). Differential effects of course level, elementary achievement, and demographic variables on secondary school literacy scores. The Canadian Society for the Study of Education Annual Conference, Toronto, Ontario.
- Jang, E.E., Lau, C., & Sinclair, J. (2017, May). Learner modeling in technology-rich learning environments. LEADS 2017 Annual Meeting, Montreal, Quebec.
- **Sinclair, J.**, Jang, E. E., Stille, S., & Park. G. (2017, April). New frontiers of assessment using a disciplinary literacy approach: Perspectives from teachers. Annual Meeting of the American Educational Research Association, San Antonio, Texas. (Awarded Honorable Mention for Distinguished Paper by AERA's Classroom Assessment SIG.)
- Lau, C., Jang, E. E., **Sinclair, J.**, Azevedo, R., Taub, M. (2017, April). Latent class profiling of self-regulated learning in MetaTutor: A technology-rich learning environment. Annual Meeting of the American Educational Research Association, San Antonio, Texas.
- **Sinclair, J.** (2016, September). Ontario's legislative battles over heritage language education. Multidisciplinary Approaches to Language Policy and Planning Conference, Calgary, Alberta.
- Jang, E. E., Lau, C., & **Sinclair**, **J.** (2016, April). Measurement issues and challenges in learner modeling and assessment. LEADS 2016 Analytics Workshop, Washington, D.C.

Lau, C., Sinclair, J., & Jang, E. E. (2016, April). Systematic evaluation of the effectiveness of TREs in tracking affective psychological and cognitive growth. LEADS 2016 Annual Meeting, Washington, D.C.

Bale, J., Kawaguchi, M., & Sinclair, J. (2016, April). The Heritage Languages Program in Ontario, 1977-1986: Origins, conflicts, and consequences for diverse democracies. Annual Meeting of the American Educational Research Association, Washington, D.C.

**Sinclair, J.** (2016, April). Reviewing initial assessment and classification procedures for EAL learners in six English-dominant countries. American Association for Applied Linguistics Annual Conference, Orlando, Florida.

Rajendram, S., **Sinclair, J.**, Larson, E., & Masson, M. (2016, April). Language tests at the gates of academia: Student narratives around English language proficiency assessments. American Association for Applied Linguistics Annual Conference, Orlando, Florida.

**Sinclair, J.** (2015, October). "A paradoxical element": The (mis)use of IQ tests under the U.S. Bilingual Education Act, 1968-1978. Centre for Educational Research on Languages and Literacies Informal Seminar Series, Toronto, Ontario.

**Sinclair, J.** (2015, June). Immigrant children, "steamer classes," and the official discourse of Americanization, 1900-1925. Bridging Language Acquisition and Language Policy Symposium, Lund, Sweden.

**Sinclair, J.** (2015, June). A "vast" linguistic resource denied: The development of Ontario's policy on heritage languages in schools. Canadian Society for the Study of Education Annual Conference, Ottawa, Ontario.

**Sinclair, J.** (2015, March). No Canadian child left behind? Accountability policy enactment and language minority students. TESOL International Convention & Language Expo Doctoral Research Forum, Toronto, Ontario.

Elsherief, H., Jaimungal, C., and **Sinclair, J.** (2015, March). Centering voices: Issues of power and belonging in "culturally responsive" educational spaces. Panel presentation, Comparative and International Educational Society Annual Conference, Washington, D.C.

**Sinclair, J.** (2014, November). Is "same" the same as "equal"? Ontario's provincial assessments for elementary-aged language minority students. Proceedings of the 25th Edward F. Kelly Evaluation Conference, Toronto, Ontario.

#### RESEARCH EXPERIENCE

2018–present Research Fellow, Precision Education: The Virtual Learning Lab. Funded by the Institution of Education Sciences, National Research and Development Centers Program (\$8.9 million). Dr. Carole R. Beal (University of Florida), Dr. George Michailidis (University of Florida), Dr. Donald Pemberton (University of Florida), Dr. Sidney D'Mello (University of Notre Dame), and Dr. Walter Leite

(University of Florida), co-PIs.

Development of predictive algorithms for mathematics engagement and achievement from a large-scale online algebra tutoring platform.

2015–2018 Project Manager. Blended Assessment of Literacy and Numeracy in Computerized Environments (BALANCE). Funded by Social Science and Humanities Research Council Insight Grant (\$311,804), Dr. Eunice Jang, PI.

Development of innovative language and literacy learning and assessment platform for elementary classroom use, with natural language processing and machine learning functionalities. Research presented at AERA 2017 and 2018.

2016–2018 Research Assistant. Learning Environments Across Disciplines (LEADS): Supporting Technology-Rich Learning Across Disciplines. Funded by Social Science and Humanities Research Council Partnership Grant (\$2.4 million), Dr. Susanne Lajoie, PI (McGill University).

International collaboration of scholars in medical and educational fields investigating innovations in computerized learning environments. Research presented at AERA 2017.

2016–2017 Research Assistant. Improving International English Language Testing System (IELTS) Reading Test Score Interpretations and Utilization through Cognitive Diagnostic Modeling Skill Profiling. IELTS Joint-Funded Research Program (\$79,310), Dr. Eunice Eunhee Jang, PI.

Investigation of disciplinary-specific academic language in university settings and the relationship with standardized English proficiency assessments.

2016–2017 Research Assistant. Revision of Optometric English Language Proficiency Exam. Contract with Touchstone Institute, Dr. Eunice Eunhee Jang, PI.

Update of occupational-specific language assessment, from item-writing workshops to piloting and validation report. Research presented at the 2017 Language Testing Research Colloquium.

2016–2017 Research Assistant. Assessing and Supporting Aboriginal Children's Oral Language and Writing Development through Play in Classrooms, Daycares, and Homes in Northern Communities. Funded by Social Sciences and Humanities Research Council Partnership Grant (\$2.8 million), Dr. Eunice Jang, co-PI.

Development of research base for culturally responsive oral language assessment for students of First Nations, Métis, and Inuit descent in northern Canadian communities.

2015–2017 Principle Investigator. Language Tests at the Gates of Academia. Supervised by Dr. Jeff Bale.

Inquiry into international graduate students' experiences with high-stakes language tests. Research presented at American Association for Applied Linguistics 2016 conference and accepted by *Language Assessment Quarterly*.

2015–2017 Research Assistant. Disciplinary Literacy & Resilient Readers projects. Contract with Ontario Ministry of Education (\$89,223), Dr. Eunice Eunhee Jang and Dr. Saskia Stille, Co-PIs.

Field research to support adolescent resiliency in reading, professional development and research collaborations with teachers, and validation of online student self-reflection tools. Research presented at AERA 2017.

2015–2017 Volunteer Research Assistant. Ontario's Heritage Language Program: Origins, Conflicts, Consequences for Language Education. Funded by Social Science and Humanities Research Council Institutional Grant (\$2,460), Dr. Jeff Bale, PI.

Investigation of the historical foundations of Ontario's heritage language program and its relationship with the contemporary program. Research presented at AERA 2016.

Volunteer Research Assistant. Detracking Project. Dr. Katyn Chmielewski, PI.

Analysis of academic streaming, economic trends, and languages of instruction/assessment using five decades of international data from PISA, TIMSS, and PIRLS.

2014–2015 Research Assistant. Pragmatics Instruction in Vocational English-as-a-Second-Language Settings. Dr. Julie Kerekes, PI.

Exploration of pedagogical issues in pragmatics instruction and curricula in publicly-sponsored courses for newcomers to Canada.

#### **SERVICE**

Conference and Journal Reviewer

2018	Center for Culturally Responsive Evaluation and Assessment Annual Conference
2018	OISE Graduate Student Research Conference and Journal
2017–2018	Studies in Educational Evaluation
2017–2018	Annual Meeting of the American Educational Research Association
2016	Canadian Society for the Study of Education Annual Conference
2015	Critical Intersections in Education
2015	Journal of Classroom Research in Literacy
2014-2015	Canadian Journal for New Scholars in Education

#### Committee Involvement

OISE Council Academic Programs Committee (2018-2019)
OISE Council Equity Committee (2018-2019)
OISE Faculty Council Student Representative (2014–2016)
Graduate Students' Association Elections Appeals Committee (2015)

## RESEARCH SKILLS

- Psychometric techniques including cognitive diagnostic modeling, item response theory, differential item functioning, and many-facets Rasch measurement.
- Multiple regression and related approaches (e.g., ANOVA family of statistics), exploratory and confirmatory factor analysis, and latent class analysis
- Longitudinal analyses including latent transition analysis and growth curve modeling
- Current research utilizes machine learning and natural language processing
- Applications include R, SAS, SPSS, Stata, and Python, with large and small datasets
- Narrative inquiry, grounded theory, and text-based archival research

## **LANGUAGES**

Spanish (proficient)

## PROFESSIONAL MEMBERSHIPS

American Educational Research Association Canadian Society for the Study of Education American Association for Applied Linguistics International Language Testing Association