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Cover photo

Drawing from the article “Exploring the Untapped Potential of Loose Parts Learning: An Interview with Carla Gull,” Anita Sterne explored this whimsical opportunity for storytelling with natural loose parts at the Mount Maunganui Beach in New Zealand. Photo credit Anita Sterne.

*Early Childhood Education* is the official journal of the Early Childhood Education Council (ECEC) for ECS and Grades 1, 2 and 3 teachers of the Alberta Teachers’ Association (ATA). The journal helps the ECEC to achieve its objective of improving practice in early childhood education by publishing articles that increase the professional knowledge and understanding of teachers, administrators and other educationists involved in early childhood education. The journal seeks to stimulate thinking, to explore new ideas and to offer various point of view. It serves to promote the conviction of the ECEC about early childhood education.

Mission Statement: The objective of the Early Childhood Education Council of the Alberta Teachers’ Association is to improve the practice of teaching young children by increasing member knowledge and understanding of this specialty. The ECEC acts on behalf of young children and their teachers to promote excellence in education.

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## From the Editor's Desk

Welcome to the 2026 edition of *Early Childhood Education*. This issue contains a variety of topics, including literacy, math, nature and a historical piece about the beginnings of early childhood education. I hope that the research-based articles in this issue guide your practice, stimulate conversation and provide food for thought.

In the article, "Getting Students into Nature: Effective Teaching Strategies for Outdoor Learning in Kindergarten to Grade 3," teacher Hayley Bremner discusses the benefits of outdoor learning. She presents a review of the literature to answer the research question, What are the most effective strategies for early education teachers to integrate outdoor learning into the curriculum for children in Kindergarten to Grade 3? Bremner then proposes a few practical strategies.

Maren Aukerman, PhD, and Kim Lenters, PhD, explore literacy practices in their article, "Beyond the Science of Reading: Disentangling Five Common Myths." This article is bound to produce interesting conversations.

In the article "Moving Numbers," Krista Francis, PhD, suggests considering numbers in terms of space. Francis provides ideas for using spatial reasoning to develop number sense. Hopscotch, number lines and numbers as size are a few suggestions for building a robust understanding of numbers.

Another article focused on building literacy skills highlights the importance of read-alouds. Michelle Bence, PhD, and Miriam Ramzy, PhD, provide great strategies for enhancing read-alouds in your classroom in their article, titled "Reimagining the Power of Read-Alouds Through Dialogic Conversations."

Finally, this issue includes a historical piece charting the journey of an early educator in Calgary. A treasure trove of letters and photographs were found, shedding

light on a period when early childhood education was offered in homes or church basements. The article by Hetty Roessingh, PhD, and her sister, Fen, shares the adventures of their mother and reminisces about their childhood in the 1950's, when their house was full of neighbourhood children. This time was well before early childhood services (ECS) became established in local school districts.

One of my favourite components of early childhood exploration is using loose parts. I love the books *Loose Parts Learning in K-3 Classrooms* (2021) and *Loose Parts Alive: Inspiring Child-Led Nature Explorations* (2024). They were a staple in my classroom. Anita Sterne, an early learning specialist with Edmonton Public and the professional development chair for ECEC contributes to our journal with an interesting conversation with Carla Gull, PhD, the author of these books and the host of a podcast, *Loose Parts Nature Play*.

All articles in *Early Childhood Education* are peer-reviewed by our dedicated committee. We appreciate their ongoing constructive feedback to maintain the quality of this journal.

I hope you enjoy this latest issue of *Early Childhood Education*. If readers have articles or suggestions for content, please respond to the journal email at [earlychildhoodeducation.ecec@gmail.com](mailto:earlychildhoodeducation.ecec@gmail.com) as we are always seeking new ideas and research reflecting current trends in our field.

This year, 2026, heralds the 60th anniversary of the ECEC. There will be special celebrations at our annual conference in April. We, as a council, acknowledge the critical importance of early childhood education and honour the educators that support the learning.

Joy de Nance  
Editor

# Getting Students into Nature: Effective Teaching Strategies for Outdoor Learning in Kindergarten to Grade 3

*Hayley Bremner*

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*Hayley Bremner is an early elementary teacher in the Calgary Board of Education. She has recently completed her master of education at the University of Calgary.*

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The outdoors can provide an excellent context for high-quality early education, yet current research indicates that it is vastly underutilized and overlooked (Oswald et al 2020). Outdoor learning encompasses learning, teaching and experiencing in the outdoors, and is a pedagogical method that has gained significant interest within educational research in recent years (Kuo et al 2019; Becker 2017). As a result, the evidence demonstrating its physical, cognitive and social-emotional benefits has grown substantially (Kuo et al 2019). Outdoor learning has significant potential for young children, in particular because the neuroplasticity in early childhood makes this a golden age to experience safe opportunities for risk-taking and autonomy that are present in the outdoors (Andersen et al 2021).

While the body of research showing the benefits of outdoor learning continues to grow, the rates at which children are spending time outdoors continues to drop. The reality is that children actually spend less time outside each year, which means that the immense benefits of outdoor learning simply does not reach many children in our classrooms. Compounding this juxtaposition between evidence and practice is the reality that many teachers perceive outdoor learning to be unattainable and unrealistic, due to pressures to meet rigorous academic standards, lack of outdoor teaching knowledge and lack of adequate outdoor learning spaces (Hamilton and Hile 2023).

This literature review presents teaching strategies for kindergarten to Grade 3 that will make outdoor learning more realistic and accessible for early childhood educators. The review begins with a summary of the research about

the benefits of outdoor learning, the current reality of the underutilization of the outdoors and the barriers to implementing outdoor learning. Following this summary, I will provide an overview of the methods for how I conducted this literature review. Finally, I will explain and analyze the teaching strategies found in the review. This literature review fills the current research gap that exists between the extensive evidence on the benefits of outdoor learning and the limited evidence of how to access and implement it effectively. These findings are particularly significant for early elementary teachers because they provide opportunities for more frequent and effective implementation of outdoor learning in kindergarten to Grade 3 classrooms. This will present students with more opportunities to reap the benefits of outdoor learning.

## Background

### Benefits of Outdoor Learning

Outdoor learning provides young children with developmentally appropriate experiences that support their need for play, social and emotional development, and academic development. It can provide a unique form of play for students that allows them to learn in and *from* the environment and is a critical opportunity for young children to learn how to interact, negotiate, collaborate and connect with one another (Prins et al 2022; Taylor and Boyer 2020). These skills are critical parts of children's social and emotional development, which is the process of developing the skills and knowledge to effectively understand and regulate emotions, develop positive relationships with others and learn from the environment (Darling-Churchill and Lippman 2016). Prioritizing the development of social and emotional competencies in early childhood provides children with

significant benefits, such as increased academic abilities, positive social relationships and higher academic engagement (Darling-Churchill and Lippman 2016; Jones et al 2017).

Outdoor learning has also been impactful for kindergarten to Grade 3 students' academic development. Research demonstrates that this flexible learning approach contributes to higher levels of academic engagement and motivation, as well as higher grades and standardized test scores (Jones et al 2017). These effects are particularly significant for students who have been traditionally underserved and undersupported in regular classroom environments (Kuo et al 2019). Learning in nature provides opportunities for diverse learners to feel calm, safe and autonomous in their learning environment and helps children to develop self-discipline, engagement and motivation (Kuo et al 2019). McCree et al (2018) found that students who struggled to meet grade-level expectations in regular class environments experienced increased achievement, resilience, self-regulation and overall well-being when learning in the outdoors.

Outdoor learning creates unique opportunities for students to “bring their own funds of knowledge to the classroom where new learning is added in ways that support their individual identity development rather than viewing students from marginalized populations as deficient in classroom knowledge” (Pope et al 2023, 196).

## **Underutilization of the Outdoors**

Despite the body of evidence demonstrating the extensive benefits, in reality, outdoor learning is underutilized (Oswald et al 2020; Neville et al 2023). This shift can be attributed to several factors, including parental concerns about safety, lack of access to suitable outdoor environments and ease of access of electronic devices (Adams and Beauchamp 2021). The invasiveness of electronic devices in place of time spent outdoors is particularly concerning. For example, children in the United States reportedly spend an average of seven hours per week outdoors and nearly seven hours a *day* on screens (Oswald et al 2020). This is a concerning reality for our young children. Evidence illustrates the harm that can come from lack of time spent outdoors, especially when that time is filled with screen time. Oswald et al (2020) found that greater screen time is associated with negative mental health outcomes, while greater time outdoors is associated with positive mental health outcomes. Similarly, Thorsteinsson (2023) explain how a lack of time spent outdoors can negatively impact children's social relationships and peer connections.

Young children who spend limited time outdoors miss the countless benefits of nature as well as this golden window of time to connect with nature and develop critical life-long skills. In the interest of improving children's access to the outdoors, it is imperative that schools prioritize outdoor learning opportunities.

## **Barriers for Implementing Outdoor Learning**

For outdoor learning to be utilized more frequently in the current early elementary context, first we must understand the barriers of implementation that teachers face. Some teachers perceive outdoor learning as unrealistic and unattainable for a variety of reasons. They state that the biggest barrier to utilizing outdoor learning is a lack of time, which results from factors such as pressure to fulfill time-consuming and rigorous academic standards and lack of outdoor teaching knowledge (Hamilton and Hile 2023). Similarly, Oberle et al (2021) identified a range of factors that impacted teachers' ability to utilize outdoor learning, including teacher interest and preparedness, principal support, school culture, and weather and natural environment. These concerns and barriers are legitimate realities that teachers face on a daily basis and should not be downplayed in terms of their impact on teachers' daily school experiences.

This literature review presents an opportunity to provide teachers with solutions to overcome some of these barriers. I argue that there are several practical ways to implement outdoor learning, even in the demanding and complex early elementary school context. This research provides teachers with specific and actionable teaching strategies for outdoor learning in the early years. In this way, it helps to significantly reduce concerns about lack of time, teaching knowledge and other demands on teachers. When teachers find outdoor learning more accessible, there is the potential to increase the amount of time young children learn in the outdoors. Therefore, they can enjoy more of the benefits that come from these rich learning opportunities.

## **Methods**

In this literature review, I looked to answer the research question, What are the most effective strategies for early education teachers to integrate outdoor learning into the curriculum for children in kindergarten to Grade 3? I chose to conduct a nonsystematic literature review of the Education Resources Information Centre (ERIC) database through the University of Calgary library. This approach was selected due to its suitability for the investigation and developing a broad understanding of

outdoor learning strategies. For a review with a more specific and narrow focus within outdoor education, a systematic review may have been a better fit (Sabbaghan 2024).

I selected peer-reviewed articles that resulted from search terms such as *outdoor learning*, *outdoor education*, *land-based learning*, *kindergarten*, *Grade 1*, *Grade 2*, *Grade 3*, and *teaching strategies*. I further reduced the resulting group of articles by ensuring that each article focused on children between the ages of five and eight years old, contained a form of outdoor learning and had a discussion or evaluation about a teaching strategy. Even though early childhood is more broadly defined as ages under eight years old, I chose to focus this study on ages five to eight years old, which encapsulates students in kindergarten to Grade 3. I selected this age range because there was already a strong pre-existing body of early childhood research that focused on preschool-aged children and younger in the

context of outdoor learning. However, there was far less outdoor learning knowledge on the in-school period of kindergarten to Grade 3. It is my intent for this literature review to fill this gap.

## Results

In the analysis of these 51 journal articles, six key themes emerged as effective strategies for outdoor learning in kindergarten to Grade 3.

The first was the strategy of prioritizing student autonomy and agency. Researchers frequently highlighted that outdoor learning was most effective when students had the freedom to explore, play and discover as they chose. For example, Molyneux et al (2023) emphasized that “the opportunity for children to experience autonomy and agency drive the social, emotional, cognitive and physical benefits” (p 1528) of outdoor learning.

### Prioritizing Student Autonomy and Agency

- Opportunities were provided for students to explore and learn independently and to have agency in their own learning.

### Providing Learning Tools and Resources

- Tools and resources that could deepen outdoor learning opportunities were used strategically, such as magnifying glasses or iPads.

### Strategically Utilizing Outdoor Spaces

- Specific outdoor spaces were chosen intentionally and the frequency they were used was planned regularly.

### Integrating Cross-curricular Content

- Multiple curricular areas were often intertwined into outdoor learning lessons.

### Preteaching Prior to Outdoor Learning

- Important content was taught in-class before heading outdoors so that the time outdoors was more flexible and student-led.

### Cultivating Positive Teacher Beliefs about the Outdoors

- Teachers’ own feelings about the outdoors was the best predictor for the frequency and quality of outdoor learning.

The next strategy that emerged was providing students with tools and resources that supported their learning outside. These tools ranged from items such as digital cameras to iPads to magnifying glasses. The teachers chose these tools intentionally to support specific skills they were focusing on outdoors, such as observational skills or making predictions.

The third strategy was the strategic utilization of outdoor spaces. This consisted of two aspects: being selective when choosing the specific setting for outdoor learning and scheduling regular times for the outdoor learning to take place. Researchers observed that teachers put thought into what setting met the needs of their students and their learning intentions, rather than just taking them to the first spot they could find. They also found that teachers who effectively utilized outdoor learning with their students made it a consistent part of their teaching routine, whether that was once a week, once a month or at specific times throughout the term.

The next strategy in the data was the use of different academic disciplines when learning outdoors, such as combining literacy lessons with science exploration. For example, Eick (2012) observed a teacher who used outdoor learning to deepen students' understanding of literacy and math.

The fifth strategy was preteaching students prior to outdoor learning, which allowed for more flexibility in the time spent outdoors, as there were more opportunities for student autonomy and independent learning.

The final strategy that emerged was cultivating positive beliefs about the outdoors. Effective outdoor learning teachers regularly reflected on their own connectedness with nature and how important it had been in their own personal growth and development (Strachan et al 2017). These teachers had a deep belief in the importance of ensuring their students spent time outdoors, which helped them to persevere through the challenges and barriers that existed when implementing outdoor learning.

## Discussion

The strategies documented in this literature review demonstrate practical and effective ways to implement outdoor learning in kindergarten to Grade 3 settings. Not only do these strategies provide opportunities for teachers to overcome some of the barriers they currently face, but the strategies also support students in their pursuit of broader educational goals such as increased engagement, developing peer connections and holistic development. Through prioritizing student autonomy, integration of learning tools, thoughtful utilization of

outdoor spaces, combining cross-curricular content and reflecting on beliefs, teachers have access to a comprehensive framework for outdoor learning in kindergarten to Grade 3.

What are the implications of these outdoor learning strategies in action? What do they look like in practice?

- **Prioritizing Student Autonomy**
  - Example: Beginning a plant study? Instead of telling students the exact recipe for caring for their plant, provide them with the opportunity to choose how much sun and water to give their plant each day. This helps them make their own discoveries about how to correctly care for a plant (Owens and Martin 2011).
  - Impact: Providing students with opportunities for student-led inquiry enhances engagement. These opportunities create authentic learning experiences, where students are discovering the information for themselves rather than being told the information by the teacher.
- **Providing Learning Tools and Resources**
  - Example: Technology can be a great opportunity to enhance outdoor learning. Try combining nature with technology, for example, by using the JourneyNorth website (<https://journeynorth.org/tulips>) as part of a tulip project. Students can track the planting, sprouting, and blooming of tulips across North America and can use this information to plan when to plant their own tulip and to help make predictions for when it will sprout in their local context (Hatton et al 2019).
  - Impact: Learning tools, such as technology or magnifying glasses, are an impactful way to increase students' engagement in outdoor lessons. These tools can help to focus students' attention to a specific skill that is the learning intention of a lesson. For example, magnifying glasses can support students in working on specific observation skills, while access to a website can support students' abilities to critically apply complex information to a new environment.
- **Strategic Utilization of Outdoor Spaces**
  - Example: Having a hard time finding time for outdoor learning with all the other daily requirements? Start small and try scheduling an hour of outdoor learning time once a month, or even once every two months. Put it in your planner far in advance, so you can plan around it and ensure that it comes to fruition.

- Impact: Scheduling outdoor learning lessons in advance will ensure that there is time to prepare the students and the lesson. It will also increase the likelihood that the outdoor lessons will occur (Berg et al 2021; Mygind 2009).
- Integrating Cross-Curricular Content
  - Example: Intertwine literacy and science lessons outdoors by having children create a documentary about a tree of their choice. Alternatively, have students apply their sense of creativity by imagining that they have been exposed to magical dust and are slowly transforming into a tree! To survive this transformation, they must learn all about what a tree needs, spend time with other trees, and record sketches and observations of what they see around their new home in the forest (Häggström and Schmidt 2020).
  - Impact: Intertwining subjects in this manner creates multimodal learning experiences for students, which enhances learning and increases engagement (Häggström and Schmidt 2020).
- Preteaching Before Outdoor Learning
  - Example: Prepare students to be still and observant while exploring outdoors by preteaching techniques for using animal senses. In the classroom, practise fox walks (walking silently and gently to carefully observe all around while exploring), deer ears (cupping hands over ears to amplify sounds), or owl eyes (focusing on visual observations up, down and all around) and then try these techniques out during outdoor learning opportunities (Stapleton and Lynch 2021).
  - Impact: Practising these skills in the classroom provides opportunities to check in with the students in a controlled environment before going outside. Once outside, it is easier to provide students with more autonomy and independence to try out these skills since they have already practised them and understand the expectations.
- Positive Teacher Beliefs About the Outdoors
  - Example: Take time to reflect on your own experiences with the outdoors. What are some positive memories you have of spending time outdoors? Think about the potential that nature has to offer your students.
  - Impact: The more positively you see nature and outdoor learning, the more likely you will be to prioritize it in the classroom and champion its benefits for your students (Zeni et al 2023).

## Limitations

While this literature review improves the accessibility of outdoor learning, it is not without limitations. One significant limitation of this review is the type of data that resulted from the database search. A significant number of the studies analyzed were case studies that focused on high-quality outdoor learning environments, while very few were controlled empirical studies. As a result, the data presented is skewed towards qualitative evidence. Although this allows for rich and more nuanced outdoor learning strategies to emerge, it limits the generalizability of these results and adds potential for greater levels of subjectivity.

Another limitation in this study is the lack of representation of Indigenous perspectives through land-based learning. Among the articles identified through the search criteria, there were only a few that made connections to Indigenous perspectives, and these were limited to research based in the Canadian context. This accounted for a small number of articles across the pool of evidence. A separate database search for research focused on land-based learning and Indigenous ways of knowing quickly provides extensive and complex literature detailing the importance and the nuance of this approach. Johnson (2023, 167) explains that

In Indigenous ways of knowing and being, science learning is not an individual effort, nor is it a discreet subject. It is, instead, entwined with other people and all aspects of life. Science learning should not, in fact cannot, be disconnected from everyday life, from connection and community, or from land and place.

This deep and complex relationship with the land goes deeper than simply learning outdoors. Access to outdoor learning supports students in their abilities to connect with nature and one another, and to develop a sense of ecological responsibility and respect for the diversity that surrounds them (Johnson 2023). Ensuring that outdoor learning opportunities are crafted in culturally responsive ways that embody the interconnectedness of land-based learning is essential as “Indigenous knowledge and processes related to learning and life in general, and to environmental education in particular, are useful everywhere—for anyone” (Anderson et al 2017, 6). Despite this importance, land-based learning and Indigenous ways of knowing were not prevalent in the search results of this review. Thus, it is vital that future research prioritizes this rich perspective and insight.

Future research in outdoor learning strategies should ensure that a broader range of Indigenous voices and perspectives are prioritized in order to present inclusive and culturally responsive teaching strategies. A starting point for teachers looking to combine the presented strategies of this study with Indigenous education practices could be to utilize the resource *Natural Curiosity* (Anderson et al 2017). This guide outlines how educators can responsibly prioritize Indigenous perspectives through environmental inquiry. By addressing these limitations, future researchers can ensure that findings are more representative of the diverse field of outdoor learning.

## Conclusion

The strategies that emerged from this literature review demonstrate that outdoor learning is more attainable and accessible to educators than is currently believed. This provides an essential shift in perception as it clarifies that outdoor learning can be utilized even with the obstacles that teachers face in the classroom. If outdoor learning becomes more accessible, then it can be utilized more in schools. Therefore, children would be more likely to experience its positive physical, socio-emotional and cognitive benefits.

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# Beyond the Science of Reading: Disentangling Five Common Myths

*Maren Aukerman, PhD, and Kim Lenters, PhD*

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Maren Aukerman, a Werklund Research Professor at the University of Calgary, studies how to make the teaching of literacy more ethical and socially just—a question for which there are no simple answers. She is a previous recipient of the Albert J Harris Award and the Dina Feitelson Research Award, both research awards from the International Literacy Association. In 2023, she was awarded the In Defense of Good Teaching Award from the University of Arizona Foundation for her work in elevating the quality of public discourse around literacy instruction.

Kim Lenters is a professor and Canada Research Chair in Language and Literacy Education at the University of Calgary's Werklund School of Education. Her research examines children's and educators' multimodal literacy practices as enacted within relational networks of people, objects and institutional practices. Kim's research is published in a range of Canadian and International journals such as *Language and Literacy*; *The Reading Teacher*; *Journal of Early Childhood Literacy*; *Literacy, Reading Research Quarterly*; and *the Journal of Literacy Research*.

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Over the past decade, many schools across North America and around the world have seen renewed emphasis on the need to draw upon current, high-quality research to inform how early reading is taught. Spurred by concerns that children have fallen through the cracks (OHRC 2021), much of this focus has centred on the imperative to make sure all children learn to fluently decode text. In Alberta, for example, recent revisions to the elementary language arts curriculum placed greater emphasis on phonics skills, and school districts are revamping instruction to be more intentional in these areas.

We see greater intentionality as a positive development that has the potential to strengthen early literacy instruction. Simultaneously, we recognize that shifting rhetoric and

rapidly changing mandates can leave educators reeling, unsure of what to embrace and what to discard. The struggle is real, particularly because the umbrella term *science of reading*, often linked to literacy education reforms, has no stable, agreed-upon meaning (Aydarova 2023). Adding to the confusion, some of the approaches and practices referred to as *the science of reading* are anchored in research, while others lack research support (see Shanahan 2021).

More frequently, approaches may contain snippets of research-informed veracity but are communicated to educators in ways that strip them of nuance and create inaccuracies. Educators may come away with the message that they should *always* or *never* engage in a particular instructional approach, even though the reality is less black and white. Our goal here is to examine five widely circulating myths, outlining what aspects are in alignment with contemporary reading research. Our hope is that this analysis will allow educators to be more intentional in how they bring research-based classroom practices to life.

## Getting Past the Myths

**First myth:** Mastering phonics is the lynchpin that determines whether a child becomes a good reader.

**Reality check:** Learning to read involves developing the ability to decode words using phonic knowledge, but other aspects of the reading process are also foundational.

Reading is a complex process that involves *coordination of meaning-making at a variety of levels*, such as letter-sound relationships; word recognition; and making sense at the sentence, paragraph and whole text level. Phonic knowledge is an important dimension of reading in English, and there is robust research indicating that most students benefit from phonics instruction (Tierney and Pearson 2024).

That said, research also indicates that teaching children phonics is not the only puzzle piece that matters. In fact, a meta-analysis—a kind of study that looks across outcomes of many different studies—found that instructional support targeting things like language comprehension, motivation and fluency had greater effects on reading achievement than instructional support in phonics (Burns et al 2023). None of this is to say that teachers should neglect phonics, but even in the early years, children need a robust, rich program that supports multiple aspects of the reading process.

Given that literacy classrooms have limited time, spending excessive time on explicit systematic phonics instruction is likely to come at the expense of the fuller suite of skills and practices that, over time, come together to help students become fluent and motivated readers. Although there has not been a rigorous study of specifically how much time teachers should be spending on targeted phonics instruction, some scholars suggest no more than about 20-30 minutes daily (Shanahan 2019a). Moreover, there is little evidence to suggest that most readers benefit from phonics instruction after the first grade (NRP 2000). In short, phonics instruction is important in the early years but over-emphasizing it—or any other single dimension of the reading process—could put children at a disadvantage later.

**Second myth:** There is one right way of teaching phonics that is right for all children.

**Reality check:** There are a variety of promising ways of teaching phonics; children may benefit from different approaches.

There are several different ways to address phonics teaching (Mesmer and Griffith 2005). *Synthetic* approaches focus on blending and segmenting individual letter sounds (for example, *b-a-t = bat*). *Analytic* approaches focus on developing phonic understandings through patterns and analogies (for example, knowing how to read *cat* can help with reading *rat* and *mat*). In addition, instruction may fall somewhere on a continuum between *explicit* instruction, where the teacher directly tells students information about how letters and sounds work, and *implicit* instruction, where students are invited to explore elements of phonics situationally, as they arise in children’s reading, writing and even play. Finally, approaches may be more or less *systematic*, that is, comprised of a predetermined, sequentially structured set of phonics elements.

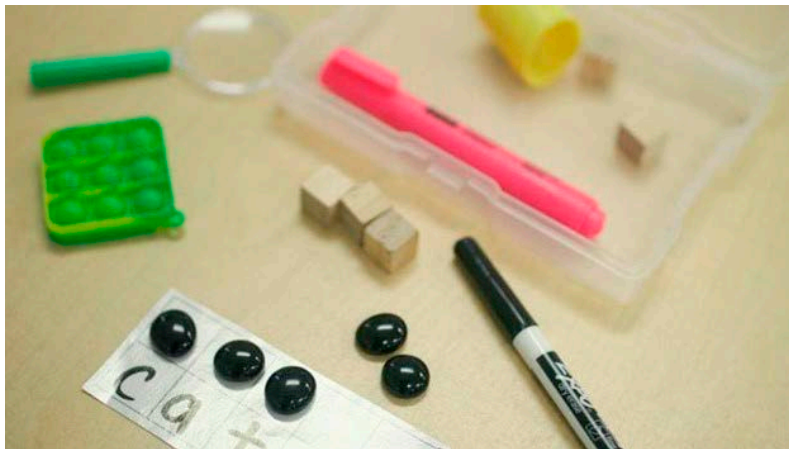


Figure 1. A child’s personal kit for tactile exploration of sound–symbol correspondences. Photo credit K Lenters (2024).

Some have claimed that if phonics instruction is to be aligned with the science of reading, it should *only* be synthetic, explicit and systematic, and that virtually all children need similar instruction in order to learn to decode (see Spear-Swerling 2019).

However, available research does not support such universalistic claims. There is insufficient evidence to suggest that synthetic approaches are superior to analytic approaches (NRP 2000); it may be that children benefit from both equally, or that some children benefit from one approach and others from the other, or that teaching both is synergistic. Given this fact, it is probably beneficial to give children opportunities for individual letter–sound blending (for example, using Elkonin boxes; see Resources for Further Exploration) *and* giving opportunities for reading words by analogy (for example, using word sorts). It need not be an either/or. Figure 1 provides an illustration of one teacher’s approach to helping her students explore letter–sound relationships through a number of modes, both material and oral.

There is a stronger body of research indicating that systematic, explicit phonics instruction has advantages in supporting children’s word recognition skills (Castles et al 2018). Much of the existing research has been carried out on a subset of students designated as struggling, meaning that outcomes may not hold for a general population of students. However, a smaller number of studies undertaken with readers without diagnosed reading disabilities in regular classroom settings have also shown the benefits of this form of instruction for improving decoding proficiency (Ehri 2020).

These decoding gains do not necessarily translate into clear gains in comprehension, however (Suggate 2016). Indeed, one cross-national study found that in classrooms that do not rely on systematic explicit phonics instruction have no reading deficits. These children are superior in reading fluency compared with those in classrooms centred on explicit phonics (Thompson et al 2017). Another study found that first grade teachers who did a lot of telling—versus actively involving the children in their own learning—were the *least* effective in improving reading achievement (Taylor et al 2002). Taken together, these studies suggest that explicit teacher explanation of phonics, while it can play a role, needs to be used judiciously.

It is fair to say that a purely implicit, haphazard approach to teaching phonics would also be inappropriate, particularly for students who need the most support. However, explicit and implicit phonics learning are not mutually exclusive, and opportunities for implicit phonics learning can also have considerable value. For example, one study (Cavanaugh 2017) compared how well children learn phonics from teacher-taught games versus games the children themselves invented using the same materials. It found that children learned more when designing their own forms of play. In other words, a largely (but not exclusively) implicit approach was more successful than a largely explicit one. There are similar findings for instruction encouraging students to use invented spelling (another largely implicit approach) as a means of supporting reading performance (Ouellette and Sénéchal 2014). In other words, some implicit approaches, particularly those that foster student agency, active thinking and exploration, also demonstrate research-backed benefits. In light of available evidence, blending explicit and implicit approaches to phonics teaching may be the best way to reach all children.

Moreover, the oft-quoted maxim *One size does not fit all* applies here. One study found that first graders who started the year with relatively strong word recognition skills made fewer reading gains when their instruction was highly phonics-centred and teacher-driven, while those who had less word recognition skills benefited from such an emphasis (Connor et al 2004). This finding suggests that some children may require more systematic explicit phonics instruction, while others require less. To meet every student's needs, teachers should adjust instruction for individuals and small groups, so that all children get enough, but not too much, phonics instruction for their particular needs.

**Third myth:** Teachers should only use decodable texts to teach children to read in the early grades.

**Reality check:** There is little evidence that any one type of text is uniformly better for emergent readers; children benefit from regular opportunities to read books regardless of type.

There are three main types of texts available for teaching emergent readers (Shanahan 2019b). Predictable texts centre on patterned natural language to help children learn how texts work (for example, “I like my cake”; “I like my candles”; “I like my present,” etc). *Controlled vocabulary* texts emphasize repeated vocabulary to support sight word learning (for example, “The dog is big”; “The man is big”; “The big dog is on the big man”; etc). *Decodable texts* emphasize repeated letter/sound patterns (for example, “Nan can fan the man”). Some claim that decodables are superior, but currently, there is little research to back up such a claim (Birch et al 2022).

In fact, there have been remarkably few studies comparing the use of different kinds of texts (Hiebert 2024). One of the few existing studies showed no advantage to using more decodable versus less decodable texts when provided instructions were similar (Jenkins et al 2004). Decodable texts appear to draw children's attention to word reading (Cheatham and Allor 2012), which can be helpful for early emergent readers. At the same time, there is some evidence that they can hamper children's fluency, likely because the process of sounding out each word can be laborious (Mesmer 2010). In short, while research evidence is slim overall, available research suggests that decodable texts may have advantages, but also disadvantages, for emergent readers.

Some researchers argue for using different kinds of texts in combination and/or at different points in children's learning. For example, Mesmer (2020), who has done research on decodables, believes they should be used within a limited window of time—only until a child can fluently decode consonant-vowel-consonant words, which often happens by the middle of the first grade. However, as Mesmer points out, to date, these kinds of recommendations have been based on informed opinion, not formal research findings. No single kind of text has been definitively demonstrated to be better—or worse—than other texts. It may well be that the quality of instruction matters more than the type of text, or that child readers differ in the kind of text that helps them learn better.

Available research does support the idea that children need regular practice with real books, and that too much isolated skills practice at the expense of reading actual

texts may be counterproductive (Pressley et al 2001; Taylor et al 2000). Some research has even indicated that having children coauthor and read their own culturally and personally relevant texts is more powerful and engaging for their learning than working with pre-existing basal texts (Lawson 2023). In short, it may be more important that children have regular opportunities to read than that they are reading a particular kind of text.

**Fourth myth:** Encouraging young students to use the context of a sentence or the pictures as they are decoding hurts their reading ability long-term.

**Reality check:** Readers who draw on a flexible range of strategies for making sense of text, including the use of context cues and pictures *alongside* emerging phonic knowledge, are poised to become strong readers.

Because there is a research consensus that skilled decoding is critically important (Scanlon and Anderson 2020), the worry about children overrelying on context in order to figure out words when they are reading is understandable. If a fourth grader's main strategy when encountering an unknown word is to use the context of the sentence to identify it, they are unlikely to be successful as a reader until they develop additional strategies. To our knowledge, no one is advocating for children to rely on context at the expense of developing phonics skills.

However, the use of context and the application of phonics skills are not mutually exclusive, and there is evidence that children can benefit from instruction that encourages them to use both in tandem, particularly as their phonics skills are under development (Scanlon and Anderson 2020). To understand why, several larger principles need to be kept in mind. First, the use of context cues is *useful*, at times even *indispensable*, for reading some words accurately. For example, it can enable the emergent reader to identify irregular words like *business*; to select among homographs, such as the present and past tense of *read*; and to handle variability in how the same letter pattern might be pronounced, as in *gone* versus *bone* versus *done*.

Second, automaticity in reading depends on *orthographic mapping*, which enables readers to effortlessly identify words by sight. It is orthographic mapping, not letter-by-letter decoding, that skilled readers routinely use in most circumstances (Scanlon and Anderson 2020). While using phonics to sound out

words can facilitate orthographic mapping on its own, coupling emergent phonic knowledge with the use of context for very early readers can play a role in advancing orthographic mapping because

The use of partial decoding, along with context to check decoding attempts and a set for variability, increases the proportion of words that are accurately identified while reading, thus enabling the orthographic mapping that is necessary for word learning to occur and potentially increasing readers' familiarity with phonics elements that have not been explicitly taught. (Scanlon and Anderson 2020, 521)

Thus, when a child is able to use context cues as one strategy within a range of strategies, their early orthographic mapping may be more efficient, even as phonic knowledge is being solidified.

Third, reading is more than simply decoding words, and the ability to call out words as they appear on a page *does not necessarily correlate with the ability to comprehend text*. One challenge for emergent readers, already mentioned, is that at a stage when little orthographic mapping has yet taken place, sounding out every word on every page is laborious and can hamper fluency, potentially undermining comprehension. In addition, it is important to remember that strong readers monitor their comprehension, continually asking themselves if what they are reading makes sense (see Schwartz 1997). When a reader uses the sentence context to predict an unknown word, they are utilizing inferencing skills, inferring the word's identity based on the rest of the sentence. For example, in the sentence, "That is none of your bXXXXXss!" it is relatively easy to infer that the unknown word is *business*. Similarly, when a sentence initially gets read as "The dog was goan," a child should ideally recognize *goan* as a nonword and self-correct it to *gone*.

While we do not want to see children predicting words based on sentence-level context cues as their primary approach, we do want to encourage using this strategy supplementally, as a form of comprehension checking. It helps ensure children are not simply plowing through text regardless of whether it makes sense to them. Helping young readers learn to monitor for their own understanding is one way that teachers may help students achieve accurate word identification *coupled with* strong text comprehension.

Turning to the matter of using context cues found in pictures, the argument is similarly nuanced. Texts designed for young children typically incorporate illustrations, drawings and/or photos. The reason is that images are inviting, engaging and highly supportive of overall meaning-making. Even in decodable books written for young readers, illustrations exist on every page. If using picture cues constituted a harmful practice, reading materials would omit them entirely.

In fact, authors and illustrators of high-quality children's literature and nonfiction work carefully to ensure bidirectional synergy—the image animates salient aspects of the text and, simultaneously, the text identifies what is seen in the image (Sipe 2008). Illustrations are often constructed to provide more detail than that found in the words; sometimes, they are crafted to contradict what is said in the print. These text–image juxtapositions encourage close reading, inferencing and in-depth exploration of possible textual meanings (Aukerman and Chambers Schuldt 2016; Sipe and Brightman 2009). In short, encouraging children to carefully attend to what is being *said* in pictures can support their ability to grow as readers.

Despite this, effective early reading instruction does not allow the use of context to substitute for the development of other word recognition strategies. Children whose phonic skills remain underdeveloped can come to overrely on images and sentence-level context to support their efforts at decoding. When this happens, their reading progress can stagnate, as the use of context becomes a compensatory strategy for other skills that are missing. There is no evidence that this happens *because* children are encouraged to use context, or indeed that encouraging children to attend to context as part of their early textual decoding efforts is in any way harmful (Shanahan 2020). However, it is vital that all children develop additional strategies, particularly those that help them develop strong phonic knowledge. Use of context and pictures should be one part of a broader decoding repertoire that children develop across time.

**Fifth myth:** The science of reading is a body of settled facts in reading research; anyone who does not accept those facts is in the wrong.

**Reality check:** Reading research is a complex, evolving and contested field.

Education scholars, like researchers in many fields, read the available research to draw informed conclusions. Scholarly debate involves convincing others of those conclusions while drawing on research evidence.

There are some areas of general agreement, such as the need for most children to develop an understanding of phonics as they start to read, as well as the idea that reading is a complex, coordinated process involving more than just decoding (Tierney and Pearson 2024). However, scholars do not agree on everything. For many decades, there have been disagreements over how best to teach early reading (Durán and Hikida 2022).

This is partly because the field is vast: a recent database search of Education Resource Information Center (ERIC) landed 140,003 hits for the terms *reading* and *education* together. (Smart, thoughtful people can disagree about how to interpret all this research, especially because sometimes findings conflict.) It also reflects different assumptions that scholars have about what matters (for example, comprehension versus decoding outcomes). Scholarly disagreement of this sort is common and can even serve as an engine for future scholarly research as people try to strengthen the evidence base.

What is harmful is not the disagreement itself, then, but the insistence that anyone who has a scholarly disagreement with a particular approach backed by some scholars—for example, centring the teaching of phonics—must be *unscientific*. Particularly odd is that less than a quarter of scholars in postsecondary reading education identify with a highly phonics-centric approach to teaching early reading; most prefer an approach that integrates and balances multiple dimensions of the reading process (Kurtz et al 2020). It makes no sense to claim that research evidence supports a position when most scholars in the field disagree with it.

It is important to realize that popular reading-related websites and journalists sometimes latch onto a *side* and become advocates for a particular approach, resulting in material that may be biased or incomplete. One analysis of websites featuring content about dyslexia found that they were rife with information presented as research-based fact that was, in fact, not backed by actual evidence from reading research (Worthy et al 2021). Similarly, an analysis of reporting on the science of reading found that research connections were often weak (Aukerman 2022). Furthermore, the media frequently promotes an *us/them* narrative that encourages polarization and conflict rather than exploration, synthesis and nuance (MacPhee et al 2021). Many scholars—ourselves included—see value in a range of research insights and perspectives rather than identifying narrowly with a single label or approach.

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In this examination of widely circulating myths about reading instruction with young children, our intention has been to sort through messaging that is too often framed in dire, black and white, either/or terms. The research we have explored sits within a much larger, robust body of literacy research that provides pedagogical guidance in critically important areas, such as oral language development, writing instruction and literature study. It is our hope that the exploration and attendant reality checks can help to minimize the whiplash that educators of young children may be experiencing as they navigate early literacy teaching in present times. In the appendices that follow, we provide a list of principles for phonics and word study, and a resource list for those interested in further exploration.

We conclude this article with five recommendations for traversing the fraught informational field within which we currently find ourselves.

- Approach with skepticism any informational sources that frame statements about research in a language of absolutes. Statements such as, “There is research supporting the idea that...” are more measured and scholarly than “Research proves that educators should always...”
- Seek to learn from multiple perspectives and different approaches, including both structured and balanced literacy, rather than yielding to voices that would dismiss an approach outright.
- Directly engage, when possible, with the research itself. For example, read research journals such as the *Early Childhood Education Journal*, *Journal of Early Childhood Literacy*, *Literacy, Language and Literacy*, *Language Arts* or *The Reading Teacher*.
- Learn with and from colleagues; dialogue among educators around literacy research and practice can be generative. Find communities of people with whom to explore teaching dilemmas and opportunities. These may be local, in-person communities. Online spaces can also be fruitful ways to connect.
- Continue to learn from what your own students teach you about what they need in order to thrive as literacy learners.

## Appendix A—Principles for Phonics and Word Study

- Phonics is just one part of robust early literacy instruction. It needs to be balanced with other vital aspects of literacy learning.
- About 20–30 minutes of phonics/phonemic awareness skills instruction tends to be the sweet spot. More than that crowds out other vital literacy learning. Some children may need less.
- Phonics instruction should be differentiated but make sure that less advanced students are not fed an instructional *diet* of *only* phonics!
- Students need regular exposure to and practice with reading real texts.
- Students need to write, with invented/developmental spellings playing a facilitative role.
- Word study instruction should be based on assessment that considers phonemic awareness, phonics and developmental spelling.
- Phonics instruction should respect children’s current English pronunciations, which may be influenced by their home languages, dialects, etc.
- Phonics instruction should invite students to be active thinkers and talkers. To facilitate this:
  - invite students to predict,
  - invite students to notice and
  - elicit explanations.

(Sources: Aukerman and Chambers Schuldt 2021; Hoffman et al 2021; Palmer and Invernizzi 2015; Pearson 2004; Taylor et al 2000; Wyse and Bradbury 2022)

## Appendix B—Resources for Further Exploration

- The science of reading and early literacy learning
  - Aukerman, M. 2024. “Toward Comprehensive, Research-Informed Literacy Instruction: Thinking With, Against and Beyond the Science of Reading.” *Spring Educational Freedom Lecture Series*, Ithaca College Department of Education, (February 22). <https://www.ithaca.edu/academics/school-humanities-and-sciences/education/spring-educational-freedom-lecture-series-2024>.

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- Play and early literacy learning
  - Cavanaugh, D M, K J Clemence, M M Teale, A C Rule, and S E Montgomery. 2017. “Kindergarten Scores, Storytelling, Executive Function and Motivation Improved Through Literacy-Rich Guided Play.” *Early Childhood Education Journal* 45, no 6, 831–843. <https://doi.org/10.1007/s10643-016-0832-8>.
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- Building comprehensive literacy programs
  - Aukerman, M, and L Chambers Schultdt. 2021. “What Matters Most? Toward a Robust and Socially Just Science of Reading.” *Reading Research Quarterly* 56, S1, S85–S103. <https://doi.org/10.1002/rrq.406>.
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- Using *Elkonin boxes* to support blending sounds
  - Institute of Education Sciences. 2016. “Video 15: Phonemes Linked to Letters.” *YouTube*. [www.youtube.com/watch?v=6wjU03hjOvs](http://www.youtube.com/watch?v=6wjU03hjOvs).
- Participating in a virtual or in-person discussion group

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# Moving Numbers

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**H**ave you ever considered numbers in terms of space? We often think of number as a way of counting objects. But considering it in terms of motion creates a more robust and enduring understanding of this mathematical concept. When numbers are in motion, there are also opportunities for engaging spatial reasoning. Spatial reasoning has garnered attention for mathematics teaching in the classroom. Yet often, the spatial qualities of mathematical concepts such as number receive little attention. This paper will explore the different spatial qualities of numbers and provide a few suggestions for playful activities that you can take back to your classroom.



Figure 1. A child playing hopscotch and experiencing moving along numbers on the court.

A great example of exploring the spatial qualities of numbers is hopscotch. Each square in the court represents a position. As a child hops into a new space, the number becomes a part of moving along a path. As the child moves forward, the numbers increase. When they turn around and go back, the numbers decrease. All of these physical experiences of moving, increasing, decreasing and positioning numbers are also spatial reasoning experiences.

In the early years, both mathematics and spatial reasoning are important for later mathematics learning and achievement. How well a child does in early mathematics predicts not only their later mathematics performance but also their retention and later

performance in other subject areas (Claessens and Engle 2013). Claessens and Eagle (2013) found that kindergarten skills in pattern recognition, measurement and advanced number sense were predictors of students' Grade 8 achievement.

Likewise, early years spatial training is significant for later years mathematics learning. Like early mathematics, early spatial reasoning is a predictor of how well a child will do academically (Möhring et al 2021). Spatial reasoning is generally thought of as the ability to imagine moving objects in space (Bruce et al 2017). Doing so requires experiencing multiple objects (including oneself) moving in space. Babies develop their spatial reasoning skills as they begin to crawl and experience their body moving in space. There are many comingling elements that contribute to emergent spatial reasoning, including building, moving, placing, comparing and interpreting features of objects (Davis et al 2015). It is not therefore surprising that there are similarities between early mathematics and spatial reasoning. In fact, similar brain regions are recruited for numerical and visual spatial tasks (Toomarian and Hubbard 2018). Clements and Sarama (2011) argue that, at its core, mathematics is inherently spatial. Dehaene (1997) claims that they could be considered one and the same. Yet, teacher education rarely incorporates spatial reasoning into the teaching of mathematics (Newcombe 2010). Therefore, exploring the connections that exist between mathematics and spatial reasoning could deepen our understanding of both.

## Ways of Thinking About Number

There are four different ways of thinking about number that invoke different spatial representations. Lakoff and Núñez (2000) call these representations *grounding metaphors*. Flexibility with all the metaphors is essential for having a robust understanding of number. In early years teaching and learning, number as a concept is often depicted as a collection of objects and in terms of its relation to counting. Children naturally count their fingers as they count to 10. On the classroom walls, pictures of objects representing a corresponding featured number abound (for example, three apples alongside the symbolic representation for *the number three*). Likewise, most textbooks feature pictures of objects representing numbers and operations.

### Number as Count

Figure 2 below provides an illustration of what *number as count* looks like in terms of arithmetic when counting objects. Note that metaphors of number are *italicized*, and spatial elements are **bolded**.

When you compare objects, three apples are **fewer** than five apples. Addition is about **gathering more** objects. Subtraction is about **taking away** objects. Multiplication is about **grouping** collections of equal quantities of objects together. Division is about **splitting**

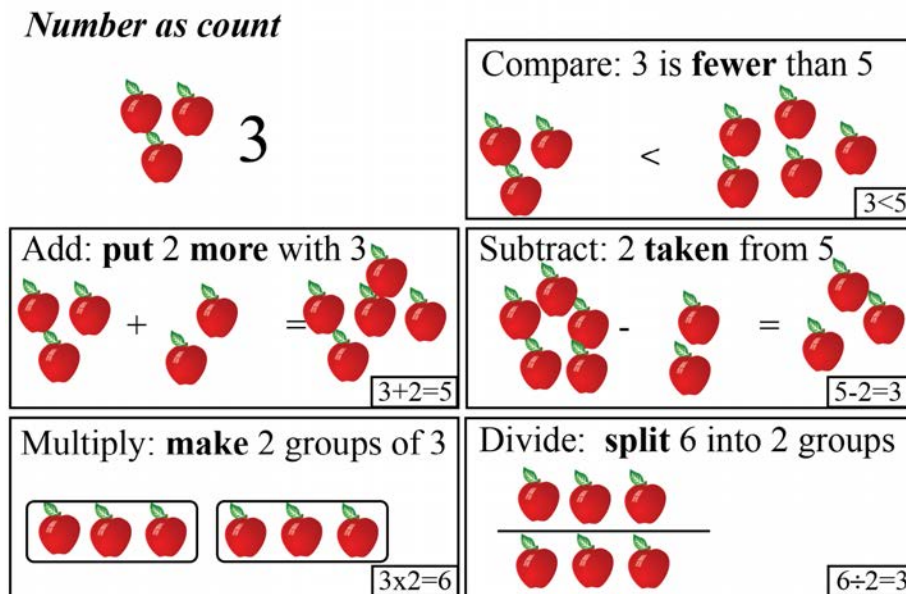


Figure 2. Numbers and operations when number is considered as count

**things apart** into groups of equal quantities. Take a moment to think about how you teach number and arithmetic. Is *number as count* prevalent in your repertoire?

### Number as Size

The metaphor of *number as size* builds on the metaphor of *number as count*. Figure 3 shows an example of the metaphor of *number as size*, where number is about constructing objects. In the classroom, this metaphor is invoked through building blocks or unifix cubes. When you compare sizes, a tower of three blocks (or objects) is **smaller** than one with five blocks. Addition is about **putting more** blocks **on** to make a **bigger** tower. Subtraction is about **taking off** blocks to make a smaller tower. Multiplication is about repeatedly **fitting together** blocks of equal size. Division is about **splitting apart** blocks into equal sized parts or segments. *Number as count* is entailed within *number as size*, but the reverse is not true. How would you use the metaphor of *number as size* in your classroom?

### Number as a Measuring Stick

Each metaphor of number becomes subsequently more powerful because it includes the previous one. *Number as a measuring stick* is shown in Figure 4.

When you compare **lengths**, a segment of three is **shorter** than a segment of five. Addition is about **growing a longer** segment. Subtraction is about **shortening** a segment. Multiplication is about repeatedly **fitting** parts or segments **together** to make a **longer** segment. When two measuring sticks are aligned perpendicularly, multiplication is

### Number as size



Compare: 3 is **bigger** than 5

Add: **put 2 on 3 to make a bigger piece**

Subtract: **take 2 off of 5 to make a smaller piece**

Multiply: **fit 2 of size 3 together**

Divide: **split 6 into 2 parts the same size**

Figure 3. Numbers and operations when number is considered as size

### Number as measuring stick



Compare: 3 is **shorter** than 5

Add: **put 2 on the end of 3 to make a longer piece**

Subtract: **take 2 off of 5 to make a shorter piece**

Multiply: **fit 2 segments 3 long together**

Divide: **split 6 into 2 segments of the same length**

Figure 4. Numbers and operations when number is considered as a measuring stick

about **area**. Division is about **splitting apart** into equal parts or segments. One measuring stick measures distance. Two perpendicular measuring sticks measure **area**. In the classroom, arrays invoke this metaphor.

The measuring stick representation includes both count and size. For instance, you can count the number of tiles along the floor to measure its length. You can also note the size of that number of tiles. As such, there is more flexibility and power in using this representation of number compared to count or size. Next, we will examine the most powerful metaphor of number.

### Number as Motion Along a Path

One reason that number as motion (or position) along a path is the most powerful metaphor is that it contains all the other metaphors. You can count numbers on a path. Paths can be a certain size and can be measured. When comparing numbers on **paths**, it is their **position** that is being compared. As shown in Figure 5, five is further from the point of origin than three. Addition is about **moving forward**. Subtraction is about **moving backward**. Skip counting equal spaces is multiplication on a number line. Division can be thought of in reverse. The hopscotch in Figure 1 invokes the metaphor of *number as motion along a path*.

By exemplifying this metaphor, the number line incorporates spatial-numeric associations between number magnitude and line length (Newcombe et al 2015; Siegler and Lortie-Forgues 2014). A number line

orients students’ emergent understanding of quantitative reasoning (Sarama et al 2011). Internalization of the number line can serve as a “core conceptual element” (Case and Okamoto 1996, 9) in children’s developmental progression. Mazur (2003) argues that a nuanced appreciation of the number line is essential to most concepts beyond those encountered in elementary school. In the two-dimensional space, a grid or the cartesian plane are also metaphors of *number as movement along a path*.

### Implications for Teaching and Learning

These different metaphors are useful for implementing the new curriculum. The new mathematics curriculum considers numeracy as the ability to interpret and apply quantitative and spatial information (New LearnAlberta, 2022b). Using the number line or simplified whole number versions will provide students with both spatial and number experiences. In the new mathematics program of study (New LearnAlberta, 2022a), concepts of quantity and ordinality start in kindergarten and continue to Grade 6. The first two grounding metaphors of number are not great for illustrating ordinality. Do five apples come after three apples? Or does a tower of size three blocks come before or after five blocks?

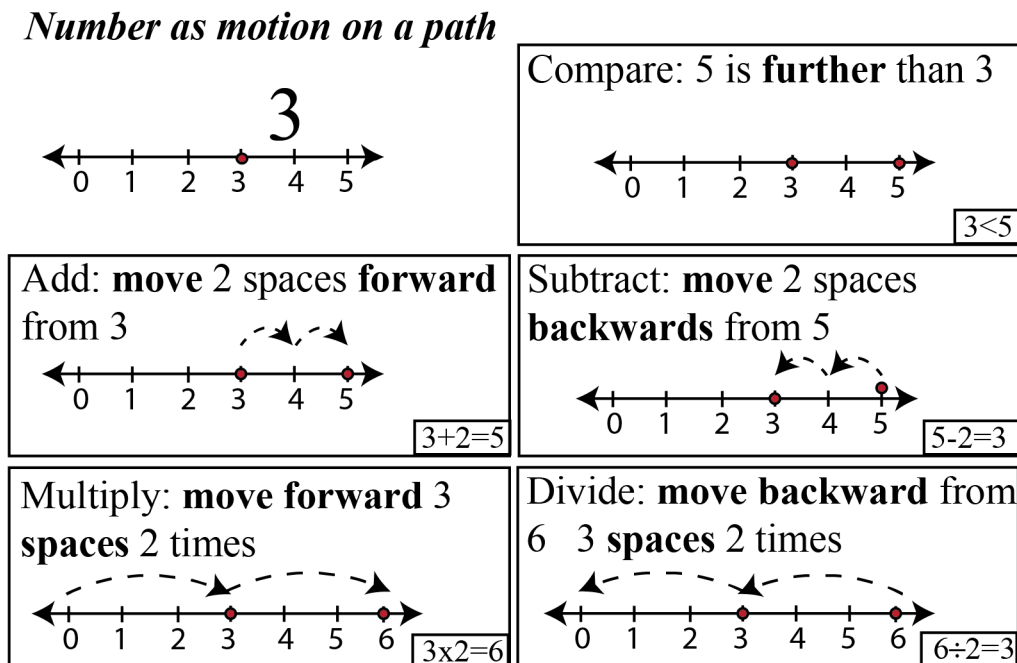


Figure 5. Numbers and operations when number is considered on a path

In contrast, when examining the location of three and five on a measuring stick or a number line, the order of the numbers is clear. The quantity or magnitude also becomes clear. The skills and procedures in the new curriculum (New LearnAlberta, 2022a) implicitly refer to the different metaphors of number. By Grade 3, understanding number as motion along a path will help with understanding place value, skip counting, modelling quotients of certain sizes and modelling multiplication with array.

## Ideas for Classroom Teaching and Learning

Besides hopscotch, there are many ways you can teach students to think about numbers' moving positions. If you have images with numbers alongside the appropriate number of objects, such as the number three alongside three apples, I recommend replacing those with a number line. I have seen classrooms where students have the number line taped to their desks. Whenever you are teaching numbers, use the number line. Show the students how to use the number line for each operation, similar to Figure 5. Adding numbers is about starting at

one point and moving forward to a certain number. Where you end up is the answer. With multiplication, keep hopping on that number line while skip counting.

In *Taking Shape*, Moss et al (2016) describe a few wonderful unplugged computational thinking ideas that unite numbers and spatial thinking. In one activity, they describe giving students a path on a grid, with a starting point and arrows pointing directions to an end point. In the first example, the classroom has a grid on the floor (easily made with masking tape). Then, one student is placed at the starting point. Another student then provides instructions for the student to move to the end point. Next, this activity moves to drawing, where one student draws the other's movement instructions on a grid with arrows. Eventually, the students make secret routes on their own and practise telling each other the directions to get to the right spot.

Snake in a Box (<https://galileo.org/math-fair-problem/snake-in-a-box>) and Sam's House ([www.mathfair.com/sams-house.html](http://www.mathfair.com/sams-house.html)) present similar mathematics problems that include moving numbers in a grid.

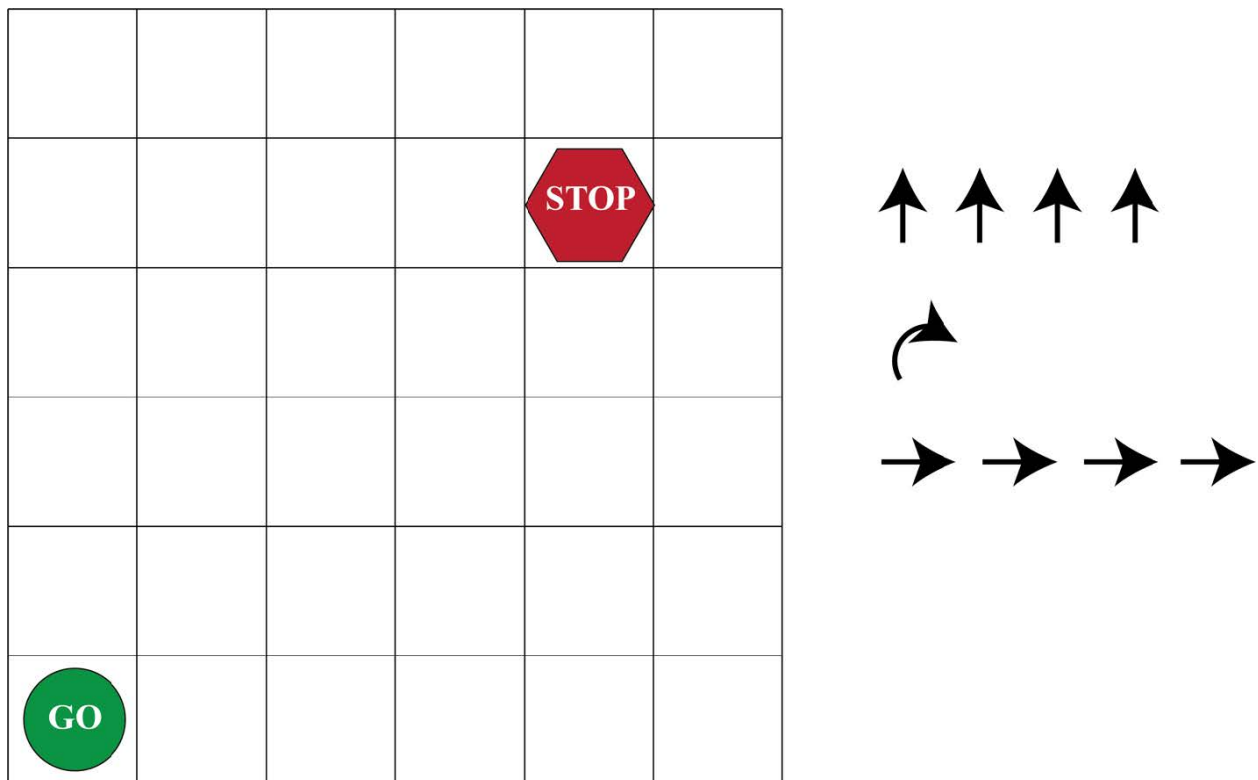


Figure 6. An example of an unplugged activity that includes moving numbers

## Conclusion

Shifting your practice of teaching numbers to using the number line will have considerable outcomes for your students' learning. Not only will they gain a more robust understanding of number as a concept, they will also strengthen their spatial reasoning skills. Teaching quantitative reasoning with the number line supports the emerging understanding of spatial–numeric associations of number magnitude. A robust understanding of numbers and strong spatial skills will set your students up for success for years to come.

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# Reimagining the Power of Read-Alouds Through Dialogic Conversations

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The picture book read-aloud (RAL) is ubiquitous in the early learning classroom, and the benefits extend far beyond entertainment. We know that reading picture books to young learners can foster a plethora of language and literacy skills, including building background knowledge, boosting phonological awareness (Riordan et al 2018), introducing new vocabulary and sentence structures (Justice et al 2002; Mol et al 2009; Silverman 2007; Wasik and Bond 2001), building print awareness (Justice et al 2009), enhancing early comprehension skills (Wiseman 2011; Zucker et al 2009), and of course, fostering a love of books.

Reading aloud offers a significant yet often overlooked benefit: it supports the development of thinking skills such as interpretation, reasoning and critical meaning construction, encouraging students to engage with texts beyond a surface level. Not only are these skills essential to literacy in the 21st century, we believe they also play a broader role for learning in general and in supporting individuals as they fully participate in society. These literacy skills include analyzing a text for its key points, synthesizing the text with the reader's own knowledge and experience, and identifying the perspective presented in the text to evaluate the validity of information. Learners can develop these skills by reading picture books in our early learning classrooms, but the types of interactions that foster these skills are not always intuitive for teachers.

This article details the importance of engaging in RALs paired with dialogic conversations in the early learning classroom to develop higher-level literacy skills. We begin by explaining dialogic conversations and sharing what these can look like through RALs with children. Then, we share four key actions, paired with tangible teacher techniques that you can use with your students. Finally, we address common challenges to implementing this type of RAL in a classroom setting. We outline several strategies for keeping the read-aloud conversations moving in the right direction and in turn, moving learning forward; all of which we have found helpful in our own practices.

## Dialogic Conversations, RALs and Thinking

### What Are Dialogic Conversations?

We use the term *dialogic conversations* to refer to a specific type of interaction that occurs both between teacher and students, and among students themselves. A dialogic conversation acknowledges and engages with multiple perspectives where students voice their diverse ideas and teachers withhold their evaluation of the correctness of the response. Students are prompted to explain their thinking so they can further negotiate and build on each other's ideas. Critical to these dialogic conversations is the context in which they take place. The students need to feel they are in a space characterized by respectful, supportive and caring relationships (Snell and Lefstein 2018). In summary, dialogic conversations involve teachers and students asking questions, talking about the work they are doing and exploring different perspectives to learn in deeper ways.

### What Do Dialogic Conversations Look Like?

In practice, if you were observing a dialogic RAL conversation in a classroom, you would see a teacher or fellow students asking open questions without expecting a predetermined answer. The teacher would listen for a variety of different perspectives and then discuss with the

students the differences between responses. You would see a teacher following the line of the student's thinking, having an extended conversation, and engaging in multiple turns with that student. In these prolonged exchanges, the teacher pursues the student's idea by asking follow-up questions, requiring the student to explain, clarify or connect their thinking. Finally, you might see a teacher combining several students' ideas together or building further questions off a response.

For example, in the exchange below, the students in a kindergarten class discuss a line from a book that suggests that the moon could stroke a bear's fur. The line states, "When suddenly, the full moon rose from behind two mountains. It reached down to him and gently stroked his fur" (Burgess 2020, 33). The dialogic conversation proceeded as follows:

**(Turn 1) Teacher:** "What do you think was happening when the author said, 'the moon stroked the bear's fur'?"

**(Turn 2) Student:** "Maybe there is a wind, and that is making his fur move."

**(Turn 3) Teacher:** "Hmm... You think that the wind is making the bear's fur move? Can you tell me more about that?"

**(Turn 4) Student:** "Well, the wind is coming from the moon, and the wind is moving the bear's fur." (The student gently fans his hands.)

**(Turn 5) Teacher:** "Why do you think that the wind is coming from the moon?"

**(Turn 6) Student:** "Because you see those lines, they are coming from the moon, like a wind, and they are going to the bear." (The student points to the moon beams illustrated on the page.)

**(Turn 7) Teacher:** "So you are saying that these lines, maybe we can call them moon beams, are coming from the moon and going to the bear. So do you think it is the moon beams or the wind that is gently stroking the bear's fur?"

**(Turn 8) Student:** "Well, I think that the moon is making the moon beams and that is making the wind, so the bear is feeling the moon beams tickle his fur."

# Typical RAL Practices and Shifting Practice to Fostering Thinking

While RALs are a cherished part of the early childhood classroom, they often fall short of encouraging the kind of deep, student-centred dialogue that supports critical thinking. Research shows that typical RAL sessions are usually dominated by teacher talk and shaped by closed questions, unintentionally limiting opportunities for children to think deeply, share ideas and build on one another's thinking (Deshmukh et al 2019; Hindman et al 2019; Walsh and Hodge 2018). This may be, in part, because we do not always associate young children with complex cognitive skills like interpretation, reasoning and critical thinking. Yet, a growing body of research shows that children are not only capable of such thinking but that dialogic read-aloud conversations, when used consistently, can help foster and strengthen these abilities (Bence Mathezer 2025; Pantaleo 2007; Sipe 2000, 2008; Wiseman 2011).

## What Happens When We Leverage Dialogic Talk During RALs?

As educators of young children, we know that RALs are essential for supporting emergent literacy. But when we add dialogic conversations, those rich, back-and-forth exchanges, we take learning even further. With small shifts to our read-aloud routines, we can help students make big gains in their thinking and engagement.

So, what makes dialogic conversations so impactful? For starters, they offer rich opportunities for students to explore ideas more deeply. When we ask thoughtful questions and guide students to build on one another's thinking, we help them reach levels of understanding they might not get to on their own. These types of conversations encourage students to reflect on their ideas, consider new perspectives and make inferences. Research shows that the reasoning skills that students develop during these conversations in RALs transfer into other areas of learning, such as mathematical and scientific logic and reasoning, and social studies perspective taking (Mercer 2002, 2013; Resnick et al 2015; Wegerif 2015).

What makes dialogic RALs especially powerful is how they honour students' experiences and perspectives. Children bring their own experiences and ways of seeing the world to every story, and their interpretations often differ from ours as adults. That is not a problem; it is a strength. By inviting children to share their thinking and

genuinely listening to how they are making meaning, we validate their perspectives and help them grow confidence in their ability to understand and engage with texts (Phillipson and Wegerif 2016). Most importantly, when students see that their ideas matter, their engagement grows. They begin to see themselves as thinkers and readers who can make sense of the world through stories (Nystrand et al 2003). In the next section, we share four key actions that facilitate integrating dialogic discussion into RAL practices.

## Four Actions to Help You Leverage Dialogic Conversations During a RAL

In this section, we share four actions you can take to embed dialogic RAL conversations in your practice. These are simple but intentional actions that will help to support building and fostering a culture of deep thinking and learning. We hope that they act as affirmations to your current practice, as creative ideas to engage your students, and as reminders of small changes you can take to deepen thinking and learning. We introduce each action and then suggest a few teacher techniques to bring the action to life. We have provided a summary of this section in Table 1.

### Action 1: Setting the Context

The classroom culture serves as the foundation for effective dialogic RALs. Below we detail some specific teacher techniques to build a culture for dialogic conversations. Building the culture begins with engaging in intentional literacy practices where you plan for student engagement and create a space where children feel confident in sharing their diverse ideas.

#### Teacher Techniques

- Preview the book before reading it to your students. When using a RAL for a dialogic conversation, it is essential to preview the book to get a sense of the main ideas, to think about the questions you may ask and to consider possible connections to other classroom activities. Dialogic conversations don't *just happen*; they require advanced planning.
- Prepare open and closed questions in advance. Prepare a mix of open and closed questions before your read-aloud. Closed questions check for basic understanding and usually have one correct answer. On the other hand, open questions invite multiple perspectives and longer responses, essential for

spark rich discussion (Worley 2015). Research shows that during most RALs, teachers ask very few questions, and when they do, they are usually closed (Deshmukh et al 2019; Gest et al 2010; Hindman et al 2019). Since open questions are harder to create on the spot, having a few ready beforehand will set the stage for deeper thinking and conversation. When planning your open questions, think about questions that have no right or wrong answer, and instead, will help you understand how the student is making sense of the book. Here are some examples of open questions:

- Why do you think \_\_\_\_ did that?
  - How do you think \_\_\_\_ felt in that moment?
  - What does this make you think about?
  - What do you think \_\_\_\_ should do now?
- Think of possible answers to your open questions and keep them to yourself (at first). This technique can feel counterintuitive, especially since we are often taught to model thinking through *think-alouds*, making our reasoning and connections visible to students. While think-alouds are still valuable, you should use them intentionally. When we immediately share our own interpretations or connections, we may unintentionally take over the cognitive work, leaving little room for students to develop and share their own thinking. It can also signal that there is a *right* answer, usually ours. Instead, ask an open question, and then keep your answer to yourself while gathering different student ideas. Give students time to share their ideas, compare interpretations and explore their reasoning. When we delay making our thinking visible, we shift the thinking and learning to the students, foster multiple perspectives and support the kind of productive struggle that builds critical thinking skills.
  - Gather in a circle. As you prepare for a RAL, if you have the space, gather your students together in a circle. This makes space for all students to see each other as they are speaking, and fosters a culture of community and belonging, important keys to building dialogic conversations.

## Action 2: Gathering Student Responses

The goal of this action is to activate prior knowledge and consider different ways of connecting to a text. By asking open questions and gathering responses from multiple learners, we encourage students to think deeply,

so they can search for their own connections and interpretations. This requires them to draw on their *funds of knowledge* (Moll 1992), leading to a richer, deeper understanding of the text.

### Teacher Techniques

- Survey for different responses. After asking an open question, begin by gathering as many answers as possible.
- Avoid giving an evaluation after each student. After a student shares, we are often inclined to provide an evaluation because we think it will encourage more students to share. We say things like, “Yes, great thinking!” or “Wow, I love that idea!” or “Hmmm, no, that’s not exactly right.” However, when we offer an evaluation, we can create the opposite effect. By saying, “Yes, great idea!” to the first child who shares their answer, we unintentionally communicate that this is the correct answer, and the other students may become less inclined to offer a different response. This technique is one of the most difficult to embody but one of the most important. Next time you ask a question, try the following responses:
  - Thank you for sharing.
  - Hmmm... Interesting idea!
  - Thank you for adding your voice.
  - I appreciate your connection.
- Set a protocol for student sharing. There is no right or wrong protocol to gather ideas during a dialogic conversation. You need to determine what you are comfortable with and what the students in your class can handle. You might have students raise their hands. You can use popsicle sticks and draw names for sharing. You can even allow students to call out their answers and negotiate turn-taking themselves. Having a protocol that is clearly articulated to your students will help these conversations begin and expand in a smoother way. Recognize that the protocols for sharing may also change over time as students become more skilled at listening to their peers, considering different ideas and asking for more information as they try to understand diverse perspectives.

## Action 3: Diving Deep

This practice is all about probing students' thinking and helping them develop deeper cognitive skills. We draw on Zucker and Cabell's (2024) *Strive for Five* framework, which encourages teachers to engage students in rich, extended conversations using *upward scaffolding questions*. These are questions that prompt connection, explanation, comparison or elaboration. Read-aloud time is an ideal setting for these conversations. As teachers go deep by probing one student's thinking, others also benefit. As peers listen and reflect, they begin to adopt similar thinking strategies, a dynamic known as the *snowball effect* (Anderson et al 2001; Bence Mathezer 2025). This occurs when one student's successful use of a strategy prompts others to try it too, gradually increasing the thinking strategy's use across the group.

### Teacher Techniques

- Dive deep with two of the shared ideas. Once you have gathered multiple answers to an open question, pick two ideas to engage with on a deeper level.
- Strive for five (Zucker and Cabell 2024). Start with one of the ideas you selected, and engage in a back-and-forth discussion with the child, aiming for five turns. The goal is to dive deep and better understand the student's response. Repeat this with both ideas selected. Here is an example of five turns:
  - **(Turn 1) Teacher:** How do you think the wolf felt at the end of the story [the three little pigs]?
  - **(Turn 2) Student:** He was mad.
  - **(Turn 3) Teacher:** Hmmm, interesting. Why do you think he was mad?
  - **(Turn 4) Student:** Well, because he kept blowing and blowing but the house stayed up.
  - **(Turn 5) Teacher:** Ah, you think he was mad because he couldn't blow the third pig's house down.
- Use sentence stems. As you engage in five turns with a student, you may find that some children find it difficult to explain their thinking or elaborate during dialogic conversations. Here are four ways to support a student in thinking more deeply about their answer, paired with some sentence stems:
  - **Connecting:** We can help students connect to what they already know about the topic, by helping them remember previous lessons, discussions or experiences. Here are some possible sentence stems:
    - What does this remind you of...?
    - Tell me what you know about...
    - Can you remember a time when you had to do something similar...?
    - How does this connect to...?
  - **Explaining and reasoning:** We can help students explain and provide a reason for their answer by asking if their answer makes sense. You can also ask the student to double check, share, show or find information that helps confirm their response. Here are some possible sentence stems:
    - Why do you think...?
    - Can you explain how you got that?
    - How do you know?
    - Tell me more about what... has to do with...
  - **Comparing:** We can support students in looking for patterns across responses, texts or content. By asking students to consider how their idea is similar or different to something, we are helping them develop the ability to generalize. Here are some possible sentence stems:
    - How is that different than...?
    - How does this look similar to/different from what we did yesterday?
    - What were you thinking when you...?
  - **Elaborating:** We can help students to refine their thinking by asking them to extend and elaborate on their thinking, add information to their answers or clarify parts of their responses. Here are some possible sentence stems:
    - Do you think it is the same every time?
    - What if... Would it be the same?
    - How does that work with \_\_\_\_\_'s idea?
- Dive deep as a class: After you have shared multiple turns with the two ideas, summarize the thinking. Then, ask one more open question to engage your whole class and encourage further exploration of the initial ideas shared. Here are some possible sentence stems:
  - Do you agree with these ideas?
  - Did either of these ideas prompt your thinking about something else?
  - What else has you thinking?

## Action 4: Honouring and Acknowledging the Child's Response

This action centres on the importance of recognizing, validating and building on students' ideas to support their engagement and sense of agency with text. Our goal is not just for children to listen attentively during RALs but to also be actively involved, making connections, asking questions and interpreting meaning from both words and pictures. For this kind of engagement to flourish, students need to feel that their thinking matters. When we genuinely acknowledge and respond to their ideas, we convey that their contributions are valued and that they have the knowledge and ability to do this complex work. Through this affirmation, students begin to develop the confidence and agency to engage deeply with texts as thoughtful, capable readers.

### Teacher Techniques

- Express gratitude. When a student shares, a simple *thank you* is a way to show the whole class that you value what they have to say.
- Restate and/or recast the student's answer. When we restate or recast a student's response, we signal to them that we heard their answer, we understood it and we honour their thinking. Restating is simply repeating the child's response. If a student says, "I think he was mad," you could say something like, "So, you think he was mad." Recasting is where you repeat the child's answer but adjust the language slightly; you might adjust for grammar or syntax, use a synonym or include a character's name, without explicitly naming or drawing attention to the adjustment. For example, if the student says, "I think he was mad," you could say something like, "What I hear you saying is that the wolf is mad, or angry. Is that correct?".
- Make connections visible. After a student responds and you have five back and forth turns, you can also make connections between ideas shared. This helps encourage students to begin responding to each other's ideas. Here are some possible sentence stems.
  - Hmm, that sounds similar to/different from how \_\_\_\_\_ felt when...
  - I am hearing a lot of similar connections. What do you think?
  - How is that different from/similar to what \_\_\_\_\_ thought?

## Additional Practices to Make the Actions Even More Powerful

Although dialogic conversations are widely recognized as powerful pedagogical practices, they are not consistently implemented across classrooms. We recognize this is, in part, because facilitating such conversations can be inherently challenging. In our own practice, even when we are very intentional about making this happen, we run into challenges. For instance, students don't say anything, they say "I don't know," or they quickly get off-topic. Here are some additional practices we pair with the four actions above to help move past some of these challenges.

- Implement wait time. After asking a question, give students some time. Count to 20 before saying anything further.
- Turn and talk. Before surveying the class for answers, have students turn and talk with a peer to activate thinking. This allows even more think-time for some students and lets them hear ideas from their peers. We usually set a timer during a turn and talk to keep students on topic, often starting with 15–20 seconds and building from there.
- Use mini whiteboards. After asking a question, students can gather their ideas and thinking on individual whiteboards. Students might jot notes, draw pictures or even doodle as they think about the question.
- Read the book twice. You might find it works best to read the book first, with no interruptions, on one day, and then reread the book later in the week, asking questions the second time. During the first reading, focus on students briefly summarizing the story to ensure that everyone understood the main events and clarify any new vocabulary. During the second reading, dive into understanding the different ways students connected to and made sense of the story.
- Centre questions around the pictures. We have found that many students make the deepest connections when questions and discussion opportunities are centred on the text and the pictures.
- This takes time. It is important to acknowledge that developing dialogic read-aloud practices takes time, patience and plenty of practice. The early attempts might feel a bit awkward or uncertain, but that is part of the learning process. If you stick with it, the benefits are well worth it: deeper student thinking, richer conversations and a more engaged classroom community.

Table 1. Summary chart of teacher actions and techniques to support dialogic conversations during RALs

<b>The Action</b>	<b>Setting the Context</b>	<b>Gathering Student Responses</b>	<b>Diving Deep</b>	<b>Honouring and Acknowledging the Child's Response</b>
<b>The Why</b>	Students are more likely to engage in dialogic conversations when they feel their ideas are valued. Building this context requires intentional planning.	Multiple, diverse responses are the foundation for dialogic conversations. Students need opportunities to share and hear different ideas to begin this work.	Dialogic conversations require students to reason with and evaluate different interpretations. Teachers scaffold this complex thinking with follow-up questions.	When students' share their ideas, they are empowered to see themselves as capable, thoughtful readers and thinkers, and more likely to engage in the hard complex thinking work.
<b>The Techniques</b>	<ul style="list-style-type: none"> <li>• Preview the book in advance.</li> <li>• Prepare open and closed questions. <i>Tip: write them on a sticky-note and put them inside the front cover</i></li> <li>• Think of possible answers to your questions, but keep them to yourself.</li> <li>• Gather in a circle</li> </ul>	<ul style="list-style-type: none"> <li>• Survey for as many different answers as possible.</li> <li>• Avoid giving an evaluation after a comment. Instead try saying <i>Thank you for sharing.</i> <i>Hmmm, interesting idea!</i> <i>I appreciate your idea.</i></li> <li>• Set protocols for student sharing. <i>Tip: try these out and see which feels the best in your context: hand raising, popsicle sticks, calling out.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Pick two ideas to explore. <i>Tip: consider picking an idea that surprised you.</i></li> <li>• Strive for Five (Zucker &amp; Cabell, 2024) back-and-forth turns with both students.</li> <li>• Use sentence stems to help students build their idea and their thinking by <i>connecting, explaining/reasoning, comparing or elaborating.</i></li> <li>• Dive deep again as a class. Summarize what the two students shared and ask one more question: <i>Do you agree?</i> <i>What else has you thinking?</i></li> </ul>	<ul style="list-style-type: none"> <li>• Express gratitude – thank your students for sharing.</li> <li>• Restate and/or recast student ideas. <i>Restate: repeat the student's idea</i> <i>Recast: repeat the idea by adjusting or extending something (vocabulary, grammar, pronoun etc)</i> <i>Tip: when recasting, don't emphasize the correction.</i></li> <li>• Make connections to other ideas visible. <i>Tip: try one of these questions to invite more students into the conversation: I am hearing a lot of connections. What do you think? How is that similar/different to...?</i></li> </ul>

## Summary

As teachers, we already know the power of reading picture books with young children; it is a joyful, meaningful part of early learning. In today's world, our role also includes helping students become critical thinkers who absorb information, question it, connect it to their unique experiences and make sense of it in thoughtful ways.

Dialogic conversations during RALs weave together the joy and the thinking. They use a familiar and beloved medium, picture books, to spark engagement, deepen understanding and nurture the confidence children need to share and explore ideas. It is a practice that fosters a love of reading and empowers students with the skills essential for literacy in the 21st century. When we take the time to make space for student voices, we are not just reading stories, we are helping students author their own thinking. And that is a powerful thing.

### Helpful Resources and Tools

A question we hear often from teachers is, *What are the best books for dialogic read-alouds?* In our experience, one type of book is not better than another; it really is the teacher and how they enter into the conversation that makes the difference. All books can foster dialogic conversations, including wordless picture books; however, to get started, here are some of our favourite books and resources that have guided our practice.

### Our favourite RALs

- *Can I Be Your Dog?* by Troy Cummins (2022, Dragonfly Books)
- *Gaston*, by Kelly DiPucchio and Christian Robinson (2014, Atheneum Books for Young Readers)
- *I Can Only Draw Worms*, by Will Mabbit (2017, Greener Books Canada)
- *Just a Walk*, by Jordan Wheeler and Christopher Auchter (2010, Theytus Books)
- *Oh No, George!*, by Chris Haughton (2012, Candlewick Press)
- *Outside In*, by Deborah Underwood and Cindy Derby (2020, Clarion Books)

- *The Blue Scarf*, by Mohamed Danawi and Ruaida Mannaa (2022, Running Press Kids)
- *The Gruffalo*, by Julia Donaldson and Axel Scheffler (2016, Macmillan Children's Books)
- *The Pigeon Needs a Bath*, by Mo Willems (2014, Hyperion Books for Children)

### Our favourite teacher books and resources to support dialogic conversations

- *Strive-for-Five Conversations: A Framework That Gets Kids Talking to Accelerate Their Language Comprehension and Literacy*, by Tricia A Zucker and Sonia Q Cabell (2024, Dreamscape Media)
- *Talk Box: Activities for Teaching Oracy with Children Aged 4–8*, by Lyn Dawes and Clair Sams (2017, David Fulton Publishers)
- *Talking Points: Discussion Activities in the Primary Classroom*, by Lyn Dawes (2013, Routledge)
- "Talking in Class: Strategies for Developing Confident Speakers Who Can Share Their Thoughts and Learning," by Emelina Minero (2016, available on Edutopia at <https://www.edutopia.org/practice/oracy-classroom-strategies-effective-talk>)
- Thinking Together Project, by the University of Cambridge (at <https://thinkingtogether.educ.cam.ac.uk/oracy/>)
- Summary of "Four Actions for Dialogic RAL Conversations," by Michelle Bence and Miriam Ramzy (available on Layers of Literacy website at <https://www.layersofliteracy.com/resources>)

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# Happy Hours Kindergarten: Filling a Missing Piece of Early Childhood Education in Alberta

*Hetty Roessingh, PhD, and Fen Roessingh*

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*Fen Roessingh is retired. She ran the Custom Woolen Mills in Carstairs for over 40 years, which is now in the capable hands of her daughter, Maddy Purves-Smith.*

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## Abstract

Using an assemblage of data sources, including personal letters, archival records, photographs and newspaper clippings, we describe the beginnings of Happy Hours Kindergarten (HHK) in Calgary in 1955 from a fledgling basement program through its evolution over the following decade. Four broad themes emerge from these data that provide insights into how our mother, Frances Roessingh, manager of HHK, was able to use her position to influence policy on where early childhood education should be situated, supervised/administered and funded. At the time, providing for kindergarten was highly contested and continued to be over the following decades. In 1975, HHK transitioned to the Calgary Board of Education, and Frances and her colleague, Marg Huston, retired. The goal of this paper is to add a chapter that is missing to the historical record of early childhood education in Alberta.

## Introduction

The convergence of the post war *baby boom*, waves of immigrant arrivals and the discovery of vast oil reserves in Leduc in 1947 triggered rapid growth and expansion of Calgary. In 1954, Calgary had a population of 169,999. One year later, the population was 200,000 (Donald Luxton and Associates 2013).

Our mother, Frances Roessingh, was among these arrivals in 1954. She was coming from Holland, a region in the Netherlands, together with her five young children, to join her husband, a geologist, who had arrived a year earlier to secure employment and find housing for his family. At the time, few options were available for young children to participate in early childhood programming.

Mrs Edna Arbuthnott, a qualified kindergarten teacher, offered a program in the tiny basement of her home in Windsor Park, a few blocks away from where the Roessingh family settled. My sister, Fen, and I (aged five and four, respectively) attended the mixed age program in 1954–55, shown in Figure 1 below. Frances was particularly concerned about our readiness for more formal schooling to come, especially our English language development (letter, October 19, 1954; Norris 1995).



Figure 1. Mrs Arbuthnott's mixed age program, 1954–55



Figure 2. The first cohort of Happy Hours Kindergarten children: 1955–56

Within a year, Frances proposed partnering with Edna, housing the kindergarten program for 5-year-old children in our family home. This would become known as Happy Hours Kindergarten (HHK). HHK occupied the available space in two downstairs bedrooms, the downstairs family room and the upstairs living room. Figure 2 shows the 1955–56 cohort, consisting of 46 neighborhood children in one of the downstairs bedrooms. Note the rhythm band instruments the children have in hand (tambourines, triangles, sticks, hand drums and claves). We elaborate on the importance of rhythmic and music making in large groups in Theme 1, on the next page.

It quickly became clear that there was considerable demand for a kindergarten program and that, at best, it could be accommodated in our home only temporarily.

Edna's great gift was her interest in teaching kindergarten, and she remained as a teacher with HHK until 1975. HHK then transitioned to the Calgary School Board (later, the Calgary Board of Education [Norris 1995, 241–43]). In the interim, Frances, along with her colleague Marg Huston, took on the role of managing and administering HHK. Together, they oversaw the

multidimensional tasks of registering young children; finding suitable space; hiring teaching staff, including staff with specialized preparation in music (letter, January 9, 1958); selecting and securing learning materials; and designing a program responsive to the diverse learning needs of young children.

By the fall of 1956, HHK had outgrown our family home (letter, June 10, 1957). Telephone inquiries for registration, at 100, and a growing waiting list (letter, August 31, 1956) prompted Frances to locate churches and community halls in neighboring communities in southwest Calgary that could accommodate these growing numbers. Ultimately, by 1975, HHK had an enrolment of over 600 children in 22 classes.

Like so many immigrants to Calgary, Frances maintained connection to her family through letter writing. Postage was inexpensive at 10 cents for a short, self-sealing letter. Frances was a prolific letter writer to her mother. These letters, written between 1954 and 1964, together with photographs, newspaper clippings, archival records and, importantly, a brief Frances prepared and submitted to the Calgary School Board in

1961 have left detailed insights into her evolving conceptualization of early childhood development. These guided her work in shaping the kindergarten program for HHK and advocating for where it should be positioned in the broader context of early childhood services. For the purposes of this article, we include the brief submitted to the Calgary School Board in 1961 as Appendix A. Autobiographical information about Frances (Norris 1995, 241–43) is presented in Appendix B.

## Conceptualizations of Child Development

Seventy years ago, there was little in terms of published scholarly research in early childhood education. Frances had studied geology at university and was possessed of a curious, inquiring mind that sought to make the connection between her conceptualizations of early childhood development and any relevant research she could access for self-directed study (letter, January 11, 1964). For the purposes of this paper, we cite contemporary scholarly literature to provide research insights and support for decisions and directions Frances pursued so many decades ago.

Frances was particularly taken with the idea of engaging the hand–brain complex in training the neural circuitry for making meaning through music and movement (Gallagher and Sayre 2014). She applied these insights to pedagogical practices at HHK.

Further, Frances was driven by her keen sense of *kid watching*, starting with her own children both at home and in their early childhood education experiences in

Holland at the Kieviet School in Wassenaar ([www.kievietschool.nl/](http://www.kievietschool.nl/)). This school operates to this day, describing its pedagogy as progressive, and includes gymnastics, a topic that resonated with Frances. In Holland, early childhood education is offered for children as young as 2 ½ years old. Primary school starts for most children at age 4 and is compulsory from the age of 5 (Singer and Romijn 2018).

Hands-on experiential, symbolic learning through play using practice real-life materials and interaction with peers supports the development of stable, internalized mental models for learning the world, which is also known as embodied cognition (Reggin and Pexman 2021). At home, as young children we had plenty of play-based experiences that fostered direct body–object interaction (BOI) and learning the associated vocabulary through building “nimble fingers” (Suggate and Stoeger 2014). Figure 3 shows Fen and I participating in a tea party at home with our older brother, Emil, who appears to be orchestrating the action as we intently watch and listen.

In sum, Frances subscribed to the idea of *constructivism* and *embodied cognition*. Children are essentially sensory beings immersed in a material world that they come to understand and know through ongoing, rich, direct experiences and interactions that are mediated through talk. These ideas align with those advanced by Vygotsky nearly 100 years ago (McLeod 2025). Further, Frances wrote about the idea of readiness, especially language development, and continuity of experiences, thoughts that are more in line with Piaget’s stage theory in cognitive development (Belyh 2019; Cherry 2024).

We turn next to the four themes that emerged from analyzing our data.

### Theme 1: Rhythmics, Music and Movement

HHK placed a high priority on music and movement, believing that training in rhythmics and music making in large groups accrued many benefits. As noted above, Frances was drawn to the role of neuronal connections in the brain and how these could be developed through training and effortful practice: practice makes perfect. Frances hired a “proper music teacher,” Elizabeth Chalice (letter, January 9, 1958), to work on music and movement. Bonacina et al (2019) underscore these same ideas. Good rhythmic skills are associated not only with music but also with math readiness since both work through pattern recognition (Geist, E, nd; Geist, K et al 2012). Miendlarzewska and Trost (2014) provide additional research evidence for the multiple benefits of



Figure 3. Tea party at home. Emil is seen with younger siblings Fen and Hetty.

musical training, including for cognitive development. Barrett et al (2021) offer practical, pragmatic ideas for supporting music making throughout the day.

HHK participated year after year in the annual Calgary Music Festival, now known as the Calgary Performing Arts Festival (<https://cpafestival.ca/>) often winning in rhythm band and choral speech (letter, January 4, 1957; April 12, 1962). Rehearsals began in January for this event, which, to this day, is usually held in mid-April. But it was more about the journey than the destination: goal setting, belonging, learning and growth, discipline and developing confidence were all part of the performance. Winning instilled pride, a sense of accomplishment and achievement.

## Theme 2: The Importance of Materials and Children’s Direct Tactile Experiences with Them

Frances recognized the importance of well-made, high-quality materials that were developmentally progressive and didactic in nature (Early Childhood Pedagogy Network 2024). She found that materials such as puzzles, blocks and manipulatives were not widely available locally. Her letters reveal a strong interest in ordering Simplex puzzles, shown in Figure 4 below, from catalogues that her mother had sent (letter, July 1957) and her delight when these arrived (letter, October 23, 1957).

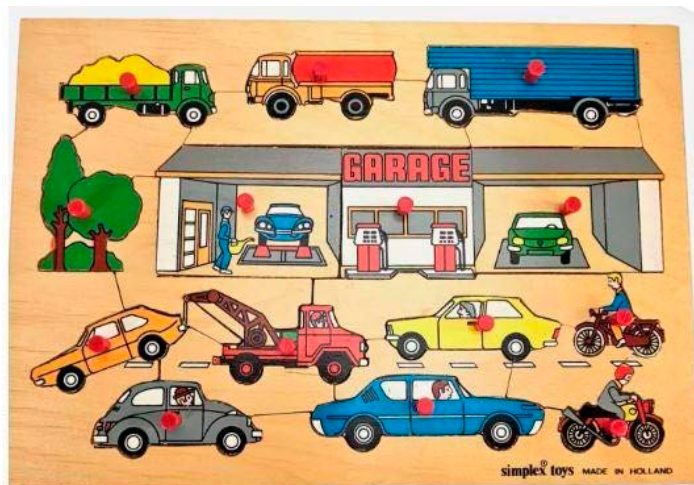


Figure 4. Simplex puzzles (made in Holland)

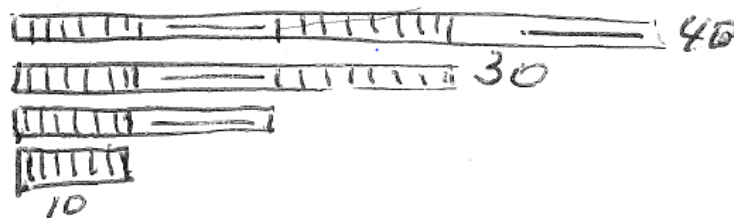


Figure 5. Sketch for home-made counting sticks

Contemporary scholarship highlights the idea of situated cognition in the materiality of young children’s worlds. Puzzles and block play foster the development of spatial reasoning that is foundational to mathematics understanding as young as age three (Verdine et al 2014; Cohen and Emmons 2016; Dewar 2022). Roessingh and Bence (2018) similarly identify the importance of direct tactile experiences and BOI through guided play as central to building the language skills needed to learn the world: its shape, size, structures, textures and more.

Other times, Frances resorted to making materials at home inspired by Montessori (Wang 2021) that reflect pedagogic intent (letter, November 2, 1957), as seen in the sketch in Figure 5. She and her husband spent countless hours cutting the wooden lengths, sanding and painting them.

Shared storybook reading had been a constant in Frances’ parenting habits (Figure 6). She naturally included rich exposure and experiences with books in HHK. Saracho and Spodek (2009) elaborate on the multiple benefits of shared story booking reading. This includes specific mediating behaviours by parents that support literacy and vocabulary development among young children (Torr and Scott 2009). Examples of these behaviours include shared gaze on the page, making connections between the text and the pictures, and dialogic talk (Roessingh 2021a, 2021b).

The bookshelf at HHK contained children’s classic stories such as those written by Beatrix Potter, and other favorites of the 1950’s. Figure 7 displays a selection of these books. In addition, the local library had a generous (free) book borrowing policy, and Frances was able to secure a sufficient and varied selection of books for storybook reading (letter, October 19, 1954). Children never tire of hearing the same storybooks read to them repeatedly; they glean deeper meaning and understanding with each retelling (Herbert 2018).



Figure 6. Shared storybook reading at home



Figure 7. Favourite books from the 1950's. Many are still commonly read today.

### Theme 3: Recognizing the Importance of HHK

Frances was frequently invited to do demonstration lessons at the Calgary Teachers' Convention on action songs, finger plays and games. She also demonstrated her Simplex materials (letter, February 9, 1958). The Calgary School Board often turned to her to borrow her materials to determine their utility in their own programs. Frances was increasingly invited to sit on committees (letter, September 22, 1957) or consult the Department of Education on the place, position and funding of early childhood programming. She notes an increasing awareness of the importance and value of kindergarten, which she refers to as "kindergarten conscious," in the continuum of education experiences for young children (letter, March 8, 1958). Other communities in Calgary, including Acadia, invited her to establish kindergarten programs for their young children (letter, March 7, 1964).

### Theme 4: Advocacy for Early Childhood Education in Alberta

As Frances became more aware of the recognition that the Calgary School Board and the (then) Department of Education accorded HHK, and as she became more confident in her English language proficiency (letter, June 8, 1958), she also grew more confident in advocating for policy development on where early childhood education should be situated, supervised/administered and funded.

Frances presented a *Kindergarten Brief* (May 1961) to Miss Janet Johnson (see Appendix A), kindergarten supervisor for the Calgary School Board, at the conclusion of her address to the Local Council of Women at City Hall. The *Kindergarten Brief* provided specific response to proposed changes in the Alberta legislation covering the provision, teaching and supervision of teaching and teacher training, for children aged four to six. The Local Council of Women appears to have played a key role in advancing and positioning early childhood education. They secured a meeting with Miss Johnson to voice their concerns about the shift in the administration of kindergarten from the (then) Department of Education to the Department of Welfare (Norris 1995), a shift they opposed. They argued successfully that kindergarten

programming should remain in the Department of Education to ensure continuity and smoother transition to Grade 1. This would have immediate as well as far reaching future implications for early childhood education in Alberta.

The Alberta provincial government did not provide for fully funded kindergarten programs until 1973. Prior to 1973, Alberta was the only province with no public funding and only about 25 per cent of three to five-year-old children participated in any pre-Grade 1 programming (Wisniewski 1989).

Forceful action and advocacy for kindergarten became necessary given the recurring threats to kindergarten programs and funding cuts (Webber 1995; Taylor 2001). Under Premier Ralph Klein, these were once again on the table. From September 1993 to September 1996, the funded hours of kindergarten in Alberta decreased from 400 to 200 hours, then increased to 240 hours. Public pressure reversed these cuts, and kindergarten was again funded to 400 hours (Harrison and Kachur 1999).

The Alberta Teachers' Association (2000–2001) has been instrumental in securing stable funding for kindergarten programming. From an early time after its inception in 1966, the Early Childhood Education Council (ECEC) of the ATA began to raise the importance of early childhood education, including kindergarten and full day kindergarten (de Nance and Wrathall 2011). Faculty members at the University of Alberta have also provided strong support for early childhood education for decades. For instance, Myer Horowitz, PhD (Shane 2023) and Walter Worth, PhD (1972) were committed to universal access and publicly funded kindergarten programming.

Currently, kindergarten programs are offered and funded up to 475 hours per student (Government of Alberta 2018) for children who turn five before December 31 in the year of registration. Though most five-year-old children in Alberta currently attend kindergarten, it is not mandatory to do so, hence its ongoing exposure to risk when government seeks options for fiscal restraint.

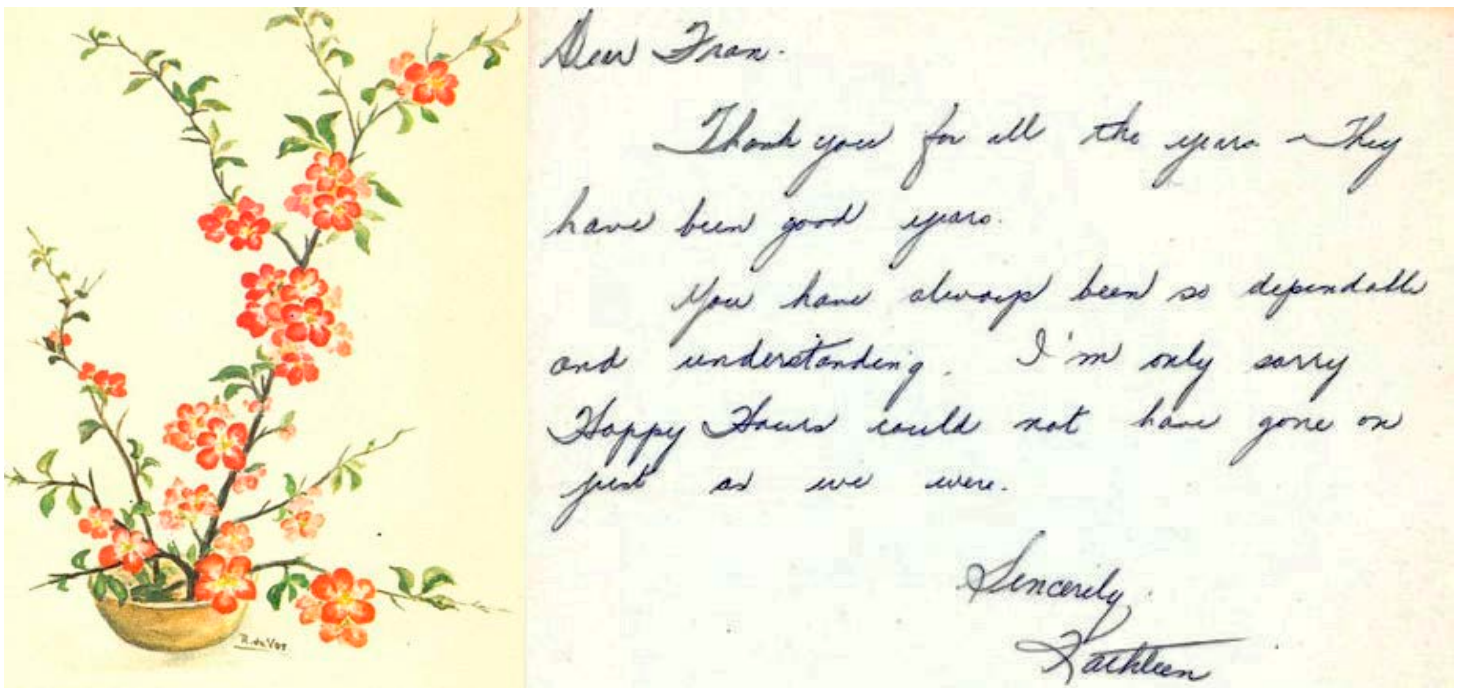


Figure 8. Thank you for all the years, from a long-time teacher with HHK.

## Summary and Concluding Thoughts

Figure 8, which depicts a thank you note from a long-time HHK teacher, succinctly sums up and acknowledges Frances' many years of dedicated leadership and determination to provide quality programming in early childhood education.

Frances was at the vanguard of early childhood education in Calgary in the decade between 1954 and 1964. She recognized the need for kindergarten programming and occupied a niche in providing kindergarten experiences for five-year-old children amid the booming population growth of postwar Calgary.

Music, movement and rhythmic, and direct, tactile involvement with quality learning materials, including puzzles, blocks and books through play and adult interaction, provided the cornerstones of the daily program.

Frances was a tireless advocate for institutionalizing equitable, publicly funded early childhood education, especially for English language learners (ELLs) and children raised in poverty who would otherwise be disadvantaged upon arrival in Grade 1 (Roessingh and Elgie 2009). The growing number of ELLs in our schools today points to the importance of the year before six. A continuum of learning from kindergarten to formal schooling in Grades 1 to 12 offers important foundational *readiness* skills development (Slack 1986; Gilbert et al 2011). Our young children and their families are vulnerable: many do not have the English language proficiency or the confidence to speak on behalf of themselves. They need strong advocates to protect their early educational needs.

Frances left indelible footprints on the unfolding landscape of early childhood education in Calgary and in Alberta. The story of Happy Hours Kindergarten, as told to her mother in a series of letters written in the decade after immigrating to Calgary, together with additional documents and photographs, provide an audit trail and a tangible record of early years' learning that should not be lost to time. Kindergarten programming has needed its champions. Frances was among the earliest.

We hope we have done justice to these data and, importantly, provided insights and missing information that help to fill a void in the historical background of early childhood education in Calgary and in Alberta.

## Appendix A—Kindergarten Brief: The Status and History of Kindergarten Teaching in the Calgary Area. Prepared By Frances Roessingh and submitted to the Calgary School Board, 1961.

Note: Frances wrote this brief in response to proposed changes in the Alberta legislation covering the teaching and supervision of teaching and training for children aged 4–6. In January 2025, I found this document in a box of letters and newspaper clippings that had been stored in my basement for 25 years.

It is not clear who the recipient of this brief was; however, the Local Council of Women (Frances was not yet a member) played a key role in advancing the importance of early childhood education and sought to position it in the Ministry (Department) of Education, rather than the Department of Welfare. Miss Janet Johnson, kindergarten supervisor with the Calgary Board of Education, spoke to the Local Council of Women (date unknown), and Mrs H K Roessingh is reported to have given a proposal (see newspaper clipping included below).

This brief provides invaluable data and background information on the beginnings of kindergarten and early childhood programs and services starting in 1954, the year we immigrated to Calgary from Holland, in the Netherlands. The beginnings were in Edna Arbuthnott's basement in Windsor Park but soon moved into our house, a few blocks north, though Edna stayed on to teach at least until 1956. Happy Hours then began to move into St Philip and Riverview United Church, and Meadowlark Park Community Hall. Frances notes this brief had the impact hoped for.

### No Kindergarten Closings, Supervisor Tells Council 1961

The "rocking" kindergarten situation was somewhat steadied Wednesday in an address by Miss Janet Johnson to the Local Council of Women at City Hall.

"There have been no kindergartens closed as a result of the new administration," she stated. "And furthermore, I don't think any will be closed."

Kindergarten supervisor for the Calgary School Board, Miss Johnson was speaking on the recent shifting of kindergarten administration from the department of education to the department of welfare.

A proposal at the conclusion of her address came from Mrs. H. K. Roessingh, a non-council member who is manager of Happy Hours Kindergarten.

She felt kindergartens should be part of the school system such as they are in Holland, New Zealand and England.

"In this way, when children in kindergartens are more advanced they can move up to the primary grades," she explained.

A representative of a Calgary nursery school was also in attendance but expressed no views on the matter to the meeting. Nursery schools have also felt the effect of changed administration.

One of the major problems deals with the number of children per teacher. Under the school board, kindergartens operated on a 1 to 30 ratio.

#### 1 TO 15 RATIO

The new program calls for one teacher for every 15 children. Some of the community and home and school associations operating kindergartens feel this is a financial impossibility, says Miss Johnson.

At present HSA and the school board are working to clear this hurdle.

In outlining the history of kindergartens in Calgary, Miss Johnson noted in 1932, some 14 years after the first pre-school classes had been started, there were 23 half-day classes being conducted by 11 teachers. Enrolment was approximately 700, about half the number of children who would enter Grade I the following year.

This year by the end of February there were 2,483 children in kindergartens; 82 half-day classes, and 69 teachers.

Mrs. Joan Gorman, chairman of the laws committee, presented a report on the Provincial Council of Women meeting March 11 in Edmonton.

### Many Meetings Soon 1961

## Calgary Kindergartens Expect Record Season

Calgary's non-profit kindergartens, all 18 of them, are busily gearing for the fall season when a record enrollment is expected, according to the Community Kindergarten Group.

Parents who have children five years old on or before

Dec. 31 this year have been asked to attend the registration meetings which will be held by the community kindergarten shortly.

#### DATE, TIME, PLACE

The date, time and place of the various meetings are as follows: Altadore, June 5, 7:30 p.m., at Altadore Baptist Church, 16th St. and 42nd Ave. S.W.

Earl Grey, June 5, 11 a.m., at Earl Grey School.

Killarney, June 5, 8 p.m., at West Calgary United Church.

Victoria, June 6, 8 p.m., at the Victoria Community Hall.

St. Alban's, June 7, 8:15 p.m., in St. Alban's Hall.

South Calgary, June 11, 8 p.m., at South Calgary Community Club.

Hillhurst, June 12, 2:30 p.m., at the Hillhurst-Sunnyside Community Club.

Capitol Hill, June 14, 8:30 p.m., at the Lutheran Church Hall, 19th St. and 18th Ave. N.W.

'PHONE OTHERS

Other kindergartens in the city have either had their registration meetings or take registrations by telephone.

Those and the persons to contact are:

Briar Hill, Mrs. Donald Johnson, 832574; Crescent Heights, Mrs. D. H. Cooke, 72753; Elbow Park, Mrs. John S. Peach, 33515; Elbow, Mrs. D. M. Arbuthnott, 34133, or Mrs. H. K. Roessingh, 34929; King George, Mrs. Cliff Irwin, 76946.

Parkdale, Mrs. D. E. Duff, 87467; Richmond, Mrs. J. Romanchuk, 491255; Rosedale, Mrs. J. G. Walker, 71101, or Mrs. Alex. Gibson, 74495; Scarboro, Mrs. H. C. King, 443470, or Scarboro United Church, 441151.

#### PERHAPS ANOTHER

Should enough persons contact Mrs. John May at 54542 a kindergarten will be set up in the area of Col. Walker and Alexandra Schools.

Highland-North Balmoral kindergarten has been operating for the past two years, but the name of their present registrar is not known.

Any kindergartens organizing this fall on a non-profit basis who wish to obtain the services of the Community kindergarten group have been asked to contact Mrs. L. A. Storey at 445265.

## K I N D E R G A R T E N   B R I E F

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In connection with the proposed changes in the legislation covering the supervision of the teaching and training of children between the ages of four and six years in the Province of Alberta, the following Brief regarding the present status and the history of Kindergarten-teaching in Calgary and some smaller communities is respectfully submitted.

By most people and organizations concerned (such as School Boards, Community Associations and Home and School Associations), Kindergarten Training is and for many years has been considered an essential part of the education of a child. A natural consequence of this attitude was, that in the years after the Second World War, when the educational facilities in Alberta were greatly expanded and modernized, Kindergarten classes were included in the Public Schools in Calgary as they were in many private schools. When in June 1954 these classes in the Public Schools were officially discontinued, the given reason for this step was lack of space caused by the rapid increase in the population of Calgary, not a change in the opinion of the authorities, that the schools are the proper place for Kindergarten classes. The hope of all people concerned is, that at some future time Kindergarten classes will return where they belong, i.e. to the Public and Separate Schools.

The void left by the discontinuation of these school-Kindergarten classes was in subsequent years gradually filled by non-profit organizations sponsored by Home and School Associations, Community Associations and Churches. As a rule these classes were for half days and were accommodated in Community Halls, Churches and private homes. The accommodation had to comply with local zoning, building, fire and health regulations in order to obtain a licence.

The development of these classes in numbers was as follows:

year	number of teachers	number of classes	approximate number of children
1954	16	22	600
1955	19	26	700
1956	25	45	1200
1957	29	51	1500
1958	32	60	1800
1959	39	61	1800
1960	58	70	2100
1961	69	82	2400

These figures relate to the City of Calgary alone. Outside Calgary similar organizations have started to operate in the past few years in the following towns and centres:

- 1) Banff; 2) Bowness; 3) Cardston; 4) Exshaw; 5) Forest Lawn; 6) Grand Prairie;
- 7) Highwood; 8) Innisfail; 9) Lethbridge; 10) Medicine Hat; 11) Montgomery;
- 12) Nanton; 13) Olds; 14) Peace River; 15) Penhold; 16) Pincher Creek; 17) Ralston;
- 18) Raymond; 19) Red Deer.

In September 1956 the Calgary Kindergarten Teachers Association was formed. At the initial meeting Mr. R. Warren and Miss G. Johnstone of the Calgary School Board were present, indicating the approval and the moral support of this Board. Active support by the Calgary Public School Board came forward in April 1959

.../...

when Miss H. Clarke was appointed Assistant Primary Supervisor to Miss G. Johnstone, supervising eligible Kindergarten classes half days. Eligible are licenced, non-profit, non-denominational Kindergarten classes with qualified teachers.

The rates of the Calgary Kindergartens vary from \$ 6.- to \$ 10.- per month depending on whether rentals are paid for accommodation, the salaries paid to the teachers, extra charges for parties, milk and cookies, special staff for music instruction, etc. Transportation is never included in these charges.

It is generally felt that any increase in these rates would substantially decrease registration as even at the present rates Kindergarten classes in some of the poorer districts had to be discontinued through lack of sufficient registration. These rates can only be maintained with full classes of approximately 30 children.

As far as we know, the Calgary Kindergartens operate at present to the general satisfaction of all concerned. If there have been complaints that the welfare of the pupils is suffering in any of the classes, we have not been notified.

Letters and information received by some of our Kindergartens indicate that it is proposed to eliminate Sections 395 and 396 of the "School Act" and transfer control of the education of the children between the ages of four and six years from the Department of Education to the Department of Public Welfare. Apparently the Department of Public Welfare will have control and supervision over all phases of our Kindergarten, including accommodation, size of classes, curriculum, accounting, etc. The present curriculum as issued by the Calgary Public School Board could be changed by the Department of Public Welfare, jeopardizing the present effective continuity between Kindergarten and Elementary School education. It seems obvious that Kindergarten training is part of the education of our children and that all phases of education should be under the supervision of one and the same provincial Department. The Public School Boards are subject to the Department of Education. In Calgary this Board is taking an increasing and welcome interest in Kindergarten training, that should be encouraged by the Provincial Government rather than discouraged by transferring authority to a different department.

The Royal Commission on Education in Alberta in its 1959 report has the following comments on Kindergartens:

"While it is recognized that problems would be encountered in the introduction of the kindergarten throughout the Province, their absence is a serious omission of educational effort. The Commission recommends serious study to devise ways of incorporating kindergartens as an integral part of public schools" (Chapter 29, page 257).

This recommendation has been endorsed by the Alberta Federation of Home and School Associations. The proposed legislation will move the kindergartens away from the public schools by putting them under the control of a different department and is thus ignoring the recommendation of the Royal Commission and the endorsement of the voting public.

The Province of Alberta is represented on the Canadian Committee on Early Childhood by Miss Muriel Gentleman from Lethbridge, who studied kindergartens in five other Canadian Provinces and was the only Canadian representative at the 10th. Anniversary Congress of the International Organization for Early Childhood Education (Brussels, 1958), where 30 countries were represented by 300 delegates.

Miss Gentleman may obviously be considered an authority on the subject of kindergartens, but she has never been consulted about the advisability of the proposed change. The Department of Public Welfare has issued letters of instruction to kindergartens in Calgary over the signature of Miss J. Frances Ferguson, who also represented the Department at the 5th. Annual Kindergarten Teachers Convention at Calgary on February 10, 1961. Miss Ferguson is a nurse and was at the convention unable to answer questions from the teachers, creating a general uneasiness about her qualifications as a supervisor of kindergarten activities, curricula, etc.

The Department of Public Welfare is not equipped to handle the task of supervising educational institutions and obviously should never be considered for that task. There is no plausible reason why this task should not be handled by the local authority in charge of education: the School Board under the final supervision of the Provincial Department of Education.

As a first sample of its activities, the Department of Public Welfare has sent to various kindergartens "Minimum Standards required by Child Welfare Commission Governing Operation and Licensing of Institutions and Nurseries". All kindergarten supervisors and teachers consulted agreed that enforcement of these minimum standards would effectively kill all kindergartens. The staff requirements of these Standards alone would increase the fees for kindergartens by 30% to 50% and in nursery schools by 50% to 75% (Section II, F, 4 and 5); accommodation and equipment requirements would increase the fees by another 25% (Section II, A, 6, Section II, B, 6 and Section II, C, 4). When present kindergarten rates were discussed in this brief, it was pointed out that any increase in these fees would result in a reduction in registration; an increase of between 50% and 100% as resulting from the Minimum Standards would make continued operation impossible for all kindergartens catering to population groups below the upper-middle class.

The books and records of some of the larger kindergartens are now kept by qualified accountants. These kindergartens are understandably reluctant to have welfare workers examine and criticize these records (Section II, K, 4).

Anticipating the decision of the Legislature regarding the proposed changes, the Department of Education has already turned over supervision of kindergartens (to the Home Investigating Committee of the Department of Public Welfare). Miss J. Frances Ferguson, of that Investigation Committee, told the Kindergarten Teachers Convention that she had turned over the answers to her questionnaire, which she had already received, to the Department of Education for evaluation of the qualifications of the teachers and that these had been returned to her with the comment, that this was her affair and not that of the Department of Education. As a welfare worker is obviously not qualified to make this evaluation, the alternative is of course the local school board, which as we suggested before, should be in charge in the first place. The same applies to curricula.

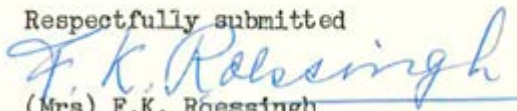
There are a number of kindergarten classes operated in Calgary and possibly elsewhere, with teachers without the qualifications required by the school-board, but with often a lengthy experience and highly successful. These teachers are admitted to membership of the Kindergarten Teachers Association but it is felt, that the provision of specialized kindergarten teachers training by the University of Alberta both in Edmonton and Calgary, preferably by the extension departments, would be a major contribution to better kindergarten teaching.

CONCLUSIONS AND RECOMMENDATIONS:

- 1) Private initiative in Calgary and approximately 20 other Alberta towns and communities has achieved a satisfactory standard of kindergarten training and nursery schools.
- 2) Increasing support of local school boards is effecting continuity between kindergarten and elementary school teaching.
- 3) Increasing the present monthly fees substantially would adversely affect registration.
- 4) Welfare workers are not qualified to supervise teaching and curricula and therefore should not be authorized to do so.
- 5) The Provincial Government is regulating kindergartens and nurseries without consulting recognized authorities on the subject.
- 6) The local school boards should be in charge of kindergarten teaching and curricula.
- 7) There is no necessity for the proposed changes in authority.
- 8) The Extension Departments of both branches of the University of Alberta should be encouraged to provide Kindergarten Teacher training.
- 9) All kindergartens, non-profit as well as private, should be supervised by the local school boards.
- 10) Ways and means should be considered to expand kindergartens to include children from low-income families. In this connection subsidies by the Department of Public Welfare should be considered.
- 11) A proper study of this matter with consultation of the pertinent organizations and authorities should be made before legislative action is taken.

This brief has been written after lengthy consultations with a great number of teachers and supervisors by the management of the "Happy Hours Kindergarten and Nursery School" at Calgary, with 10 qualified teachers and in excess of 300 pupils the largest kindergarten in Alberta.

Respectfully submitted

  
(Mrs) F.K. Roessingh  
540 - 49th. Ave. S.W.  
Calgary

We were so angry that just before the Legislature in Edmonton (8 weeks each year) they told us that the changes would be forthcoming, shifting the administration of kindergarten from the Department of Education to Department of Welfare. Hein spent a whole Sunday working on this 'brief' that luckily had prompt/immediate effect. They gave us everything when we so neatly explained how things should/must be.

## Appendix B—Autobiographical Information

The following excerpts are from Marjorie Norris, "Frances Roessingh." In *A Leaven of Ladies: A History of the Calgary Local Council of Women* (Detselig Enterprises Ltd, 1995), 241–243.

### *Frances Roessingh (Fennigje Kerkhoven)*

I was born in 1919 in Bandung on West Java, the main island of Indonesia. My parents ran a tea plantation which my grandfather had pioneered in 1873 on land granted to him as a 75-year lease. I was educated by a governess until Grade VII, when I went on to a Christian school in Bandung after passing my plus eleven exams. From there I attended lycée in Holland and finishing schools in Switzerland and England. My formal education culminated with a BA degree in geology at the University of Leyden, in Holland.

I met my future husband, Hank, during my first year. We university students lived in turbulent times then because World War II was imminent. When a group of Dutch students in Utrecht burned the university records in protest against Nazi policies, the Germans in reprisal picked up 5000 students across Holland. Hank was one of those marched off to be taken by train to a concentration camp elsewhere in Holland. We girls were locked in a room during their removal so that we could not see where they went. Later, a sympathetic railman who walked the railroad secretly passed their destination on to me. It was unsigned and written upon a piece of toilet paper. To our great relief the churches which were still powerful in Holland put pressure on the authorities and the students were freed. Hank was very lucky that the Germans never found out that he worked for the underground.

After Hank and I married in the December of 1943, living in Holland was still not safe for him, so he arranged to leave the country in February of 1944, when I was pregnant with our first child. His "flight" was to a Swiss concentration camp which was actually a work camp. He left there when Shell Lumina paid for his student fees at a polytechnical school in Zurich. When Paris was liberated in late August of 1944, the Dutch army in London called him up to finish his officer's training. Meanwhile I wrote him letters through the Red Cross and received a few. As a safety

subterfuge we corresponded as cousins (we were in fact distant cousins) instead of as husband and wife. I managed to "pass on" as gossip the news that we had a son.

Holland was liberated in April of 1945, and Hank came home in May to meet, as a stranger, our son who was now nearly a year old. After several different postings in the Dutch Cavalry, Hank left to finish his Master's degree. He was hired right away by Standard Oil. Following a brief orientation course in the United States, he went to Indonesia as a field geologist, and despite the waiting lists, I soon followed with our two children. We stayed four years. The company provided a school and hospital for its employees and their families.

After we returned home to Holland in 1952, we soon sensed that we needed to emigrate. Our first prospect was the United States, where we had a sponsor in California, but in August of 1954 we actually came to Calgary, where we had friends in the oil patch. We arrived with our five children.

The need to earn extra household money attracted me to my first job – a flyer-boy supervisor at \$30.00 per month – in 1955. My involvement with kindergarten started because our five-year-old daughter, who didn't speak English well, needed help with the language before entering grade one. What pre-schools there were at that time were private. They were few and far between and in no way able to meet the number of postwar babies. (One hundred children lived on our city block alone.) After a few months' wait, I registered her in a class conducted in a small basement room by a qualified kindergarten teacher. The next year, with me as manager, we moved the kindergarten into a larger, temporary facility in my home. In that first year, I remember, we had 46 children in the school, and the fees of \$7.00 per month included milk and cookies. In the second year, the classes were moved into a newly-built church, Saint Phillip's Anglican, then to Riverview United Church. Eventually, we were operating 22 classes with over 600 children. I remained as manager until the government introduced Early Childhood Services in 1973 and we turned over our whole system to the Calgary School Board in 1975 after operating for two years under ECS.

In those years, we made several attempts to persuade the Social Credit government to include kindergartens in the school system but without success. We were supported by the Calgary Kindergarten Teachers' Association, but the government had a "better" solution: they suggested that nurses and social workers from the Department of Social Services would take over the kindergartens and would evaluate the teachers' qualifications and the program. There was a virtual revolt by the teachers.

That is when I went to a meeting of the LCW to ask for help in our struggle. I became an individual member and later represented the Women's Liberal Club. Under the chairmanship of a very professional,

enlightened teacher, Jean Mekitiak, Local Council of Women renewed interest in education. Both the LCW and the Women's Liberal Club sent resolutions to the government regarding kindergarten education.

After the sudden death of Ethel M. Johnson in 1966, I was invited – delegated that is – by Mary Winspear to “temporarily” take over her leadership of the Alberta Provincial Council of Women. My term of office lasted until 1969. In 1967, we organized the 50-year women's franchise celebration with a luncheon in Red Deer, attended by 136 prominent women. Red Deer LCW was the host, but Laura McCullough and I looked after the preparations, including arranging a \$1000 grant from the government. Our National president, Mrs. H. Steen, was the main speaker. Mrs. S. Ruemper from Edmonton took over the Alberta presidency in 1969.

I served on various committees of the Calgary Local Council for ten years, from 1963 to 1973. One of these was the Natural Resources Committee, which was of particular interest to me because in 1960 my family had started a summer camp for children. This, in time, developed into Silver Creek Ranch, Water Valley, an outdoor education centre operating year round, mainly for grade six students, but also widely used for workshops and retreats. It had a capacity of over 100 guests, a large theatre, log cabins in remote areas, and many miles of riding and ski trails. The buildings were all of our own design, intended to fit in the natural environment of the Ranch. When the year-round work got too heavy for us, we sold the Ranch in 1985, but it is still operating around the year, making its contribution to education in and about the out-of-doors.

We were active members of the Alberta Camping Association, of which I was president in 1966. Both my husband and I served on several provincial and national committees, participating in federal student exchange programs, which resulted in many years of bilingual music camps. In 1985 we were awarded Honorary Life Memberships of the Alberta Camping Association.

In 1982 I received an honorary National Council of Women life membership from five LCW members as a token of friendship and support, which was very much appreciated.

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# Exploring the Untapped Potential of Loose Parts Learning: An Interview with Carla Gull

Anita Sterne

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Carla Gull, PhD, has over 20 years of experience in education at the preschool, elementary and postsecondary levels. Gull enjoys helping educators incorporate nature in the everyday early childhood setting and in nature preschools. She hosts a podcast, *Loose Parts Nature Play*; facilitates an international group, *Loose Parts Play*; and presents workshops, keynotes and academic research around loose parts, tree climbing, STEM, outdoor classrooms and nature education. She is a coauthor of the books *Loose Parts Learning in K–3 Classrooms* (2021, Gryphon House Inc) and *Loose Parts Alive: Inspiring Child-Led Nature Explorations* (2024, Gryphon House Inc).

Anita Sterne is passionate about using the power of play to celebrate child-led learning and strengthen communities. She is a kindergarten and early learning consultant with a large urban school division and the provincial professional development chair for the Early Childhood Education Council (ECEC), a specialist council of the Alberta Teachers' Association (ATA). With over 20 years of experience and having taught in both Canada and New Zealand, she brings a joyful spark to life and education. Sterne holds a bachelor's degree from the Concordia University of Edmonton and a master's in education from the University of Alberta.

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*Loose parts play* is often a key component in early childhood education, as its rich potential and open-endedness can be used as a means to enrich learning. In an effort to dive deeper into the untapped aspects of loose parts play, Anita Sterne interviewed Carla Gull, coauthor of *Loose Parts Learning in K–3 Classrooms* (2021) and *Loose Parts Alive: Inspiring Child-Led Nature Explorations* (2024). This interview, edited for clarity and length, is based on their casual dialogue.

**Anita Sterne:** The concept of loose parts is more complex than I think many people realize. Can you share a working definition of loose parts?

**Carla Gull:** Yes! You mention complexity, but within that complexity, it's also squishy. When we started doing our first academic research article on loose parts, my research colleagues and I wanted to know how to explain it to someone else, so we did a research project on definitions of loose parts. To offer a simple explanation, I would call it exploration and experimentation. Within that, it can be what we're exploring and experimenting with, such as words, ideas, sticks or big pieces of fabric—the *stuff*, but it can be nontangible as well. In our research, we came up with our own definition:

Loose parts are open-ended, interactive, natural and manufactured materials that can be manipulated with limitless possibilities. Interaction with loose parts includes experimentation, exploration, and playful interactions with variables through creativity and imagination. Participants have the freedom to explore variables, combine materials, and react to complex themes and ideas that emerge. Facilitators encourage participants, make loose parts available, stimulate discovery, provide opportunities, allow for open-ended play and prompt meaningful connections and experiences. Through loose parts exploration, participants develop imagination, creativity and collaborative skills. Process is more important than the end product, fostering overall growth and development. (Gull et al 2019, 51)

For me, it boils down to exploration and having freedom to move these concepts and ideas around. I also

really love this quote from landscape architect Simon Nicholson (1971), who wrote a popular article titled “How NOT to Cheat Children: The Theory of Loose Parts”:

[...] All children love to interact with variables, such as materials and shapes; smells and other physical phenomena, such as electricity, magnetism and gravity; media such as gases and fluids; sounds, music, and motion; chemical interactions, cooking and fire; and other people, and animals, plants, words, concepts and ideas. With all these things all children love to play, experiment, discover and invent and have fun. All these things have one thing in common, which is variables or ‘loose parts.’ (p 30)

While I would say that it’s an incomplete theory on its own, we can use it in combination with other sound educational practices to expand what *loose parts* can be. I like that he calls them variables instead of just loose parts, because that allows for a greater application. When I read this quote during professional development sessions, many gasp at fire and chemical interactions. Although safety parameters are important, when we let go of a structured approach to using materials, there is immense learning that can happen when we are curious through experimentation and exploration.

**Anita Sterne:** I love the concept of *variables* because I think that’s the term that allows others to see the breadth and the expanse that loose parts offer, beyond tangible items. Variables include the elements of wind or air, fire and water, which may be aspects that you are not necessarily manipulating but playing with. A good example is children playing with fabric or ribbons that are blowing in the wind, or even chasing bubbles, where the natural environment is providing the moving air. I think there are benefits that come out of taking a wider view of loose parts, rather than considering them only as items for small world play or bigger outdoor loose parts, which are two areas I see as being popular. Given the complexity of this concept, what are some of the common myths about loose parts?



**Carla Gull:** We have an article about this, some information in our book, and there is also a podcast episode about this topic on my website, Building Creativity One Leaf and Bolt at a Time: Loose Parts Nature Play (<https://loosepartsnatureplay.org/>). There are many myths that I see around loose parts. First, many think they are only for children. My mother, who is in her 70s, manipulates fabric as loose parts and puts them together in different ways for sewing projects. For her birthday, she asked for a soldering iron so she could burn her fabric, as she wants to experiment and play around with the different variables that are within the textile arts world. Interestingly, Nicole Root does some work with the older adult population. She brings play trays with loose parts into adult living homes and has these available for them to move around and manipulate. The stories that come out of the experience are just phenomenal. So, it’s not just something for children, it can be for all ages.

**Anita Sterne:** So they aren't just for children, they are also for adults. What's another myth?

**Carla Gull:** Earlier, you referred to loose parts as small tabletop items put out in trays, yet it's a much more expansive mindset. Often, we see trays that are organized with the materials neatly lined up as an invitation to learn. This is one approach to loose parts that I have used many times; however, I also have big bins of materials jumbled together. There's play value in both of these approaches. I find that children enjoy going on a hunt to find the perfect material for their project, as there is tactile power in being able to sift through things, like a button collection. There are many different approaches, and it's okay to explore other possibilities.

Along this line, oftentimes I hear that loose parts are messy. I once set up a light learning lab in a Grade 2 classroom, and one of the teachers came in, felt it was too chaotic for her, and just turned around and walked right back out. I like to reframe *mess* and call it *evidence*, *trace* or *residue* of play—it's where we see the learning that has happened. While it may look like a mess according to some, I see a lot of beauty in it, and it shows me that the children have been engaged and interested in the topic enough to experiment with the materials.

Another myth is their origin and what can and can't be done with loose part materials. For instance, I've had people say that you can't paint them or they are only natural items. But there are so many loose parts that are manufactured, and we don't have to restrict ourselves. One way of envisioning what loose parts are is in how we use them.

**Anita Sterne:** Can you share a little of the history of loose parts?

**Carla Gull:** Loose parts has become a popular movement, especially in early childhood, in the last 10 years or so. However, for many adults, it was simply a part of their childhood. We were sent outside to play and used whatever we found around us to play with, so it's really an age-old concept. The first time anyone picked up a stick or a rock and used it in a different way was the beginning of loose parts.

**Anita Sterne:** What are the benefits of loose parts?

**Carla Gull:** There are basic ones that I like to focus on depending on the age and developmental stage of the child or the adult. Infants may just explore textures and sensory inputs, as they're learning to understand the materials around them. Older users attend to the 21st century skills related to the four C's—creativity, collaboration, communication and critical thinking—as the benefits of using loose parts. When they have freedom to explore, I find that children learn more when they have ownership in what they're doing. Let me give you an example of an experience I had with electricity as a loose part. Instead of having a direct lesson plan for parallel circuits, I left it a little bit more open. I still addressed all the main curricular concepts related to electricity, but the students learned many other things beyond what I would have thought to even ask about. They were able to take their own questions and implement a plan to figure things out with a loose parts mindset. The deeper they engaged with the materials, the more questions they asked, which encouraged them to want to learn even more. They had a place to record some of their observations, but this type of learning goes beyond what a traditional worksheet can offer.

Additionally, they were able to share what they learned with others, so being able to play around with the concepts is important. Earlier, I mentioned a light lab where a teacher walked out, yet the superintendent walked in when the children were having free exploration time, and he could see the children being scientists. The students were invited to learn as much about light as they could during this interactive time and then did some journaling afterward. The superintendent mentioned how every child was engaged and successful in a very diverse classroom, with a wide range of ability levels. It was developmentally appropriate for each student, and each of them benefited from the approach. The English language learners were just as successful as the other children as language wasn't a barrier, and they were able to develop their vocabulary through an authentic experience. So, there are many benefits to using loose parts.

**Anita Sterne:** What are your favourite loose parts, and why?

**Carla Gull:** Some of my favourite loose parts are simple things like sticks, scarves, rocks and cardboard boxes. Sturdy milk crates, mud and the little lids from applesauce pouches are also fun to use.

Sometimes I even have participants take a piece of paper and experiment and explore it, as it is something that's very accessible. I really look for things that are versatile and can be used in many engaging ways that will appeal to the children, based on what they are doing. I have helped develop loose parts STEM kits to support an

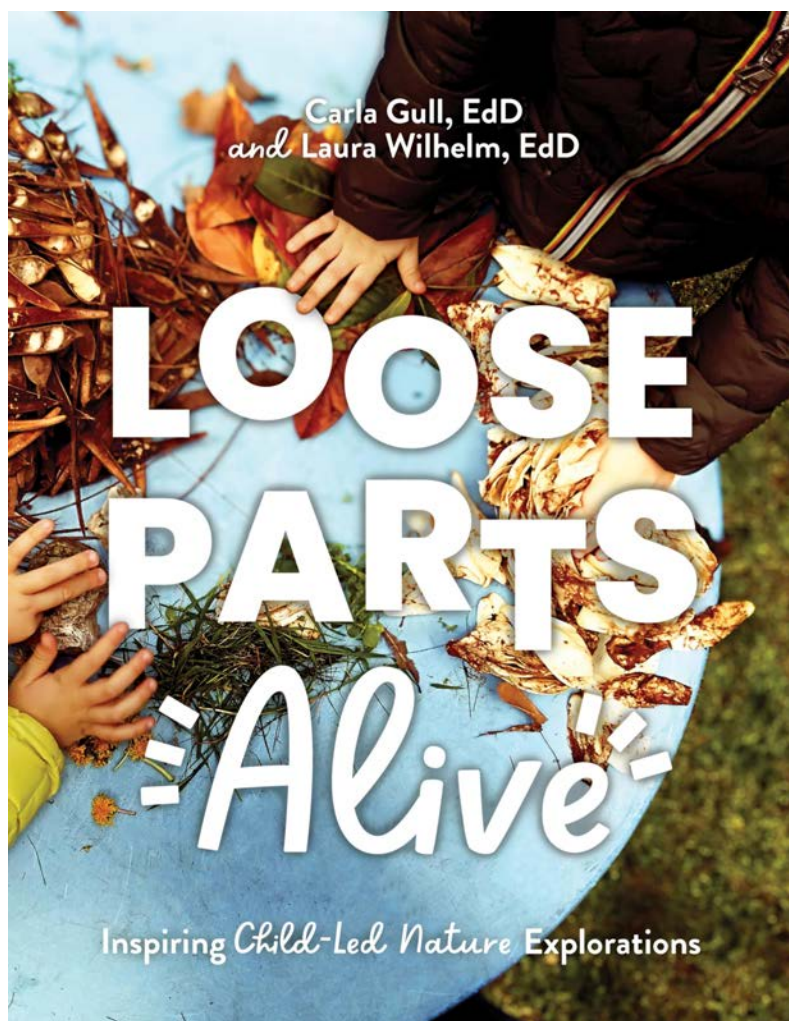
engaging loose parts approach, but I also just love the basic things found around us all the time.

**Anita Sterne:** Paper really is an adaptable loose part! In the past, I've enjoyed making little origami boxes out of sheets of paper. You can create things to put in the box and use it to strengthen relationships by gifting it to someone in your community. Exploring light is also fun, especially when chasing light moving from a flashlight or engaging in shadow play. Spring and the fall are particularly wonderful times for light play, as your shadow is longer.

For educators who are interested in using loose parts, how can they get started, and what tips can you offer them?

**Carla Gull:** I have done a podcast episode about this if people want more in-depth details, but one of the first things I should mention is to recognize that it's probably already happening. Even if you view yourself as a more traditional educator, loose parts play is occurring in your space if children have access to things they can move around and manipulate. For example, if you have a block centre and students are combining blocks with fabric or little things, they are engaged in loose parts play. So, simply recognizing that it's already there can be an initial step.

I suggest educators collect materials and then spend some time playing. We need to get used to the materials and explore some of the possibilities they offer. I've worked with so many children around the concept of loose parts that I'm able to predict some of the things they're going to do with certain materials, but never all of them. By playing around with loose parts, it gives us an opportunity to experience why the materials may be engaging for our participants. You don't have to go out and buy specialty things. I mentioned some of the low-cost loose parts I like, but even math manipulatives or game pieces can be used in other ways. Just be open to how the materials could be used.



There is also another approach: the *beautiful stuff project*. This is based on the book *Beautiful Stuff! Learning with Found Materials*, by Cathy Weisman Topal and Lella Gandini (1999). Each child is sent home with a bag to gather some items from their home. They bring it back as a way of developing a rich collection of loose parts that the children cocreate. To support family engagement, I've done this with natural treasures in autumn, where the children are invited to go out on family nature walks and then bring their collection of materials in to share with the class. We then have a rich resource of natural loose parts for the season that we can use as a springboard for so many interactions.

If people are looking for a bit of inspiration, another way is to begin with literature. I love children's books, and on my website, I have a list of children's books that are connected to loose parts. Sometimes I will start the activity with a book prompt. There are so many great books, and it doesn't even have to be one that's related to loose parts, as I'll just use it to engage their imaginations.



For example, I'll read *Not a Box* (2006) or *Not a Stick* (2007) by Antoinette Portis and invite children to wonder what they could do with a box or stick. It sparks ideas and gives them permission to start exploring. At one point, I had a Grade 2 student who I offered a sock to, and his reaction was, "What? You want me to play with a sock?" I simply asked him, "What could your sock do? What could it be?" and by the end of that one-and-a-half-hour session, he asked if he could take the sock home. It was like it had become his best friend, all because he was given permission to experiment and explore with it.

**Anita Sterne:** Do you have any suggestions for offering loose parts to older learners in Grades 2 and 3?

**Carla Gull:** We share many examples in our book *Loose Parts Learning in K-3 Classrooms* (2021). Older learners are able to get into more content, attending to specific curricular concepts and skills. We have written an article with the National Science Teachers Association (NSTA) regarding *learning labs*.

Learning labs allow for exploration of concepts, like light, electricity or simple machines. Instead of having everyone watch a video about simple machines, read some books about it or fill out worksheets, we have an experience where we set up a lab and then allow children to interact with as many different applications, like simple machines, as we can gather in that space in an open-ended way. It is a tangible way to have a shared experience to explore the concept concretely. Through these open-ended labs you can support vocabulary development when learners are directly engaged in a concept, for example, when screwing on a jar lid it can be identified as an inclined plane. Other examples of experiences I've offered include playdough, ramps and many different things around pulley systems.

Another thing I love to do is take lessons outdoors and invite students to find natural loose parts, which are then used for mathematical problem-solving challenges or storytelling and writing. If children have a chance to create something and then write about it, much more profound writing can come from the experience.

**Anita Sterne:** We know that having support is essential in starting something new or delving deeper into a pedagogical practice. Are there ways for educators to connect with one another as they engage in using loose parts for learning?

**Carla Gull:** Yes, there are several ways! I moderate two large groups on Facebook: Loose Parts Nature Play and Loose Parts Learning in K–3 Classrooms. These online spaces can be great places to connect, especially if you're interested in responding to posts. I encourage taking a buddy along with you on your loose parts journey, whether it's a friend in another school or someone down the hall. It's great to share resources, and I've participated in some groups that have even done loose parts swaps.

Book clubs are also an option, as there are so many great books about loose parts. Having a book club and a professional learning community can be a great way to unpack the ideas and interact with them. There are also online courses for those interested in longer-term professional development, where instead of having a *one and done* session, topics are explored monthly and in different ways. I know I've worked with a few schools where I would go once a month and do a session with the children and the adults, so we could see how loose parts were being implemented in different ways to keep expanding our understanding. It was great to see the insight that the educators had, as they felt like they had permission to step outside of the lines a little bit.

**Anita Sterne:** We seem to be hearing a lot about correlations between excessive screen time and mental health challenges, particularly anxiety and loneliness. Do you think loose parts could be used to help prevent loneliness and strengthen relationships within communities?

**Carla Gull:** Loose parts offer an opportunity to talk about things, collaborate and problem solve, making them particularly great for community events. Through grants, I've had the opportunity to bring scrap boxes to public spaces and have them available for the community to interact with them. Often, children come up first, but then adults are drawn in, and they end up interacting and playing together. The area becomes a fun place to gather,

as they are inventing, creating and working together in groups. When everyone is playing around with stuff, it gives them an opportunity to focus on a common task, so it helps to break the ice, and they become more willing to talk to each other.

**Anita Sterne:** Do you think loose parts can be used to help celebrate culture?

**Carla Gull:** When children bring in loose parts from home, they are sharing their culture with us. Loose parts can also be used when celebrating different holidays, and we can choose loose parts with the children to reflect the values of their home and community cultures. Loose parts are a great way for the children to see themselves represented in our schools.

I think we also need to be aware of local Indigenous perspectives. For example, in Hawaii, taking rocks from a sacred space or the beach would not be appropriate. I love rocks, but that doesn't mean we can always take them from the land. Likewise, we also need to be careful about picking plants, as the plant may die or be harmed, so we need to teach children when it is okay to harvest items from the land. For items that can be harvested, offering a mortar and pestle in an outdoor kitchen or dramatic play area can be a lot of fun for recognizing cultural smells. I don't want us to think of loose parts as being consumptive, as reciprocity is important.

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## *Editorial Review Committee*

The following reviewers offered constructive feedback to the authors of the articles in this issue. I thank them for their contributions to *Early Childhood Education*.

Deb Bailey, Calgary Board of Education (retired)

Natasha Bobyak, École Bellevue School, Black Gold SD

Kim Boswell, Rocky View SD

Gail Danysk, Calgary Board of Education (retired) and  
University of Calgary

Elan La Montagne, Calgary Board of Education

Lee Makovichuk, MacEwan University

Ronna Mosher, University of Calgary

Larry Prochner, University of Alberta

Simone Shirvell, Edmonton Public School Board (retired)

Catherine Smey Carston, Mount Royal University

Sherry Woitte, University of Alberta

# The Early Childhood Education Council of the Alberta Teachers' Association

## *A specialist council for ECS and Grades 1, 2 and 3 teachers*

The objective of the Early Childhood Education Council of the Alberta Teachers' Association is to improve practice in early childhood education by increasing members' knowledge and understanding of this specialty.

Joining the Early Childhood Education Council will permit you to

- belong to a professional organization that is interested in your work and area of specialization;
- participate in a provincial ATA organization concerned with educational issues relating to teachers of young children;
- contribute your opinion on matters concerning early childhood education;
- meet other professionals interested in and involved with early childhood education;
- participate in activities sponsored by the ECEC regional for your area;
- attend the annual Early Childhood Education Council conference to glean new and exciting ideas and to share your concerns with colleagues;
- receive *Issues, Events and Ideas*, a newsletter published several times a year, featuring council news and ideas for classroom use; and
- read *Early Childhood Education*, a journal published once a year, to keep informed of current early childhood research and writings.

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## Early Childhood Education Council, ATA Membership (ECS–3) Application Form

A. Name \_\_\_\_\_

Address \_\_\_\_\_ Postal Code \_\_\_\_\_

Alberta Teacher Certificate No \_\_\_\_\_

Local Name and Number \_\_\_\_\_

B. Category of membership in the Alberta Teachers' Association (check one)

Active       Associate       Student       Life       Honorary

I am not presently a member of the Alberta Teachers' Association

C. Membership fee enclosed (check one)

Regular \$25 (1 yr)       Student \$0       Life \$25 (1 yr)       Subscription \$30 (1 yr)

Please enclose cheque or money order payable to the **Alberta Teachers' Association** and mail to

The Alberta Teachers' Association, Barnett House  
11010 142 Street NW, Edmonton, AB T5N 2R1

# Publishing Under the **Personal Information Protection Act**

Under the *Personal Information Protection Act (PIPA)* of Alberta, the Alberta Teachers' Association (ATA) requires consent to publish personal information about an individual. Personal information is defined as anything that identifies an individual in the context of the collection: for example, a photograph and/or captions, an audio or video file, and artwork.

School boards sometimes obtain blanket consent to publish students' and/or teachers' personal information under two new acts brought into force on June 13, 2025: the *Access to Information Act (ATIA)* and the *Protection of Privacy Act (POPA)*. However *PIPA*, *ATIA* and *POPA* are not interchangeable. They fulfill different legislative goals. *PIPA* is the private sector act that governs the Association's collection, use and disclosure of personal information.

If you can use the image or information to identify a person in context (for example, a specific school or a specific event), then it is personal information and you need consent to collect, use or disclose (publish) it.

Minors cannot provide consent and must have a parent or guardian sign a consent form. Consent forms must be provided to the Creative and Publishing Services editorial staff at Barnett House together with the personal information to be published.

Refer all questions regarding the ATA's collection, use and disclosure of personal information to the ATA privacy officer.

Notify the ATA privacy officer immediately of any incident that involves the loss of or unauthorized use or disclosure of personal information, by calling Barnett House at 780-447-9400 or 1-800-232-7208.

**Maggie Shane**, the ATA's privacy officer, is your resource for privacy compliance support:

780-447-9429 (direct)

780-699-9311 (cell, available any time)

## Consent for Collection, Use and Disclosure of Personal Information

Name (Please print): \_\_\_\_\_

I am giving consent for myself.

I am giving consent for my child/children or ward(s), identified below:

Name: \_\_\_\_\_

By signing below, I am consenting to The Alberta Teachers' Association collecting, using and disclosing personal information identifying me or my child/children or ward(s) in print and/or online publications and on websites available to the public, including social media. By way of example, personal information may include, but is not limited to, name, photographs, audio/video recordings, artwork, writings or quotations.

I understand that copies of digital publications may come to be housed on servers outside Canada.

I understand that I may vary or withdraw this consent at any time. I understand that the Association's privacy officer is available to answer any questions I may have regarding the collection, use and disclosure of these records. The privacy officer can be reached at 780-447-9429 or 1-800-232-7208.

Signed: \_\_\_\_\_

Name (Please print): \_\_\_\_\_ Today's Date: \_\_\_\_\_



## Council Notes

### Membership

Total membership of the council is currently 2,414.

### Conference and Other Programs

The Early Childhood Education Council organizes an annual conference for its members.

The next conference will be held in Kananaskis on April 23–25, 2026. Please check the ECEC website ([www.ecec-ata.com](http://www.ecec-ata.com)) for registration updates.

Members at large from all regions of the province who are on the executive council organize professional development (PD) event for all members across the province. We aim to provide services to members to enhance practice in the field of early childhood education. Suggestions for PD events can be directed to the ECEC email at [ececata@gmail.com](mailto:ececata@gmail.com).

### Publications

The Early Childhood Education Council publishes a newsletter (*Issues, Events and Ideas*) and a journal (*Early Childhood Education*). Members of the council receive these publications as part of their membership. Nonmembers wishing to receive copies of these publications may obtain them by paying the subscription rate of \$30 (Canadian funds) annually and writing to the Early Childhood Education Council, ATA, Barnett House, 11010 142 Street NW, Edmonton, AB T5N 2R1.

### Website

The council maintains an Internet site at [www.ecec-ata.com](http://www.ecec-ata.com).

Personal information regarding any person named in this document is for the sole purpose of professional consultation between members of the Alberta Teachers' Association.

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Contact information for the complete ECEC executive is available at [www.ecec-ata.com](http://www.ecec-ata.com).





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