Short bio

I am an Associate Professor in ECPS and a member of the Language Sciences Initiative (https://languagesciences.ubc.ca/). These are the highlights from my CV that are related to the mandate of the Professorship and I believe demonstrate my track record for community-driven research that strives to bridge the research-to-practice gap. I was a teacher of students who are deaf and hard of hearing (TODHH) for nine years in itinerant and resource settings. I am the coordinator of the Education of the Deaf and Hard of Hearing concentration in the Special Education graduate professional preparation program for teachers of the deaf and hard of hearing. My areas of research include the role of grammar comprehension in language and literacy acquisition for students with complex academic and language needs. I teach language and literacy courses in my concentration, as well, I secure and supervise a 10-week practicum placement so students can meet national certification standards for our profession.

I have a demonstrated research record of funding and publishing work that translates to practice for teachers, learners, and families of those with disabilities. My research supports educators to increase literacy skills for a vulnerable population of learners due to their complex linguistic profiles. I conducted the validation research of the Comprehension of Written Grammar (CWG; Easterbrooks, 2010) test, an informal reading comprehension assessment of vocabulary and grammar (https://blogs.ubc.ca/cwgtest/). I funded this work via two SSHRC grants (*2011-2013 Insight Development Grant; 2014-2017 Insight Grant*) and have worked with Educational Technology Support to develop the new digital version of the test. This online test can be accessed for free by educators and researchers (currently 260 learners have completed the new online version). The results of the SSHRC grants have been used to (a) publish 4 manuscripts; (b) present at 7 international conferences; (c) create an online version of the CWG (Easterbrooks & Cannon, 2019) test; (d) collaborate with the National Technical Institute for the Deaf at the Rochester Institute of Technology [post-secondary for students who are deaf], who are using the CWG test to assess incoming freshman with [identified and unidentified] learning disabilities and dyslexia; and (e) the pilot adoption of the CWG test by the *Learning Disability Society of Vancouver* (LDS; https://ldsociety.ca/) in their assessment protocols with students. I serve as Co-I of a 2018 SSHRC Partnership Development Grant (PDG; *Assessment for Effective Intervention in Written Expression for Students with Learning Disabilities*), with Dr. Sterett Mercer as PI. My focus has been on knowledge mobilization of the project goals by working with our non-profit partnership organization, LDS, to provide professional development to their instructors on written expression interventions (https://srsdonline.org/) and using assessment data to write goals and objectives.

I also have a collaboration with Dr. Jennifer Baumbusch in the UBC School of Nursing. In 2018 I was invited to serve as Co-I for her SSHRC Insight Grant (IG), which was not funded, but we re-applied for the 2020 IG and are awaiting the results. We are currently working on our SSHRC Partnership Engage Grant (*Understanding the Impact of COVID19 on Inclusive Education for Students in British Columbia's Public Education [K-12] System*) examining how teachers supported learners with disabilities during the pandemic through inclusive practices. We hope to better understand the broad scope of impact the pandemic may have had on education and the perception of inclusive services.

Vision Statement

I would enact the mandates by **translating research into practice** to increase literacy acquisition with **learners who have complex linguistic profiles** (e.g., learning disabilities, dyslexia, multiple disabilities related to language, multiple disabilities with culturally and linguistically diverse learners) by collaborating with **school communities** serving these students. The support of this Professorship would expand my capacity to nurture these collaborations and apply for further funding. To support this expansion, the majority of funding would go to research assistants, including supplementing a post-doctoral fellowship, materials/subscriptions (e.g., Canva https://www.canva.com/ $16.99/month for infographics), and some travel funds for symposium presenters/collaborators. I would assess the **impact** of the proposed Professorship **activities and initiatives** through <u>securing</u> (a) *further funding*, (b) *publication of SSHRC-funded research manuscript(s)*, and <u>developing</u> (c) *two planned symposia*, and (d) *multiple professional development opportunities with collaborators that empower their educators to increase reading comprehension and written expression*.

The majority of my work with **learners with special needs** focuses on learners who are d/Deaf or hard of hearing (d/Dhh) and **experience language delays of two to three years behind their peers**. The implications for these language delays may include reduced literacy skills that have led to the average 18-year-old d/Dhh individual exhibiting a fourth-grade reading level (Gallaudet Research Institute, 2013; Holt et al., 1997; National Agenda, 2005). In the past several years my knowledge base has expanded regarding learners with multiple special needs (e.g., learners who are d/Dhh and have a **learning disability**) and those with **learning disabilities and dyslexia**. I enhanced my knowledge while collaborating on a chapter (Cannon et al., 2021) focused on d/Dhh students with **learning disabilities**, highlighting their **complex language needs,** and through co-authorship with Dr. Stephanie Cawthon, an experienced researcher in this area. This chapter highlighted that learning disabilities are the most prevalent disability category for children who are d/Dhh, at a rate of approximately 7.2% (Gallaudet Research Institute, 2013; Guardino & Cannon, 2015; Mitchell & Karchmer, 2006).

For the past three years I collaborated with Dr. Sterett Mercer on our *SSHRC Partnership Development Grant (PDG)*, which is focused on improving **written expression outcomes** for **students with (or at-risk of) learning disabilities**. Through this collaboration, and others (*Canadian Educators of the Deaf and Hard of Hearing* [CAEDHH], the *National Technical Institute for the Deaf at the Rochester Institute of Technology* [NTID]), I have developed **connections** within the **local and university communities** serving learners with special needs and learning disabilities who **struggle with literacy acquisition**. Through my research funding on grammar comprehension I have developed **collaborations within the UBC School of Nursing** and across **other universities and community groups** to **increase support and resources** for those working with learners with special needs and their families who are culturally and linguistically diverse.

My background, experience, and research partners exhibit my ability to pursue the following **four of the five mandates** charged to the Professorship. Through the activities outlined I will **create resources** for teachers and families of children with **dyslexia and related learning**

disabilities, and demonstrate an **impact in education** through the **advancement of knowledge** and **improvement in practice**.

1. Pursue a research program in the field of learning disabilities focusing on dyslexia and related reading and writing disabilities, through securing grant support and recruitment of graduate students.

I will continue to pursue a **research program in the field of learning disabilities** by applying for **further grant support** and **recruitment and retention of research assistants**. I will complete my term as co-investigator of our *SSHRC PDG* later this year. Therefore, I would like to use the funding from this Professorship to support the professional development of the instructors at LDS. I will evaluate if this support increases outcomes among learners who are struggling with literacy skills, as well as their instructor's level of preparedness to meet their needs (see more information #3 below). I would apply for either a *SSHRC Partnership Engage Grant*, *SSHRC Connections Grant*, or the *John and Doris Andrews Research and Development Award* in *Spring of 2022* (TBD after consultation with ORE) to **secure further funding** for professional development. I would also seek funding from the *Language Sciences Initiative Catalyzing Research Cluster grants* (see #4 below).

Due to my research background in the **language development of learners who struggle with literacy**, a Ph.D. student from Dalhousie University approached me about our shared research interests and I **recruited** her to work on our *SSHRC PDG* in a GRA position. She has now completed her Ph.D. and Dr. Mercer is in the process of applying for her to become a **post-doctoral fellow**. Through this **multi-project collaboration**, the post-doctoral fellow would **play a key role in the activities outlined** in this vision statement. I would also **recruit and hire** 1-2 **research assistants** (RA) to be supported through the grant applications outlined above.

2. Provide leadership and coordination of research activities involving graduate students and faculty, in Education and across UBC; specifically, develop linkages with related UBC Faculties, particularly in the Faculty of Medicine and in the area of Rehabilitation Sciences.

I will provide **leadership and coordination of research activities involving graduate students and faculty across UBC**. I can accomplish this through SSHRC-funded work with Dr. Jennifer Baumbusch in the School of Nursing. Dr. Baumbusch focuses her research on inclusive practices for individuals with special needs to increase well-being. As I stated in my bio, we submitted a 2020 SSHRC Insight Grant application. The proposal is to conduct secondary analysis of population-based, longitudinal data (1999-2016; collected under her previous SSHRC grant) about **students with special needs** from the BC Ministry of Education in collaboration with UBC's *Human Early Learning Partnership*. My focus in this project will be on **learners with complex linguistic needs** and what the broader longitudinal data can show us about their educational trajectories. I will consider how the results influence collaborations with CAEDHH-BC and LDS regarding **inclusive educational supports** for learners with **language delays**. We also plan to apply for a future *SSHRC Partnership Development Grant* with our collaborators.

I hope to **expand and strengthen my collaboration** with the *Language Sciences Initiative*. The proposed **post-doctoral fellow** is also a member of the *Language Sciences Initiative* and has an extensive background in speech and language pathology, American Sign Language interpreting, and research in the role of grammar and morphology in language development. Through the

initiative we can find other members with research synergies and explore questions we have about how to best **support learners with complex linguistic profiles** (e.g., multiple disabilities that result in language and literacy delays), with a **focus on morphosyntax**.

3. Work with school communities to develop policies and/or practices that will effectively meet the needs of children with dyslexia and related learning disabilities.

In my collaboration with LDS, they have expressed an interest in ways to **provide professional development** to their instructors about how to effectively use **language and literacy assessment results** to develop measurable objectives for their students, and understand the connections between **vocabulary and morphosyntax knowledge in reading comprehension and written expression**. Through our collaboration I have shared with them the Comprehension of Written Grammar (CWG; Easterbrooks & Cannon, 2019) test, described in my short bio, which they have added to their assessment protocol.

LDS also wants to increase case management support by providing more **systemic language instruction** for their instructors from varying educational backgrounds. We plan to use an iterative process of professional development designed to be intensive and sustained, and to **deepen instructors' pedagogical content knowledge** (Darling-Hammond & Richardson, 2009). This would be accomplished by (a) examining completed pilot data (b) utilizing pilot data to develop case studies for training materials, (c) attending LDS instructor training, and (d) developing *training materials*, using the case studies, that expand upon previous training sessions. *Year 1 training materials* would include (a) a pre-recorded webinar on **short and long-term language goal tracking**, (b) a post-webinar survey for feedback, (c) a follow-up live workshop for **applied practice and coaching**, (d) developing infographics that support webinar and workshop concepts, (e) updating the current **language goal-tracking system**, (f) tracking how the system is used, (g) **one-on-one support** with 3-4 instructors throughout Year 1 as pilot project, and (g) conducting an end of the year, post-survey, with the **results used to increase the effectiveness of materials** in Year 2.

The post-doc would also support my **collaboration** with my colleague at NTID. NTID adopted the CWG test to assess incoming d/Dhh **freshman with significant language delays**. They have been using the test for pre- and post-assessment for the past two years. We co-presented their initial results at a conference and they have invited me to co-author a manuscript about this program, including the results of the CWG test. Edits are required to the survey platform housing the online version of the test, in order to **provide collaborators and teachers with the results that can help guide instruction**. The post-doc would assist, in consultation with Qualtrics support and Educational Technology Services, in editing the automatic output of the test to make it more **user-friendly for instructors and teachers**. The CWG website (https://blogs.ubc.ca/cwgtest/) would also receive further editing to **enhance the information** provided about test results and to **add resources and intervention information** to **increase morphosyntax comprehension during reading**. We would **develop a video demonstration** of how the test can **pinpoint areas of morphosyntax in reading comprehension that require instruction** and add it to the website. Then we would write presentation proposals and develop materials to promote the use of the updated CWG website and test for **struggling readers**.

The CWG test was used by two Institute for Educational Sciences (IES) grant projects as part of their assessment measures. They have shared their results with me and I would use the support of the post-doc to complete a **secondary analysis of this data**, along with my SSHRC IG results (Cannon, White, Hubley, O'Loughlin, & Phelan, in progress). This analysis will include 344 d/Dhh, grades K-6, across the U.S. and Canada, and is a large sample size considering the low-incidence population studied.

4. Develop symposia for faculty and students that invite international scholars in the field to engage with the UBC community, on campus and virtually, to explore new avenues of research.

As a member of the *Language Sciences Initiative*, I would like to continue to expand my knowledge in the field and invite scholars with a focus on **the role of morphosyntax comprehension in reading**, as well as **training strategies** across **reading and writing** for **struggling readers**. I would therefore apply for a *Language Sciences Initiative grant* for catalyzing research clusters to provide additional funding to **develop two symposiums**. A **research-based symposium** would be proposed, as well as a **knowledge translation professional development opportunity**, co-sponsored with LDS and CAEDHH-BC.

I am co-chair of the planning committee for the CAEDHH-BC conference in October 2021. The theme of the conference is focused on d/Dhh **learners with disabilities and those who come from culturally and linguistically diverse families**. We are currently finalizing the conference schedule and will soon begin **recruiting presenters**, including those with a background in the **area of learning disabilities**. The CAEDHH-BC Executive has also invited me and my Ph.D. student to participate in one of the mentoring program sessions this spring and to assist with a *'Journal Club'* that will review a research articles about **language acquisition** and then participants can meet virtually with the authors to discuss.

Please see Figure 1 for a timeline of the proposed activities/initiatives outline in this vision statement.

Figure 1	
Yr 1	- Continue collaborative work with LDS to examine pilot data, develop case studies, attend instructor training, and develop training materials - Recruit other members of the Language Sciences Initiative interested in collaboration - Recruit presenters for the CAEDHH 2021 conference and Journal Club - Consult with Qualtrics support and ETS to revise the output of the CWG test and update the website - Submit final results of secondary analysis of SSHRC IG data Cannon et al. (in progress) - Complete SSHRC PEG and consider how results influence collaborations - Continue collaboration with NTID and invited co-author manuscript
Yr 2	- Continue collaborative work with LDS based on Year 1 - Apply for Language Sciences Initiative grant for catalyzing research clusters - Apply for further funding after consultation with ORE - Collaborate with CAEDHH-BC to provide professional development - Develop CWG video instructions for website - Continue collaboration with NTID and finalize publication
Yr 3	- Continue collaborative work with LDS based on Year 2 - Develop and host 2 research symposia (research-based & practice-based) from Language Sciences Initiative grant for catalyzation of research clusters that involve all collaborators - Develop presentations and materials for the updated CWG website and test

References

Cannon, J. E., Guardino, C., Clements, A., & Cawthon, S. (2021). Learners who are d/Deaf or hard of hearing with a learning disability. In C. Guardino, & J. E. Cannon (Eds.), *Deaf and hard of hearing learners with disabilities: Foundations, strategies, and resources* (pp. 195-232). Gallaudet University Press.

Cannon, J. E., White, E., Hubley, A., O'Loughlin, J., & Phelan, L. (in progress). Item analysis of grammar using the Comprehension of Written Grammar test: What structures should we focus on to increase reading comprehension?

Darling-Hammond, L., & Richardson, N. (2009). Research review/teacher learning: What matters. *Educational leadership*, *66*(5), 46-53.

Gallaudet Research Institute, GRI Research: Demographics. (2008) Annual Survey: 2007-2008 Regional and National Summary. Retrieved June 23, 2009, from http://gri.gallaudet.edu/Demographics/2008_National_Summary.pdf.

Gallaudet Research Institute. (2013). Regional and national summary report of data from the 2011–2012 Annual Survey of Deaf and Hard of Hearing Children and Youth. Gallaudet University

Guardino, C., & Cannon, J. E. (2015). Theory, research, and practice for students who are deaf and hard of hearing with disabilities: Addressing the challenges from birth to post-secondary education. *American Annals of the Deaf. 160*(4), 347-355. doi: 10.1353/aad.2015.0033

Holt, J. A., Traxler, C. B., & Allen, T. E. (1997). Interpreting the Scores: A User's Guide to the 9th Edition Stanford Achievement Test for Educators of Deaf and Hard-of-Hearing Students. Gallaudet Research Institute Technical Report 97-1.Gallaudet University.

National Agenda (2005). National Deaf Education Project Now. Retrieved on September 18, 2008, from http://www.ndepnow.org/

Mitchell, R. E., & Karchmer, M. A. (2006). Demographics of deaf education: More students in more places. American Annals of the Deaf, 151(2), 95–104. doi:10.1353/aad.2006.0029