# UNIVERSITY OF ALBERTA

# Pre-Service Teachers Knowledge of Language and Literacy Concepts

### **Overview**

Dr. Georgiou's research of pre-service teachers' knowledge of language and literacy concepts involves distributing a survey of language constructs related to literacy acquisition to pre-service teachers. These surveys are completed under the surveillance of an individual in Dr. Georgiou's research team to maintain the integrity of the project. The survey helps to gain insight into preservice teachers' knowledge on phonemic awareness, morphological awareness, phonological awareness, etc. As well as insight into pre-service teachers' confidence in teaching language and literacy concepts such as phonemic awareness, phonics, vocabulary, morphological awareness, reading comprehension, spelling, and fluency in the future (Georgiou, 2024). In Alberta schools, "32% of students are reading below grade level" because of the limited knowledge that teachers have of literacy acquisition and how to teach them (Georgiou, 2024). This is the peter's effect, in that an individual cannot teach something that they do not know.

Undergraduate elementary education students are required to take two 100 level English courses, one 200-400 level English course, and EDEL 305 (Language Arts in Elementary Schools). The education course introduces the curriculum and gives a broad overview of teaching oral language, reading, and writing; however, the since the information for the course is so broad there is a limited time spent on these language constructs related to literacy acquisition. There was a study done in New South Wales university looking at knowledge of phonics and phonological awareness among preservice teachers that showed there was a correlation between teachers having a strong understanding of literacy concepts before entering the classroom is important because classroom lessons are more purposeful, and teachers are more confident in their abilities to teach reading. As well, having a knowledge of language concepts helps teachers to work with reading specialist and speech pathologist to support struggling readers in their classroom.

# Why is this research important?

This research is important because allows for educators to determine areas of growth. For the pre-service teacher's knowledge of language and literacy concepts, by getting a better understanding what pre-service teachers are learning about teaching literacy and reading, educators can determine holes in their learning and find ways to rectify that (Georgiou, 2024). Further, Alberta education kindergarten literacy screening is important because it provides a baseline for teachers to teach with. The kindergarten teacher of the class I was testing commented on how there is no baseline for how proficient kindergarteners should be regarding their understanding of literacy concepts such as naming letters, phonological awareness, and blending or segmenting nonwords. By creating a protocol, educations can more effectively input tier 1, 2, or 3 support for students (McClure, 2024). The earlier learning interventions can occur, the more easily students can be brought back to grade level.





# Language and Literacy Knowledge of Pre-Service Teachers and Kindergarteners

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# **Word Segmentation Examples**

bow	b-ow
dip	d-i-p
sheep	sh-ee-p

# Alberta Education Kindergarten Literacy Screening

### Literacy Testing Introduction

This kindergarten literacy testing was for Alberta Education's process for introducing mandatory literacy screening for Kindergarten students. My role in this was to test kindergarten students with a new literacy screener. These test booklets would then help to develop Alberta norms that will assist early education assessment approaches.

The tasks in the literacy screener:

- Phonological Awareness Screening Test (PAST)
- Segmenting Nonwords
- Blending Nonwords
- > Rapid Automatized Naming (RAN Colours and RAN Digits)
- Letter Name Sound Test (LeNS) Letter Naming & Letter Sounds
- > Oral Vocabular (TELL NOUNS & TELL VERBS)



\*\*Not the actual test, just an example of the visual for a RAN Colours test.

# Methods

### Literacy Screening Process: Testing

During my research for Dr. Georgiou, I went to Bishop David Motiuk Catholic Elementary/Junior High School to test the kindergarteners. I would work with one student at a time, we would go to a quiet testing room so that students would be able to hear me, and I would be able to hear them. We would work through the student testing booklet; it would take about 15-20 minutes. The students would, for the most part, be able to pay attention during the testing but at times you would have to redirect their attention back to the task at hand. The entire testing process is done orally, the kindergarten students are not expected to demonstrate their reading ability. Each question was spoken out to them.

### Literacy Screening Process: Dara Entry

For the second part of my research work for Dr. Georgiou in the kindergarten literacy screening I would input completed kindergarten literacy screeners. It is important to have input from a wide variety of schools and students. I was inputting data from schools all over Alberta, just not in Edmonton and Calgary.



#### Importance of Literacy Screening and Developing Protocols

This kindergarten screening is important because it will provide kindergarten teachers with a baseline of the literacy skills that their students should by the end of the year. By doing these assessments teachers can determine if any of their students require early intervention in language and literacy acquisition (Georgiou, 2024). Assessments can also help determine the specific type of assistance students need. Through knowing the average performance level of kindergarten children, educators will be able to more accurately determine if a student will have difficulties with reading. Students need strong foundational skills to develop their reading ability, these foundational skills include letter knowledge which can be assessed through Letter Name and Sounds (LeNS), phonemic awareness, and rapid automatized naming tasks. By recognizing students with high risk for reading difficulties and providing early intervention, these reading difficulties can be prevented from happening or from becoming more severe (Georgiou, 2024).

One of the most common literacy issues for children is a difficulty learning the relationship between spellings and sounds (Kilpatrick et al., 2024). Will this issue, students will struggle to sound out new words they encounter. In the screening test, students are responding to tasks that use nonwords. By using nonwords in the blending and segmenting tasks, students are not responding to words they already know but instead how to demonstrate their understanding with words they do not know.

The reason behind the LeNS task is to determine if students realize that letters correspond to sounds. As children are learning to read, they will become familiar with spoken words but will be unable to identify these words in printed form (Kilpatrick et al., 2024). This is because they have yet to realize that letters correspond to sounds, but this realization will begin to occur with instruction and early experiences with reading. Through this task, students are demonstrating their understanding of grapheme-phoneme correspondences (Kilpatrick et al., 2024). Once children understand this grapheme-phoneme correspondences, they will be able to sound out other words.

### Citations

Boundless Psychology. (n.d.). *Linguistic structure* [Image]. Retrieved September 27, 2024, from https://textimgs.s3.amazonaws.com/boundless-psychology/ls-oflinguistic-structure.svg. Georgiou, G. (2024, September 9). Reading Intervention: From Convience to *Evidence-Based Practices* [PowerPoint Slides]. eClass. https://eclass.srv.ualberta.ca/course/view.php?id=98200. Kilpatrick, D. A., Georgiou, G. K., Parrila, R., Castles, A., & Kohnen, S. (2024). Alberta *Government-Provided Kindergarten to Grade 3 Literacy Screening Assessments:* PAST, RAN, LeNS, and CC3 Interpertation Guide. Alberta Government. https://www.alberta.ca/system/files/custom\_downloaded\_images/edc-lens-cc3interpretation-guide.pdf. McClure, C. (2024, September 12). Universal Design for Learning (UDL)/Differentiated Instruction (DI) [PowerPoint Slides]. eClass. https://eclass.srv.ualberta.ca/course/view.php?id=98200&section=2#tabs-treestart. Tetley, D., & Jones, C. (2014). Pre-service teachers' knowledge of language concepts: relationships to field experiences. Australia Journal of Learning Difficulties, 19(1), 17-32. https://www-tandfonlinecom.login.ezproxy.library.ualberta.ca/doi/epdf/10.1080/19404158.2014.891530?n eedAccess=true.