

The Arts, Loose Parts and Conversations

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Abstract:

Educators today are being asked to design curricula whereby learners' abilities to analyze, question, problem-solve, evaluate and reflect are being provoked. The quest lies in uncovering suitable teaching approaches that will allow critical thinking skills to emerge organically and meaningfully. I argue that an integration of *loose parts* can offer a methodology and a provocation that makes way for open-ended, divergent and creative thinking skills to be activated. "Loose parts" can be open-ended materials that are manipulated, designed, dismantled and reconstructed in multiple ways. I also see "loose parts" as a mindset, a processoriented approach whereby meaningful conversations emerge unexpectedly and add significantly to learning. This article presents two stories to show how arts-based approaches and mindfulness to loose parts can unearth thought-filled and caring conversations. The discussion is inspired and written via a reflective lens of personal encounters, first, in a longitudinal research project with young children in an Indigenous First Nations Community, and, second, with preservice teachers in a university class. It is within these periods that students, teachers and families were impacted by loose parts whereby materials and conversations made way for new perspectives in understanding the world.

Keywords: *loose parts*; *loose-part mindset*; open-ended curriculum; arts-based education; early childhood education; preservice teacher education

Loose Parts: Development of a Mindset

n 1971, British architect, Simon Nicholson coined the term loose parts when observing how children's play with open-ended materials impacts creativity and awakens conversations. It is indeed interesting to question why an architect became so focused on children's play with loose parts. Nicholson's diverse educational background in sculpture, archaeology and anthropology, together with his focused work in the field of art and design, surprisingly led him to closely regard children's play in interactive environments. When working at the University of California in 1966, Nicholson created a course entitled "Design 12". This course aimed at understanding how play, in collaborative settings, gives rise to invention, construction and creativity. Some of the projects his students led were tested by children in various environments such as parks, hospitals, schools and playgrounds (Stott, 2017). The most successful projects proved to be those when self-guided play consisted of manipulating "loose parts": resources of open-ended and often natural materials (Stott, 2017). In "How Not to Cheat Children: The Theory of Loose Parts", Nicholson (1971) promoted inventiveness and creativity in appropriate settings so that children could have spaces to discover and cooperate with each other using open-ended materials. Nicholson (1971) noted how children "love to interact with variables such as materials and shapes; smells and gravity; medias such as gases and fluids [and so on]" (p. 30). He recognized how the environment, when complete with wellselected materials, afforded occasions for children to experiment and to formulate original ideas. These materials, as suggested by Nicholson, can be anything that stimulates curiosity, discovery and invention.

Accordingly, loose parts of tangible materials can provide multiple opportunities for learners to engage their senses and, in the process, encourage conversations; thus "loose parts" becomes a mindset that can expand thinking through social engagement and personal embodiment. Moreover, a loose-parts mindset readily finds its place as a construct in arts-based experiences, allowing those involved to become closer to the creative sources of their learning.

In 21st century education, loose parts have once again risen as a topic of discussion in early childhood. Most recently, loose parts have become the focus of Daly and Beloglovsky's (2015) keen observation of children at play. These educators envision early childhood environments whereby loose parts are offered as resources to enhance children's abilities to think, create, discuss and have adventures. Daly and Beloglovsky (2015) have grounded their theories in how loose parts add to children's developmental domains (i.e. physical, social-emotional, language, aesthetic and cognitive abilities) while recognizing the benefits loose parts offer to diverse populations: "loose parts are so open-ended, they can support play for children of every cultural background, class ability, and gender" (Daly & Beloglovsky, 2015, p.13). Loose parts can be attractive, beautiful items and materials that young learners can manipulate, control, construct and transform (Oxfordshire Play Association, 2014, as cited in Daly & Beloglovsky, 2015). Importantly, a loose-parts mindset involves no specific set of guidelines. The objective, as Nicholson once suggested in his theory of loose parts, is for children to "carry, combine, redesign, line up, take apart and put 'loose parts' back together in almost endless ways" (Daly & Beloglovsky, 2015, p. 3). Children have opportunities to create their

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own stories, ponder, and use open-ended materials to transform them into imaginative constructions or tales. The materials and the creations invite conversations and social interactions whereby relationships and cooperative work are stimulated (Daly & Beloglovsky, 2015).

The merits of loose parts in early education have been well established and documented (Froebel, 1897; Gandini, 1999; Montessori, 1946; Piaget, 1970; Singer et al., 2006). Research repeatedly suggests that children learn best through meaningful engagement and exploration found in play that supports the use of open-ended and well-selected materials (Gandini, 2004; Hirsch-Pasek & Golinkoff, 2011; Montessori, 1946). For example, Montessori (1946) repeatedly emphasized that through a prepared environment of well-selected resources, children have the freedom to explore without adult intervention. As an illustration, Montessori's simple set of ramps with balls offers the child opportunities to discover physics through his/her own experimentation. Thus, the child discovers sensorially and intellectually.

Similarly, Froebel encouraged provision for children's natural curiosity and exploration; this was considered novel and daring pedagogy for turn-of-the-century Europe when small children were educated by means of recitation and lecture (Provenzo, 2009). According to Froebel (1897), "play is the highest expression of human development in childhood, for it alone is the free expression of a child's soul" (p. 17). His endorsement of children's active engagement in play led to his contribution of crafting open-ended materials, clever inventions appropriate to the physical and cognitive development of the young child. For example, Froebel prepared a collection of six woolen soft balls, each one having a string attached. Three of the balls were primary colours, red, blue and yellow and the other three balls were secondary colours, purple, orange and green (Provenzo, 2009). Besides introducing children to the basic concepts of colour, Froebel encouraged children to explore on their own by "grasping, swinging, rolling, dropping, hiding the ball, and so on so that children would learn independently about concepts such as *here, there, over, right, left, larger and smaller*" (Provenzo, 2009, p. 5).

The world-wide attention to the Reggio Emilia approach further acknowledges how young children's potential to construct their own identity and form hypotheses can be motivated by play using loose parts as provocation. In Reggio-inspired environments, attention to loose-parts materials rests in the watchful hands of the educators who prepare the resources and who listen well via their careful documentation of children's conversations and experiences. Such a flexible approach gives way for learning to be unleashed from compartmentalization, and subsequently, learning becomes intricately intertwined with the freedom to explore and generate new ideas and perspectives. Gandini (1999) notes that children develop power when they build individual relationships with materials. Children become designers, artists and engineers when they have the opportunity to observe, collect and manipulate materials. Reggio Emilia pedagogues demonstrate thoughtful and respectful approaches to children. Vecchi (2010) explains,

The day-to-day work of observation and documentation of the children's learning process has been the instrument of interweaving between pedagogy and the thinking of the arts, modifying each other reciprocally. Teachers' observation and documentation show how

children seek beauty through many languages that are empathetic with each other, not separate and sequential; how they seek the aesthetics of expression of their ideas and thoughts. (p. 57)

Educators in Reggio Emilia environments unlock arts-filled opportunities for their young learners in order for them to discover and explore on their own, using loose-parts materials and a loose-parts mindset of a progression of learning.

My background as an early childhood educator has been grounded in Reggio Emilia thinking. I had always considered teaching approaches whereby students would be offered opportunities to creatively construct and demonstrate their understandings through various conduits. Alongside my young students, and over the years, I witnessed how the arts provided occasions for young children to develop their imagination, moments of pleasure, aesthetic mindfulness and joyful curiosity. Moreover, arts-based experiences were active processes filled with delight, open-ended progressions over time that stimulated creativity, emotional development, problem solving skills and pride in every learner (Eisner, 2001; Gardner, 1991; Wright, 2001). From my early years as a kindergarten teacher, I acquired an appreciation for how the implementation of open-ended materials and arts-based approaches could extend a learning space to make the ordinary extraordinary and to enrich the quality of children's learning.

After 30 years, I left teaching in elementary schools and moved into my doctoral studies in early childhood research and began teaching preservice teachers in higher education. My newfound involvements allowed me to bring forward my inspirations from the past and to further consider how learning through the arts might contribute to my classes in higher education. Cycling back, and now forward, I have broached the challenge of integrating the arts into my university classrooms of preservice teachers. I have worked hard at moving away from lecture-like discourses of question and answer periods. I have investigated approaches that have elicited deep conversations, and meaning-making has risen genuinely. What has grown out of my ongoing inquiries is renewed attention to the materials presented to students. Loose parts not only have become a tangible resource, but also a mindset for welcoming the unexpected conversations that invariably emerge. It is my intention to illustrate such profound experiences in this article.

First Offering of Loose Parts: Early Childhood

My doctoral research for three and a half years (2010-2014) granted me the privilege of supporting a culturally relevant early childhood program via arts-based approaches. I worked in partnership with the Mohawk community at Step by Step Child and Family Center (SBS) in Kahnawake, Quebec, studying and helping develop different ways of thinking about culture and learning in early childhood education. SBS had been actively searching for creative ways to sustain their Mohawk culture by changing their approach to their curriculum and were attracted to the early childhood Reggio Emilia approach, as it seemed to suit Mohawk culture. This attraction was ignited by their common belief that the act of looking deeply and perceiving things through the lens of the child has the potential to restructure, transform and develop teaching and learning experiences.

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Importantly, the Mohawk community in Kahnawake was striving to reawaken and maintain "continuity with Indigenous values and beliefs that are part of a community's identity" (Clavir, 2002, p. 74). However, little was understood about how to resourcefully integrate culture into daily curriculum.

I was first invited into the community as a consultant based on my expertise in the Reggio Emilia approach, and not long after, this charge became my doctoral research. During my time at SBS, I worked with educators to move away from structured teacher-directed activities and lean toward experiences whereby the teacher would follow the child and uncover what was meaningful. While culture remained the focus of the research, it was the offering of open-ended materials and arts-based experiences that deepened conversations and cultural learning for children and educators alike.

In a class of four-and-five-year-old children, for example, we carried out an investigation centered on young students acquiring the language of art. After careful observation of the children at play, we looked at supporting them in their learning about the concept of a line using open-ended materials. This objective emanated from teachers' annotated documentation when children, during play, often used construction materials to create lines of blocks, lines of cars, and Lego lines. For over a month, children explored line using paper, streamers, fabric, drawings, painting, plasticine and pipe cleaners. They developed line vocabulary in English (and Mohawk) such as *straight*, *crooked*, *bumpy*, *thin* and *thick*. They danced with line ribbons during a music class and painted different lines by experimenting with a variety of shapes and sizes of paint brushes. *What line could a flat brush make? What kind of line can I make with a round brush?* One child recognized that the letters of his name were made up of lines! Figures 1-4¹ demonstrate the children's engagement with loose parts to explore the concept of "line".



Figure 1.

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¹ All photos in this article have been provided by the author and are used with permission of all involved.



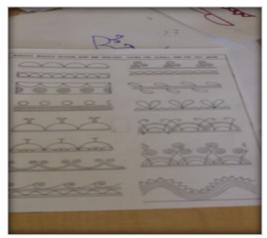


Figure 2. Figure 3.



Figure 4.

Importantly and intentionally, allowing these young learners to get to know the materials and resources before applying their skills to representations reflected Mohawk ways of learning and emphasized the kinesthetic process as significant to gaining understanding. Experiential learning is "the first principle of Aboriginal learning" (Battiste, 2002, p. 5); in this study, children learned by "observing, listening and participating with a minimum of intervention or instruction" (Battiste, p. 15). The investigations with loose parts, along with the educators' careful documentation of the experiences and spontaneous conversations, later led to teachers' gentle guidance in creating cultural representations where "line" was involved. This arts methodology provided suitable entry points for children to deepen their cultural understandings. Figures 5-6 demonstrate one child's practice with the lines in Iroquois patterns. In Figure 7, a child dresses a stuffed bear in her finished shawl, made up of lines.



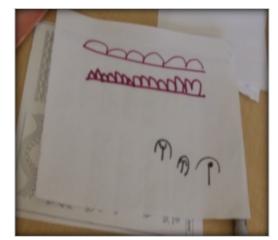


Figure 5.

Figure 6.



Figure 7.

Educators soon began to appreciate that loose-parts materials supported children's explorations, offered them a sense of belonging and encouraged their own willingness to take risks. Activities and resources were diverse, flexible and unstructured. Children had the opportunity to make choices and to decide how to use the open-ended materials. The process of learning, key to cognitive development, was well represented in loose-parts play. Children used language, practiced the concepts, worked on finding relationships, and classified and solved problems. Indeed, children constructed their own knowledge as a result of such direct experiences (Piaget, 1966). By physically manipulating and moving through loose parts, children acquired perceptions and knowledge about objects and of the relationships between them.

Additionally, the spontaneous play with lines emphasized children's joy in experimentation and their flexibility to go further with a loose-parts mindset. The practices reflected teachers' understanding of the potential of loose parts to become a mindset of engaging with a range of languages and of encouraging exploration, pleasure and discovery of relationships (Vecchi, 2010).

This was observed particularly in one class of four-and-five-year-old children during our open-ended play with lines:

The group of children explored lines by playing with long strips of purple crepe paper. Farla² (the music teacher) walked by the classroom and noticing their joy, she joined the classroom fun and helped the children move their paper lines to the rhythms of her violin. When the music went high, the lines flew high. When the music went low, lines dropped, and children crawled on the floor. The children were happy to make their lines dance fast and slow—depending on the surprise music Farla offered. It was an advantage to have Farla come by during our time in the studio. It was spontaneous play with lines. (Field notes, Jan. 16, 2012)

At all times in our study, we sought to merge First Nations culture and learning within an artsbased approach. The educators attended to the environment and experiences with offerings of open-ended materials and uncovered opportune times to bring culture into the conversations seamlessly. Interactions with loose parts supported rich conversations both between children and with educators. For example, when the children engaged in gluing lines onto a piece of paper, teachers facilitated and guided them through the exercise. The children examined their materials in detail and shared ideas about arranging their assortment of paper lines. The educators reinforced Mohawk vocabulary as children independently produced insects, trees and other depictions of the natural world and the gifts of Mother Earth. What's more, in my debriefing conversations with the educators, their dialogue changed. They began to better understand how they needed to offer "wait time", when open-ended materials were presented to their young students. Teachers uncovered what the children were interested in, which assisted them in further planning, as well as better appreciating where cultural topics could be interwoven into discussion and play. Upon reflection, I appreciate how pragmatic we were during these experiences. Teachers seemed to engage in authentic listening and their conversations acknowledged that new foundations for cultural learning were being laid.

The challenge for educators, as Rinaldi (2001) has expressed, is "to create a context in which the children's curiosity, theories and research [are] legitimated and listened to" (p. 121), a space where the child is respected and introduced to new theories, concepts, environments, languages and materials as prolific working tools. The emphasis on integrating the arts as a language *for* culture underscored a collective recognition that the arts could offer young children flexible, meaningful ways of knowing about themselves and others, and of developing their perspectives on the world (Edwards, 1998; Wright, 2003). The teachers appreciated this harmonious integration of Mohawk culture with the open-ended resources of loose parts. Loose parts offered the tools, and teachers provided the spaces, to develop Mohawk language and cultural understandings. However, loose parts needed to be carefully selected to support this goal, as was observed in the case for "lines".

² A pseudonym.

Second Offering of Loose Parts: Working With Preservice Teachers

My thinking about teaching in a university classroom has been impacted by the substantial paradigm shift that happened for the educators, children and families at SBS because of arts-based practices, the integration of open-ended materials, and my ongoing reflection on lived experiences. I have arrived at a time in my teaching career where I want to openly acknowledge that arts-based integrative approaches drive my creativity and practice. I look for moments and inspiration to change and add to my repertoire as I work with preservice teachers in developing their skills and understandings about education. This change started with questions that I began to ask myself: How can I take what I now know about arts integration and make it part of *my* teaching repertoire? Could the rich experiences I witnessed with young children's embodied learning be translated into higher education, be realized by adult students? How could I ensure the same sensitivity and rich experiences that I offered the young learners for my diverse group of mature students? These questions drove me to review and redirect my teaching schema.

Where applicable, objectives in my course designs began to include a loose-parts approach: the provision of appropriate provocation and open-ended opportunities for students to make meaning of various course topics. Whether the loose parts included flexible tangible materials, or open-ended designs of practice, I was hopeful that deeper conversations would emerge and would impact my students' understandings. I was willing to relinquish control and make way for loose-parts thinking. Loose parts became a mindset for me; a way to think about approaching subject matters in different and open-ended ways. Alongside my adult students, I observed how thought-filled arts experiences and open-ended opportunities get to the heart of the subject (Eisner, 1991).

Recently, during the Kindergarten Classroom Pedagogy course, my students had the opportunity to appreciate joyfulness in play with open-ended materials. The objective was for preservice teachers to analyze play experiences with reference to a kindergartener's development and for my students to have the same enjoyable opportunity their young students might have in self-directed play. The play was important to experience: complex, pleasurable, self-motivated, spontaneous and free of adult-imposed rules. In an open space, I presented students with a loose-parts collection of boxes, string, old maps, egg cartons, buttons, paper cups, fabric and other odds and ends.

One particular group selected a world map, some string, push pins, ribbon, paper and glue. They sat for quite a while pondering over what could be created with such disconnected items. After some discussion and attempted brainstorming time, one student noticed that the world map was especially significant to the members of their group. She recognized each of her peers, including herself, originated from a different country. With excitement they located their birth countries on the map, marked each with a pin, and then with string, and "met" each other on the map, in their current city, Montreal. They quickly assembled a paper McGill University, and across the oceans, threaded themselves together in Montreal, Quebec. Figures 8-10 tell the story: "We all came from different countries to learn together at McGill."



Figure 8.



Figure 9.



Figure 10.

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Once again, loose parts proved to be an impetus for meaningful conversations and interactions. It did not take long for the entire class to appreciate this group's conversation. Subsequently, a whole class discussion emerged about multicultural classrooms and the advantages of early childhood being the opportune time for children to gain understandings about others as well as themselves. Students disclosed their own experiences in elementary school, some who were members of uni-cultural environments and others who experienced multi-ethnic schools. The students' exchange of ideas reflected an awareness of their future role of assisting children in becoming respectful members of a multicultural society.

Moreover, these preservice teachers also identified how their experience with loose parts would be one they would want to re-create with their future students. They acknowledged that the stimulating involvement of manipulating loose parts gave rise to critical thinking, problem solving and newfound relationships. The open-ended materials not only stirred conversations about their own ideas and identities but, significantly, also taught them about the value of allowing a process of discovery to unfold. This, they admitted, was deep engagement *in* the learning. Loose parts captivated interest in a university classroom, and conversations rose to a level of profound meaning whereby self-identity was contemplated with thoughtfulness to their future roles as teachers. The creative method they underwent extended into exchanges far beyond a single outcome.

In these ways, loose-parts materials and a loose-parts mindset provided a supportive context for learning. Knowledge-building came about by evoking an active process that involved uncertainty for each individual as well as within their relationships with each other. Indeed, loose parts helped express and provoke ideas, values, emotions and reflections. Such pedagogy can help build an educational philosophy that is open to connections, affect, intensity and emergence, a pedagogy that welcomes learners' potentials and encourages finding the unexpected.

Connecting the Offerings

My two teaching stories have presented how loose parts produced palpable, significant and noteworthy outcomes, no matter what the age of the students. In both instances, a progression of learning occurred. Meaning rose from the manipulation of loose-parts materials and from the relationships between the individuals involved. Young children and preservice teachers respectively took part in a process of making new connections in their interactions with disparate components. Loose parts proved to be important activators for learning and dialogue. As seen in the experiences of the young children in Kahnawake and in that of the university students, a loose-parts mindset augmented knowledge and broke down constraints of closed-off disciplines and predetermined outcomes. In both cases, time, place and materials were set aside, and conversation about the process became the learning. Vecchi (2010) poetically expresses this occurrence as the "the dance" between cognitive, expressive, rational and imaginative thinking.

In a time when teaching and learning are often regarded as overly structured and divided, linking subjects, languages and disciplines requires deliberation. Pinar (2008) confirms that curriculum nowadays lacks flexibility and is too often delivered without learning that involves lived

experiences. He reveals how students are frequently taught to receive content narrowly, to digest the textbooks and repeat information, void of exploration or pleasure. Pinar (2008) calls for curriculum to shift from such narrow encounters to comprise "complicated conversations" (p. 379): indepth, critical, intelligent dialogue between educators and their students. According to Pinar, curriculum *is* the complicated conversation, the exchanges between teachers and students whereby knowledge is co-constructed. A loose-parts mindset and methodology may be a catalyst to support thought-filled discourse in favour of such learning.

Concluding Thoughts: Curricular Implications

What are the curricular implications of loose parts? First, it is fair to say that uncovering effective provocations constitutes one powerful step toward helping educators look, listen, think and feel with increasing sensitivity. The question lies in how experiences and extended learning will be drawn out, that is, what encounters or resources can be implemented or suggested to evoke rich conversations? Teachers need to develop professional knowledge and keen observation abilities to select appropriate methods and tools that will elicit exchanges of meaning, alive with reasoning, feeling and learning. Irwin and O'Donoghue (2012) state that educators ought to reflect well about "pedagogical possibilities from their place of knowing and to imagine pedagogical realities from these places for which there are no pre-existing models" (p. 228). The children and educators in Kahnawake and the university preservice teachers illuminated "the space between learning as a process and learning as a product" (Irwin & O'Donoghue, 2012, p. 229).

Additionally, finding place for loose parts implies educators actively seeking out timely occasions where novel teaching and learning methods might move knowledge into deeper understandings. Ideally, education should nurture such occurrences of knowledge mobilization. As Pinar (2008) has pointed out, curricula based on standardized testing and formalized evaluation obstruct finding such open spaces. When teachers show an interest in unearthing those flexible periods of time, knowledge can be translated into ideas, and the result is liberating. Teachers need to include reflexive practice to look well at their own motivations and praxis. In their examination of effective teacher practices, Carter and Irwin (2014) suggest that

teachers need to look at their experiences and subjectivities in order to exercise agency in their teaching and lives. It is only once teachers develop this ability (to exercise and act upon their own thoughts in particular situations) or agency, that they can then empower their students to do the same. (p. 5)

Loose-parts thinking, an open-ended mindset, can prove to be the mental support needed for complicated curriculum conversations. Tangible loose parts (i.e., materials) that allow for hands-on investigations help make learning visible. A loose-parts mindset challenges a conventional mindset, instead provoking unique encounters, and conversations about encounters, that can augment curiosity, creativity and wisdom.

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