

**Table S1: Ripple Effects of the Empathy Community of Practice (Extended Table)**

How are teachers impacted by CoP participation? What are teachers doing differently?
<p style="text-align: center;"><b>Teachers</b></p> <p><b>Being (Dispositional/Affective)</b></p> <ul style="list-style-type: none"> <li>• <b>Deepened valuing of empathy</b> as a key priority in their teaching practice.</li> <li>• <b>Increased dispositional empathy</b> with the children in their care, with parents, and with the teachers' own families. Bringing dispositions of openness, curiosity, gentleness, and empathy to their interactions.</li> <li>• <b>Greater teacher confidence</b> (sense of self-efficacy) in their teaching practice, in honoring their intuition, and in centering their relationship with the land.</li> <li>• <b>Personal growth:</b> <i>"We are just better people, in all areas of life, kinder and gentler across the board. We prioritize self-care, give ourselves grace, and fill up our own cups."</i> Including a <b>deepened personal connection to nature</b> which was unexpected given their already very deep connection to nature.</li> <li>• <b>Buoyed sense of sustainability of this "empathy work" and working in the early childhood field</b> because of the reciprocity with children, families, and our land, informed by Indigenous ways of knowing, being, and doing. <b>Joyfulness in their teaching</b> and seeing beauty in this work. Empathy encounters reflect beauty and bring immense joy. <b>Increased feelings of community</b> inspired by their connection with other teachers doing this work. <i>"We are not alone - we are not meant to do this work alone."</i></li> </ul> <p><b>Knowing (Cognitive)</b></p> <p><b>Deepened understanding of</b></p> <ul style="list-style-type: none"> <li>• <b>what empathy is in early childhood:</b> empathy is intuitive and innate to children; children share empathy in varied ways such as nonverbal empathy expressions, helping, and including others. <b>Children are capable of empathy</b> and of being other-focused (children are not as self-centered or self-focused as they are often assumed to be).</li> <li>• <b>the importance of empathy</b> to children's development, and for reciprocal, respectful relationships with all our relatives.</li> <li>• <b>how empathy can be supported:</b> teachers view play as empathy building (for example, through children's small but profound acts of inclusion).</li> </ul> <p><b>Changed perspectives:</b></p> <ul style="list-style-type: none"> <li>• <b>an "empathy perspective"</b> frames and guides their teaching practice.</li> <li>• <b>conceptualize their role of teacher as guide</b>, a role of "stepping back" to support children in responding to one another and modeling empathy strategies to others.</li> </ul> <p><b>Doing (Behavioral)</b></p> <ul style="list-style-type: none"> <li>• <b>Slower, gentler pace of teaching and the program day:</b> More pause and more space; More modeling; More observing, watching, and listening; Allowing instances of cause and effect to unfold so that each individual child can demonstrate empathy in their own unique way; Listening to the needs of the moment and moving accordingly, Less or no full group time; Honoring the pace of the child.</li> <li>• <b>Changes in the ways they approach interactions with children:</b> Processing and listening more deeply; Calmer in stressful or high-anxiety</li> </ul>

situations; Being honest and vulnerable with the children about their own feelings; letting children show empathy they have learned from their teachers.

- **Application of empathy strategies** including stepping back, modeling, supporting children in sharing empathy, and pausing intentionally to allow children the space to show empathy. Coaching and supporting children as they practice empathy, affirming empathy expressions from children, and holding space for children to notice, wonder, inquire, and choose their own empathy actions.
- **Changes in how teachers approach connecting children with nature:** Learning alongside the children about our relatives, including encouraging the children to share what they know about our more-than-human relatives; Teaching the Honorable Harvest; Learning and using animal names in Anishinaabemowin (the language of the Anishinabe peoples); Making connections from parts to the whole and recognizing the truth of the Anishinabe word “Aki” which translates most closely to “everything” and signifies our connection to all of creation.
- **Use of stories** to build relationships and teach life lessons that connect people to place, including stories and perspectives of other cultures; Learning how to do so more appropriately and meaningfully.
- **Use of empathy as a foundation for other skill-building.** For example to draw from and build upon for supporting children in navigating conflict and during “repair.”
- **Changes in teacher-family interactions:** Sharing empathy encounters among the other things they share with parents about their child’s day; Sharing with families about Indigenous ways, traditions and teachers; Planning educational programming for parents and families.
- **Ongoing reflexive practice:** Continued learning from reflection on their use of empathy strategies; Wondering about empathy strategies and how they might work better; Asking questions of the hows and whys of the empathy expressions they are seeing in children; Reflecting on how they could support empathy transfer (for example, using storytelling to encourage children’s reflection on empathy).

How are changes in teachers’ empathy practices affecting others? Who is benefitting from teachers’ participation?

### Children

#### Being (Affective)

- **Increased regulation of their own emotions.** Less stressed in their learning and their life.
- **Increased sensitivity to the needs of others** (human and more-than-human relatives): more purposeful, thoughtful, and respectful.
- Deepened and **more empathetic relationship with the land and animals.** An emotional connection of being with (rather than over) relatives in a shared habitat.
- **Greater receptivity to receiving empathy** from their peers; strengthening of friendships from offering and receiving empathy).

#### Knowing (Cognitive)

- **Increased awareness of surroundings** (human and non-human); noticing the aliveness of the Earth, and the connection of everything, Aki.
- **Increased capacity to solve problems and brainstorm** solutions, offering ideas as to what might help peers based on their own experiences.
- **Increased recognition that they are capable of helping** and “*tending to their community,*” and all their relatives.

#### Doing (Behavioral)

Demonstrating greater empathy towards peers and teachers:

- Choosing more empathic and less confrontational or physically aggressive responses to peers.
- More aware of their peers' feelings, likes, and dislikes; More patient and understanding with each other.
- Greater noticing, listening, acting beyond their self-interests; checking in with friends; Inquiring about peers' well-being.
- Modeling to peers empathic responses that they have seen modeled by teachers.
- **Demonstrating greater breadth in empathic responses** Sharing empathy in another's hurt and sadness, in their happiness, curiosity, and joy, in their grief, and as they encounter the cycles of life, including death.
- **Increased confidence and independence in empathic behaviors:** Increased "stepping up" to offer their experiences and assistance to peers, helping and modeling empathy to peers; Increased independence in connecting with other peers to right wrongs, provide comfort, etc.
- **Passing empathy forward:** receiving empathy and compassion and then later in the day showing empathy with another peer.
- **More regulated behavior** in response to empathic displays from peers.
- **Empathically communicating with their families** about peers (sharing stories and concerns).
- **Growing into empathetic leaders:** Second-year students are in the rhythm of the year, leading new students, guiding each other's prosocial connections and displaying and modeling empathy as they welcome new children into the school.
- **Demonstrating empathy with nature that extends outward to care and/or action:** Increase in noticing and showing care and connection with animals and the land where they play; Seeking connections and finding similarities with nature; Wondering about how animals and their needs; Building bonds with nature, showing empathy with nature that extends outward to care and/or action (for example, respecting the erosion netting on a trail), implementing Honorable Harvest practices in play.
- **Seeking out empathy from nature** finding comfort or 'shelter' in nature.

## Families

### Being (Affective)

- **Valuing of programs** not just for their provision of time in nature, but **for the growth in their children's confidence, self-expression, and social-emotional skills.**
- **Noticing, valuing, and "honoring" play** seeing beauty in how their children play.

### Knowing (Cognitive)

- **Increased awareness of empathy encounters** during their children's preschool day, from teachers sharing stories with parents and families.
- **Increased understanding of Indigenous ways of knowing, being, and doing** through what children bring home and through teacher interactions/communications.

### Doing (Behavioral)

- **Changes in interactions among family members** from children bringing social-emotional skills learned in programs into home/family settings. Parents expressing gratitude for the impact: *"You've changed our whole family's life!"*
- **Changes in family interactions with nature:** Families learning from children's modeling of their empathic and compassionate interactions with nature; Spending more time/embracing and celebrating time in nature as a family.

- **Changes in family life and home culture that reflect forest school/nature preschool philosophy:** Children play outside more; Children's range of free play expanding into the neighborhood; Family more in tune with rhythms of the seasons; Adoption of environmental/sustainability behaviors such as contributing to healing land, growing food, planting native species, and sustainable energy choices.

### School Community

#### Doing (Behavioral)

- **Changes in family-to-family interactions:** Becoming friends with families from the program, holding events for program families, or participating in social/play outside of the program; Expressing concern for other families' situations and offering assistance. *"The program/community is taking on a life of its own!"*
- **Changes in family-program interactions:** Deepened connections to the program; Increased participation in program/school events; Sharing personal/family stories; Family involvement in site restoration of the school/program's land such as assisting with removal of invasive species and ash-borer infected trees, helping replant, researching how to help restore unhealthy forests/land on which program/school is situated. *"Families are showing more concern/asking more questions about how the new trees are doing than how their child's day went!"*

What changes are we seeing (or anticipating) in the contexts that surround us?

### Program/Organization

#### Being (Affective)

- **Empathy cycle growing within the program** older child showing empathy with younger child in program; in turn, as that younger child grows, they remember how that felt as a younger child and in turn now shows empathy with another younger child.
- **Greater confidence as a program** in being *"who we want to be"* and in doing it in a way that honors both children and teachers.
- **Increased commitment to sharing what we have been learning** with teachers, families, the wider community, and the field more broadly.

#### Knowing (Cognitive)

- **Deepened understanding/** perspective as a program regarding the role of empathy and **reinforced commitment to empathy;** and deepened understanding as a program of our role/part in the natural and social system.

#### Doing (Behavioral)

- **Support staff** (volunteers, substitute teachers, assistants) **implementing empathy strategies** that were modeled by teachers who were CoP participants.
- **Changes in program implementation:** Intentional increase in the amount of free play; Intentionally weaving empathy into all aspects of programming; Grouping children into smaller groups to be more responsive to individual needs and interests; Centering the well-being of the teacher, as well as the children.
- **Strengthened relationships within the program community:** *"grew stronger together," "more trusting relationships"*

### Nature

- **The land feels loved and cared for:** Teachers are engaging children and families in caring for the land. Children are excited to help care for the land; Children acknowledge and express gratitude for what the land provides.
- **Wildlife are given space they need** (not just physical space but space as in other senses - quiet) **and are respected.** Children and teachers make space for all the voices and beings of the forest (deer coming close to graze during the children's play); Children refrain from a desire to chase rabbits after pausing to consider what would be good for the rabbit.
- **Maintenance of environmental sustainability** not overharvested; tree branches not broken off during play; moss, flowers, trees, and insects respected through children's actions; berries and flowers harvested in an honorable way.
- **Restoration of land** from children's, teachers', and families' actions (for example, removal of invasive species, planting and restoring forest, etc.).

### Community

- **Empathy skills and dispositions brought forward into elementary schools** all around the area as preschoolers move into Kindergarten, enhancing peer relationships (being good friends to the new children they meet); Teachers and administrators at elementary schools aware of, appreciating, and excited about in-coming children from these programs and the empathy skills/experiences they bring.
- **Formation of a community of educators and families** that *"walks the same path"* prioritizing children's healthy development through play and connection to nature.
- **Families choosing/moving into neighborhoods** that reflect nature preschool/forest school philosophy.

### Profession

- **Expanded opportunities for ECE professionals to learn** and experience empathy-based programs (through CoP participants sharing what has been learned within professional circles, such as Natural Start Alliance, Children and Nature Network, Duluth Nature Play Collaborative/MN Early Childhood Outdoors), and through programs offering their own professional development trainings.
- **Potential changes in Parent Aware ratings/criteria** for more room for social-emotional emphases, outdoor play, emergent learning, etc. (through advocacy of CoP participants and parent/family demand for change). Potential for the Nature-Based Early Childhood Program Assessment & Guidebook (Dutke et al., 2022) to be accepted for use.
- **Construction of professional knowledge** concepts such as "stepping back," "nestled in community v. child-centered"
- **Teachers have greater confidence to challenge the traditional approach** of early childhood education.
- **Professionalizing of the work** of early childhood educators/nature preschool teachers and **provision of a pathway** to benefit our field as it struggles to find teachers. Through this approach, participants are finding joy, knowing their work is valued, and viewing this way of teaching as sustainable and with the potential to transform ECE.