

Faculty Research Partner Day

- **EE** April 19, 2024
- Faculty of Education Building, 1137 Western Rd.
- **③** 8:30 a.m. to 4 p.m.

Grad & Faculty Research Partners Day 2024

Conference Program

Faculty of Education, Western University Friday, April 19, 2024, 8:30 am – 3:15 pm

Welcome!

The Research Office at the Faculty of Education would like to welcome attendees from school boards in and around the London area, other partner organizations, and researchers from Western University to 2024 Faculty Research Partners Day.

The goal of this one-day conference is to support future research collaborations between local school board members, partners from other organizations, and Western Faculty of Education researchers. Presentations and discussions will focus on both existing research and developing future research partnerships.

Our conference programming, including a keynote by Jennifer Johannesen.

Complimentary coffee, lunch, and parking will be provided (for parking, please see the map on the <u>conference webpage</u>).

Please **RSVP** for this event by filling out and submitting the <u>online registration form</u> by/before March 15.

We hope that this day will be very valuable to you. Please feel free to send us any feedback.

Dr. Nicole Neil,
Associate Dean – Research
Western University Faculty of Education

FRPD 2024– Schedule for The Day

Time	Room	Presentation
8:30-9:00	Auditorium	Registration
		Participants arrive and check-in.
9:00-9:15	Auditorium	Welcome and Opening Remarks
		Dr. Donna Kotsopoulos, Dean & Professor, Faculty of Education,
		Western University
9:25-9:50		Presentations:
	FEB 2036	1: George Gadanidis, Immaculate Namukasa (Education,
		Western).
		Computational Participation and Artificial Intelligence Education
	FEB 2038	2: Deanna Friesen; Abagail Hennessy (Education, Western).
		Teachers' perceptions of implementing Right to Read Report's
	FEB 2054	3: Theresa Pham, Lisa Archibald (Education, Western).
	. == === :	Supporting oral language in the classroom through talk moves
	FEB 2051	4: Perry Klein (Education, Western), Keelan Di Trolio (London
		District Catholic School Board), Stacey Lukewich (Education,
		Western), Carolyn Mussio, Dilrukshi Troup (London District
		Catholic School Board), Serena Thompson (Education, Western),
		Jill Dombroski, (University of Toronto).
		Who Benefits from Response to Intervention in Self-Regulated
		Strategy Development?
9:50-10:00		Break
10:00- 10:25		Presentations:
	FEB 2036	1: Nedra Peter, Immaculate Kizito Namukasa, Shamiga (Shamy)
		Arumuhathas (Education, Western).
		Echoes of Inclusion: A Tapestry of Anti-Racism Pedagogies
		Explored – A Scoping Review
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	FEB 2038	2: Kailee Liesemer, Lina Hawi (Education, Western), Lynn
		Seward, Laura Pritchard, Jennifer Sanders (TVCC), Colin King, Katelyn Bryant, Nicole Neil, Gemma Graziosi (Education,
		Western).
		Research Partnership in Action: Virtual Services for Children and
		Youth with Autism
	FEB 2054	3: Nikita Kalwani, Charlotte Nau, Estefania Reyes, Kaitlynn
	1 LD 2034	Mendes (Education, Western)
		Promoting Digital Safety Among Canadian Youth
		Training Digital Sujety fullong Canadian Touth
	FEB 2051	5. Katrina Kelso (Education, Western)
		Beyond the words: What does it take to comprehend text
10:30-11:00	Community Room	Break
11:00-11:25		Presentations:
	FEB 2036	1: Kathy Hibbert, M. Ott, T. Sanjeevan, J. Sidhu, S. Habib
		(Education, Western).
		(Education, Western).

		Going gradeless in Teacher Education
	FEB 2038	2: Nadir Díaz-Simón (Education, Western), Carolyn Mussio, Maureen O'Hare, Terry Tate (London District Catholic School Board), Daniel Ansari (Education, Western). What is 'Number Talks' and what do we know about it? Towards an interdisciplinary investigation of this instructional practice.
	FEB 2054	3: Meghan Fournie (Education, Western), Catherine McLean (Southwestern Public Health), Joanna Cuz (Middlesex London Health Unit), Andrea Delaney, Heather Carr, Claire Crooks (Education, Western). Public Health and Education Partnerships for Healthy Relationships Programming
11:30-11:55		Poster Session:
11.00 11.00	Community Room	1: Rachel Benninger, Lisa Archibald (Education, Western) Co-Design of a Curriculum-Based Spoken Language Assessment Tool for Teachers of the DHH
		2: Antonia Yip (Education, Western)
		Supporting English learners to understand mathematical word
		problems using the "reading to learn" approach
		3: Liwen (Audrey) Situ, Frank Boers (Education, Western) Listening First? Reconsidering the Approach to English Word Pronunciation Learning from Textual Input
		4: Emily M. Erb, Gabrielle T. Lee (Education, Western) Using virtual and augmented reality to teach children on the autism spectrum with intellectual disabilities: A scoping review
		5: Gabrielle T. Lee (Education, Western), Xiaoyi Hu, Ning Jin (Beijing Normal University, China)
		Using Computer-Assisted Multiple Exemplar Instruction to Facilitate the Development of Bidirectional Naming for Children with Autism Spectrum Disorder
		6: Skylar Cohen (Psychology, Western), Olivia Ward, Deanna Friesen (Education, Western)
		The Role of Background Knowledge on Reading Comprehension: An Eye-Tracking Study
		7: Yujie Xu, Deanna Friesen (Education, Western) The Use of Subtitles and Captions by Bilinguals
		8: Sichuang Fan (Education, Western) Content Analysis of Motivational Design in Mathematics Curricula: A Study of Ontario and China

		9: Alexandra Weatherhead (Education, Western)
		Belonging in Refugee Education: Conceptualisation, Policy, and
		Pedagogy
12:00 – 1:00 PM	Community Room	Lunch
1:00 – 2:00 PM	Auditorium	Keynote Presentation
		Jennifer Johannesen
		Researching with Partners: Making a Case for Reflexivity
		Introduction by: Nicole Neil, Associate Dean – Research, Faculty
		of Education, Western University
2:10 - 2:35		Presentations:
	FEB 2036	1: Perry Klein (Education, Western), Dilrukshi Troup, Carolyn Mussio, Julie Cybulski Malik (London District Catholic School Board), Stacey Lukewich, Savannah Heintzman (Education, Western).
		Can the Syntax Project Meet Ontario's New Expectations for
		Teaching Sentence Writing and Grammar?
	FEB 2038	2. Kathy Hibbert, Deanna Friesen, Y. Chen, R. Cole, K. Hobbs, M. Ott, J. Rouse, Michaud, R. (Education, Western). Re-imagining admissions in teacher education
	FEB 2054	3: Jacqueline Specht, Nicole Neil, Elaine Fournier (Education, Western), Jess Whitley (University of Ottawa), Paula Boutis (Inclusion Action in Ontario), Annie Beatty, Boden Brock, Gina Silva (Education, Western). Navigating the Special Education System: Parents Supporting Parents
	FEB 2051	4. Paul Tarc (Education, Western), Meagan Hamilton (Branksome Hall), Glenn Odland, (IBEC Western Consultant) Building and Sharing Knowledge on Teaching for International Mindedness from the Ground Up: IB and Beyond
2:40 – 2:55		Break
3:00 – 4:00	Community Room	Networking and Closing
		Nicole Neil, Associate Dean – Research, Faculty of Education,
		Western University

Researching with Partners: Making a Case for Reflexivity

By: Jennifer Johannesen

Western University, Faculty of Education April 19, 2024 Auditorium, 1 – 2 pm



Jennifer Johannesen writes, lectures and consults on healthcare practice and policy related to patient-centred care, patient engagement and partnership in research, and critical thinking in clinical practice. Her interest in these topics arose from her experience caring for her son, Owen, who had multiple severe disabilities all his life. Owen died in 2010 at the age of 12. Jennifer's role as caregiver and advocate led her to ask broader questions about disability and society, clinical healthcare practice, and patient/public involvement in healthcare improvement and health research. Specifically: why do we do what we do, and whom does it serve? Jennifer co-hosts Matters of Engagement, a podcast about patient engagement and partnership. She holds a Master of Science in Bioethics degree from Clarkson University (Schenectady NY) and is based in Guelph Ontario.

business: http://lowtotheground.capersonal: http://johannesen.ca

Abstracts:

Oral Presentations

1. George Gadanidis, Immaculate Namukasa (Education, Western).

Title: Computational Participation and Artificial Intelligence Education

We will share our work and learnings from two projects:

- (1) What is Computational Participation? What does it look like in research classrooms and outreach contexts? What have we learned?
- (2) What is Artificial Intelligence? How does it fit into our curriculum? What resources are available? [see https://Al-ed.ca]

2. Deanna Friesen; Abagail Hennessy (Education, Western).

Title: Teachers' perceptions of implementing Right to Read Report's

In February 2022, the Ontario Human Rights Commission (OHRC) released a report making 157 recommendations for literacy instruction in Ontario. These recommendations constituted a major shift impacting thousands of primary teachers across the province. The purpose of this presentation is to share surveyed Ontario teachers' confidence in making this instructional shift. Survey topics included their awareness of the OHRC's report, any additional professional training they received, their beliefs about implementation along with perceived facilitators & barriers. Findings included endorsing the need for more teacher training in identifying struggling students, use of tier 2 and tier 3 evidence-based instruction and differentiating reading instruction for all learners. Some respondents expressed the difficulty in abandoning the current method (e.g., levelled readers), but that additionally employing new approaches may be straightforward (e.g., decodable texts) with the appropriate supports. Importantly, training, class sizes, resources and funding were identified as being impactful factors in determining whether a shift succeeds. Critically, to implement the OHRC's recommendations, partnerships among stakeholders will be instrumental. Ideally, this presentation can lay a foundation for future partnerships by sharing teachers' expressed needs and inviting opportunities to collaborate.

3. Theresa Pham, Lisa Archibald (Education, Western).

Title: Supporting oral language in the classroom through talk moves

Talk moves are conversation tools that teachers can use to promote oral language and equitable participation in classroom talk. Teachers use talk moves to help students share and reason about their ideas as well as to listen to and think with others In this study, we examined whether teachers' use of talk moves is associated with students' language abilities and participation. Data from 209 mathematical lessons from 21 teachers were reanalyzed. We found that teachers were more likely to use talk moves than provide corrective feedback. Specifically, teachers used talk moves encouraging students to share their ideas the most, and asked students to repeat each other the least, with the remaining talk moves intermediate. Interestingly, results from Bayesian linear mixed models revealed that talk moves was positively related to students' use of mental state verbs, linguistic complexity as well as encouraging different students to join the discussions. Specifically, talk moves inviting other students to 'add on' or 'question others' had the most benefits. Overall, results highlight advantages of including talk moves in classroom talk for students' oral language and participation.

- 4. Perry Klein (Education, Western), Keelan Di Trolio (London District Catholic School Board), Stacey Lukewich (Education, Western), Carolyn Mussio, Dilrukshi Troup (London District Catholic School Board), Serena Thompson (Education, Western), Jill Dombroski, (University of Toronto). Title: Who Benefits from Response to Intervention in Self-Regulated Strategy Development? In this quasi-experimental study, 136 Grade 1 students in 10 classrooms participated in Response to Intervention. In Phase 1, 26 struggling writers participated in Tier 2 small group instruction in handwriting and spelling, while 110 students, including a matched control group of struggling writers, participated in Tier 1, regular classroom instruction using evidence-based phonics and handwriting instruction. In Phase 2, the same 26 writers learned personal narrative writing through Tier 2 instruction in Self-Regulated Strategy Development (SRSD), while 110 students completed the same SRSD lessons in Tier 1 whole class instruction. The main finding was that both Tier 1 and Tier 2 students made moderate gains in transcription skills and large gains in personal narrative text quality. Gains in text quality occurred for students with a wide range of initial skill levels in handwriting, spelling, and written expression. Students' enjoyment of writing increased during SRSD instruction. Teachers commented favorably on SRSD and recommended some improvements. The educational implication is that Tier 1 and Tier 2 instruction in SRSD can be used with beginning writers, including those with low initial skill levels.
- Jacqueline Specht, Nicole Neil, Elaine Fournier (Education, Western), Jess Whitley (University of Ottawa), Paula Boutis (Inclusion Action in Ontario), Annie Beatty, Boden Brock, Gina Silva (Education, Western).

Title: Navigating the Special Education System: Parents Supporting Parents

Ontario schools and parents have highlighted an increasing challenge of supporting students with disabilities. Parent participation in educational programming for students with disabilities is mandated in Ontario, and there is an expectation that schools work alongside parents to create and review programming goals. For successful collaboration, it is imperative that parents feel equipped to advocate for their children, that there is a shared understanding of goals, and that parents feel their concerns are heard. The overall goal of this project is to develop an understanding of how parents experience inclusive education within Ontario. As such, approximately 25 parents of children with disabilities in Ontario will be interviewed to determine their needs in working collaboratively with the schools. Interview questions include asking parents to reflect on their relationships within their child's school, their knowledge about processes in special education and where they feel they need the most support in advocating for their child. This knowledge will be utilized to create online learning modules aimed at supporting their ability to navigate and advocate for inclusive education for their children. The resources will provide academic and non-academic participants (i.e., parents, schools, teacher education programs) with tangible ways to support learning in inclusive education.

6. Nedra Peter, Immaculate Kizito Namukasa, Shamiga (Shamy) Arumuhathas (Education, Western). Title: Echoes of Inclusion: A Tapestry of Anti-Racism Pedagogies Explored - A Scoping Review

The overwhelming racial inequities within K-12 STEM/STEAM (Science, Technology, Engineering, Mathematics) education produces systemic consequences for students of colour, which are reinforced by policies, curriculum, and values that are embedded in deep-rooted colonial structures that perpetuate discrimination. Despite efforts to unschooling racism, anti-racism education is an action-oriented educational praxis that exposes the racial inequities and its pedagogical and learning implications while generating counter curricular spaces where culturally relevant ways of knowing can thrive. Though an exceeding breadth of professional teaching literature focuses on decolonization,

equity, diversity, inclusion, and anti-racism, they seldom explicitly address recommendations for teachers when incorporating and delivering anti-racism education in the classroom. As a result, education practitioners demonstrate difficulties accessing current anti-racism praxis for their curricular design. Thus, there is an urgent need to conduct a scoping literature review of the current information available on anti-racism education. By way of employing scoping literature review as the methodological design, this study aims to develop a guideline for anti-racism curriculum and scholarship in STEM education and integrated learning. In generating a guideline that is inclusive of actionable teaching recommendations, this study critiques and problematizes its significance and its implication among teachers' pedagogical realities.

7. Kailee Liesemer, Lina Hawi (Education, Western), Lynn Seward, Laura Pritchard, Jennifer Sanders (TVCC), Colin King, Katelyn Bryant, Nicole Neil, Gemma Graziosi (Education, Western).

Title: Research Partnership in Action: Virtual Services for Children and Youth with Autism Children with autism and their families disproportionately face barriers to accessing evidence-based intervention services, particularly for complex needs such as mental health anxiety, coping and selfregulation difficulties, and social relationship difficulties. Service navigation barriers often prevent access to necessary support. Responding to the challenges families face in accessing integrated, coordinated, and comprehensive services requires a concerted effort from various stakeholders. Thames Valley Children's Centre has partnered with Western University and the Mary J. Wright Child and Youth Development Clinic for a Workforce Capacity Grant focused on four main pillars of innovation: (1) develop an autism services integration committee to identify and strategize solutions for the most pressing gaps in service, (2) offer virtual core clinical services groups for children and youth in the Ontario Autism Program (i.e., social skills and relationships, anxiety management, and daily living skills), (3) conduct program evaluation research on virtual groups, and (4) offer a virtual training series on programming for children and youth with autism to community practitioners and students. To bridge the expertise of service providers, researchers, caregivers, and children and youth with autism, we will share preliminary qualitative and quantitative data on the findings of the Workforce Capacity Grant partnership.

8. Nikita Kalwani, Charlotte Nau, Estefania Reyes, Kaitlynn Mendes (Education, Western) Title: Promoting Digital Safety Among Canadian Youth

In a constantly evolving digital world, youth face unique pressures, challenges, and realities when it comes to their experiences online. Technology-facilitated sexual violence—an umbrella term for harmful behaviours that occur through digital technologies, including image-based sexual abuse, online sexual harassment, and sexual coercion—is a pressing concern nationwide and globally. Despite the pressing concern of TFSV, it is still particularly difficult for youth to find and access resources and support for this form of violence. Digitally Informed Youth (DIY): Digital Safety is a five-year, interdisciplinary research project that aims to understand responses to TFSV across educational, policy-based, and legislative systems nationwide and work with youth, community partners, educators, policymakers, and lawmakers to support and protect young people and mitigate TFSV. In collaboration with national and community organizations, we have analyzed educational curricula, policies, and legislation from Canada's provinces and territories to understand how secondary schools respond to TFSV and have conducted preliminary focus groups with Canadian youth regarding their experiences with TFSV. We present our initial findings from this research to contribute to a better understanding of TFSV and connect with potential community partners interested in empowering and supporting young people in their online and offline spaces.

9. Kathy Hibbert, Deanna Friesen, Y. Chen, R. Cole, K. Hobbs, M. Ott, J. Rouse, Michaud, R. (Education, Western).

Title: Re-imagining admissions in teacher education

Faculties of Education make important decisions about who our next generation of teachers will be. While Universities have been making declarations of commitment to EDI principles, there is little alignment between their stated goals and their admissions practices. This study examined the relationship between two metrics intended to identify strong teacher candidates (i.e., Experience Profile scores and CASPER[1] z scores) to determine whether they identify the same candidates. The second goal was to examine the relative contributions of our admission criteria to our decision-making process. Data from 3017 teacher education applicants were analyzed. All variables were unique and significant predictors of admission status. Poor agreement was observed between the two-admission metrics. However the CASPER data addressed non-cognitive metrics, and identified who was more likely to struggle in the program. We used this data to reimagine our admissions process to create a more just and equitable system.

10. Katrina Kelso (Education, Western).

Grammar?

Title: Beyond the words: What does it take to comprehend text

The Simple View of Reading proposes that reading comprehension is the product of being skilled in decoding/word reading accuracy and listening comprehension

(D x LC = RC). Difficulties with skills in either or both of these areas are likely to result in poor reading comprehension, however, the comprehension difficulties students with good word reading accuracy experience often go undetected and increase across the school grades. Unlike the ability to decode words, reading comprehension is a complex process rather than a single skill that can be taught. Once a word is decoded, a complex set of processes and knowledge need to be activated to comprehend, such as knowledge of language (vocabulary, morphology, grammar), text structure, and prior knowledge, the ability to make inferences, and working memory. In this session, an overview of these and other processes and knowledge sets involved in reading comprehension will be presented, along with a short summary of a research project comparing two reading interventions for struggling readers in grades 3-8.

11. Klein, Perry (Education, Western), Dilrukshi Troup, Carolyn Mussio, Julie Cybulski Malik (London District Catholic School Board), Stacey Lukewich, Savannah Heintzman (Education, Western).

Title: Can the Syntax Project Meet Ontario's New Expectations for Teaching Sentence Writing and

The 2023 Ontario Language curriculum calls for Grade 1 students to learn to write grammatically complex sentences. However, to date, nearly all research on sentence instruction has focused on the mid- elementary grades. Recently, Australian educators created The Syntax Project: Foundations, a resource for teaching sentence construction to beginning writers. Our research uses a waiting list control study to test its effectiveness. First, 10 Grade 1 classes (n = 113) were pretested on sentence and story writing skills, as well as possible moderator variables (spelling, oral vocabulary, reading fluency). Then, in Phase 1, five classes, comprising the experimental group, were taught the Syntax Project Foundations lessons; five other classes comprised the waiting list control. Currently, all students are being mid-tested. Then, in Phase 2, the five waiting list control classes will participate in the Syntax Project for nine weeks. Finally, all students will be post-tested. The main hypothesis is that each group

will make greater gains in sentence and story skills during their instructional phase. Teachers will be interviewed on the social validity of the unit. For FRPD, we will report on Phase 1 of the project.

12. Kathy Hibbert, M. Ott, T. Sanjeevan, J. Sidhu, S. Habib (Education, Western).

Title: Going gradeless in Teacher Education

Canadian educators, like other regulated professionals, are expected to demonstrate high levels of competence to be licensed and then continue to engage in learning as part of their ongoing professional development. In Ontario, the transition into the profession is established through a *New Teacher Induction Program* (NTIP), and an *Annual Learning Plan* (ALP) for experienced teachers. The practice involves an expectation of self-regulated learning. In Faculties of Education, the assessment of Teacher Candidates has long reflected the numerical grading system so prevalent in university undergraduate programs. As the conditions of being a professional educator grow more complex, accountability in teacher education is ever more scrutinized. The educational responsibilities and obligations we are accountable to, deserve an equally well-considered process of assessment and evaluation, that goes beyond the blunt instrument of numerical grades. This critical narrative research examines the experiences of Teacher Candidates, Mentors and Instructors following the shift from numerical grading to assessment as a Pass/Fail process that redirected the Teacher Candidates to the educational functions of their program. Findings suggest that there may be a need to make more room for this kind of professional assessment in light of the intensification of performance metrics.

13. Nadir Díaz-Simón (Education, Western), Carolyn Mussio, Maureen O'Hare, Terry Tate (London District Catholic School Board), Daniel Ansari (Education, Western).

Title: What is 'Number Talks' and what do we know about it?

Towards an interdisciplinary investigation of this instructional practice.

In recent years, there has been increased interest among educational practitioners in implementing instructional practices to foster arithmetic strategies (AS) and students' flexible use thereof. An example of this practice is Number Talks (NT). NT has been described as short, whole-class discussions during which students solve mathematical problems and share their reasoning. However, the current state-of-the-art of studies evaluating NT is limited in several ways and there currently exists no conclusive evidence that demonstrates the effectiveness of this practice. In order to generate a deeper understanding of this practice, an interdisciplinary effort between educational practitioners and researchers is needed. We will share first-hand experiences in developing this teaching strategy. Furthermore, we will present a series of integrated studies to generate empirical evidence to expand the frontiers of knowledge on different aspects related to the development of AS, and potentially contribute to support evidence-based decision-making by educational policy-makers.

14. Meghan Fournie (Education, Western), Catherine McLean (Southwestern Public Health), Joanna Cuz (Middlesex London Health Unit), Andrea Delaney, Heather Carr, Claire Crooks (Education, Western). Title: Public Health and Education Partnerships for Healthy Relationships Programming
The Centre for School Mental Health partnered with two local health units to pilot and evaluate the implementation of the Healthy Relationships Program (HRP) in grade 7 and 8 classrooms at high-priority elementary schools during the 2022-23 school year. This presentation will describe this innovative public health and education partnership model, findings from the program evaluation, and the next steps for scaling up program implementation. The local health units and school boards provided healthy relationships programming to over 800 students. Results from the mixed-method evaluation showed that the program was well received by students, and the students learned and applied program skills

that helped them develop healthier relationships with peers and partners. Public health nurses shared the program's positive impact on students and identified critical factors for successful implementation. Overall, this evaluation showed promising evidence of the benefit of delivering the healthy relationships programming universally at high-priority elementary schools.

15. Paul Tarc (Education, Western), Meagan Hamilton (Branksome Hall), Glenn Odland, (IBEC Western Consultant)

Title: Building and Sharing Knowledge on Teaching for International Mindedness from the Ground Up: IB and Beyond

Under dramatic change and global crises, heightened are the calls for schooling to provide a relevant education, an education more responsive to the wider worldly conditions that children and youth are confronting and will confront as future adults. The International Baccalaureate (IB), a program that was created as a secondary-school-leaving diploma in the 1960s in the field of international schools has evolved to be a 'gold standard' of international education in both international and domestic, and private and public, schooling. For example, London, ON now has two schools that offer the IB Diploma Programme. The IB model, that has expanded into programs across the preK-12 continuum, thus, has long been oriented to the goal of educating for international mindedness. However, IB's expansion, desirability and success has privileged (perhaps) the notion of a high-quality education over the goal of fostering international mindedness. Indeed, the goal of teaching for international mindedness remains somewhat elusive and challenging because it is a softer, more peripheral objective under the day-today demands (and politics) of schooling. Nevertheless, this panel invites insights from IB teachers' and stakeholders on the qualities, challenges and productive responses to teaching for international mindedness, across subject areas, to build knowledge and capacity for IB and non-IB teachers who aspire to respond to the demands for teaching to be relevant for the times. Panelists as well as audience members will be invited to share their experiences of enacting a 'relevant' education in IB an non-IB classes.

Poster Presentations

16. Rachel Benninger, Lisa Archibald (Education, Western)

Title: Co-Design of a Curriculum-Based Spoken Language Assessment Tool for Teachers of the DHH Difficulty with language is a hallmark feature for children with hearing impairments, and contributes to difficulty with literacy. Children who are d/Deaf and/or Hard of Hearing (DHH) require an adapted curriculum and additional support in the classroom to reach their full learning potential, and are often supported by Specialist Teachers of the DHH. These educators require curriculum-based assessment tools to foster strong literacy and numeracy skills, but these tools are often lacking.

Collaborating with Specialist Teachers of the DHH, educational Speech-Language Pathologists, and educational consultants of the DHH, our team has designed a set of four curriculum-based spoken language assessment tools. The tool focused on vocabulary includes vocabulary from the Ontario Curriculum and is organized by subject (English, Math, Science), grade, and vocabulary tier. The tool focused on morphological awareness includes tasks for adding and removing morphemes. The tool focused on discourse includes tasks to assess narrative and expository discourse skills. Each tool will have a summary form to capture results and direct intervention. The tools are considered 'live' documents to be revised as needed based on use in real-world contexts.

17. Antonia Yip (Education, Western)

Title: Supporting English learners to understand mathematical word problems using the "reading to learn" approach

Students at schools are increasingly diverse. Yet, teachers may not have the appropriate pedagogy to support these culturally and linguistically diverse students. This research aims to address the challenge in teaching English learners mathematical word problems through a language learning approach. The study will be conducted in at least two English elementary schools in Ontario with various percentages of English learners. At least four participating mathematics teachers, on a voluntary basis, will experiment with the "reading to learn" approach in teaching word problems. Lesson recordings, field notes, and student work will be collected to inform the effects of the approach in supporting students' understanding of word problems. After the lessons, teachers will be invited to participate in a semistructured interview to share their observations on their students' performance and their opinions on using a language learning approach in a mathematics classroom. Qualitative data analysis will be adopted in this research. The sets of themes will address (1) how "reading to learn" supports English learners' understanding of mathematical word problems, (2) which domains of the culturally sustaining teaching framework are identified in the lessons, and (3) teachers' perception of a language learning approach in mathematics teaching. All analyses will be triangulated by field notes and student work. The research will connect the disciplines of language learning and culturally sustaining mathematics teaching, inspiring teachers to adopt a language-focused approach to teach mathematical word problems to address the challenge in multilingual classrooms and offering insight into the course content of teacher education programmes.

18. Liwen (Audrey) Situ, Frank Boers (Education, Western)

Title: Listening First? Reconsidering the Approach to English Word Pronunciation Learning from Textual Input

There are no straightforward rules that help learners make reliable predictions of how certain words in English are pronounced. For example, the words through, thought, though, tough, and plough share the same -ough spelling, but each is pronounced differently. In the words precursor and pretentious, the primary stress is on the second syllable, whereas in predator and prevalent, the stress is on the first syllable.

Reading English texts is therefore not sufficient to master the pronunciation of English words. Worse, if a learner imagines the spoken form of new words encountered during silent reading, then this will often be incorrect. The learner may later realize this when they happen to hear the correct pronunciation of the words.

The question is whether encountering the correct spoken forms afterwards easily overrides the memories of the incorrect forms. Perhaps it is more judicious to create circumstances where learners first heard the new words before they get to meet them in writing.

The objective of this study is to compare the learning outcomes of the two scenarios just described. In addition, the study will consider the participants' individual learning styles, because it is possible that, while auditory learners benefit the most from listening activities, they may also be most inclined to imagine what words sound like when they read a text silently.

19. Emily M. Erb, Gabrielle T. Lee (Education, Western)

Title: Using virtual and augmented reality to teach children on the autism spectrum with intellectual disabilities: A scoping review

In recent years, both Virtual Reality (VR) and Augmented Reality (AR) technology have shown great promise for the instruction of people on the autism spectrum by simulating real-world experiences in a

safe and controlled environment. However, there are many reports of the failure of such research to include people on the autism spectrum who also have Intellectual Disability (ID). The present scoping review consists of 20 studies which utilized VR/AR to teach various skills to children and youth with comorbid autism and ID. Findings show that within the small number of eligible studies, a great deal of variation exists in essentially every intervention element (e.g., identification of ID, VR/AR equipment, target skills). Beyond increasing the quantity of VR/AR intervention research conducted on this population, the current review suggests the need for greater uniformity and consistency to improve research, practice, and the lives of those on the autism spectrum with ID who may benefit from such interventions.

20. Gabrielle T. Lee (Education, Western), Xiaoyi Hu, Ning Jin (Beijing Normal University, China)

Title: Using Computer-Assisted Multiple Exemplar Instruction to Facilitate the Development of Bidirectional Naming for Children with Autism Spectrum Disorder

Bidirectional naming is an important ability which enables children to acquire listener and speaker behaviours through exposure to relevant word-object associations. Many children with autism spectrum disorder (ASD) or developmental delays do not demonstrate this ability and require systematic instruction. The purpose of the present study was to evaluate the efficacy of computer-assisted multiple exemplar instruction to facilitate bidirectional naming. Three 5-year-old Chinese boys with ASD participated in a multiple probe across three participants' designs. The results indicated that all three children's naming performance increased from the pretest to the post-test, supporting the potential practicality of the instructional system for use in applied settings.

21. Skylar Cohen (Psychology, Western), Olivia Ward, Deanna Friesen (Education, Western)

The Role of Background Knowledge on Reading Comprehension: An Eye-Tracking Study Background knowledge and reading comprehension are essential to our daily lives. They interact to allow humans to interpret the world around us. Previous literature has provided strong evidence for the role of background knowledge in reading comprehension (An, 2013). However, the mechanisms underlying this process have yet to be demonstrated, and eye-tracking technology could offer this insight. The current study examined the role of background knowledge on proficient adults' reading comprehension using eye-tracking. Thirty monolingual students from Western University read six passages about animals; half the passages were manipulated to contain contradictory information. Fixation times were measured for pre-determined critical words in the passages, and longer fixation times on the inconsistent passages relative to the consistent passages were taken as evidence of contradiction detection. Participants self-reported their background knowledge of animals on a scale from 1 to 10, where 1 is no knowledge, and 10 is expert level. Greater contradiction detection among readers with higher background knowledge implies an effect of background knowledge on comprehension monitoring. Findings could provide implications for education, informing practices to enhance adult reading comprehension. An effect could suggest that tailoring educational interventions to individuals' background knowledge base may be more effective, and recommendations for instructional strategies, curriculum development, or teacher training programs might consider the role of background knowledge in literacy instruction.

22. Yujie Xu, Deanna Friesen (Education, Western)

The Use of Subtitles and Captions by Bilinguals

University students are typically expected to acquire much of their learning through reading textbooks and watching videos before even attending lectures. Ideally, students are coming to class with an initial

understanding of course content and it is reinforced by in-class experiences. For second language learners, this task can be quite difficult and reliance on first language knowledge can be helpful. Although there has been research showing the benefits of subtitles or captions by bilinguals on knowledge and language acquisition (Baranowska, 2020), there is less work examining how participants choose to use subtitles or captions. The current study investigated participants' knowledge acquisition based on their learning choices (i.e., subtitle selection). Additionally, it examined how their English proficiency and level of effort during the learning process were related to the quiz outcomes. Thirty bilingual students from Western University watched one TED-talk video explaining psychological concepts and subsequently completed a quiz related to the videos, along with questionnaires assessing their English proficiency and their engagement in the learning process. Findings will offer insights into the extent to which participants' autonomy in selecting learning methods influences their academic outcomes.

23. Sichuang Fan (Education, Western)

Content Analysis of Motivational Design in Mathematics Curricula: A Study of Ontario and China In the evolving field of curriculum studies, there's a growing emphasis on incorporating diversity, multiple perspectives, and emergent disciplines, moving beyond traditional educational paradigms. This transformation is particularly relevant in the context of modern challenges posed by standardized testing and technological innovation, which emphasize the importance of agency in the curriculummaking process. Motivation theories offer a new lens for examining this process, significantly enriching the educational dialogue. The Octalysis framework, integrating theories such as self-determination and self-efficacy with behavioral science concepts, provides a nuanced tool for analyzing motivational factors in curriculum development. This study presents a comparative analysis of motivational designs in mathematics curricula, focusing on Ontario and China. Content analysis, employing a coding checklist with 22 motivational practices categorized under 8 core drives, assesses the inclusion of motivational design in these documents. Results indicate that both curricula incorporate motivational design, particularly within their principles sections. While the Ontario curriculum demonstrates a more frequent application of these principles, both curricula notably emphasize core drives like Epic Meaning, Development & Accomplishment, and Empowerment of Creativity & Feedback. However, they tend to overlook extrinsic motivators such as Scarcity and Impatience and Loss and Avoidance. Ontario's curriculum distinctively emphasizes Ownership, encouraging students to integrate personal experiences into the curriculum-making process, a feature absent in China's curriculum. This study highlights the importance of integrating motivational design in curriculum studies, offering a new perspective that aligns with broader learning and pedagogical theories. It underscores the potential of motivational design to enrich educational frameworks across various curriculum-making sites.

24. Alexandra Weatherhead (Education, Western)

Belonging in Refugee Education: Conceptualisation, Policy, and Pedagogy

Belonging is seen as essential for human wellbeing yet it is a complex concept that is understood, experienced, and negotiated in different spheres. Within refugee education spaces, belonging is often deeply contested. This poster examines how refugee education policy shapes where and how refugee students may construct a sense of belonging as well as pedagogical practices that support belonging in classrooms. Overall, this research contributes to furthering understanding of the complex systems and structures that often prevent refugee students from constructing a sense of belonging within education systems internationally.