

Appendix B: Survey Response Summaries

1. What are the biggest benefits AI can provide for early childhood?

- AI can provide the big data to prove our case, protect our children's information, provide insights in research.
- Free up caregivers / teachers' time to spend more time with children (vs. admin.)
- Identify and support gaps in quality of care that have consistently been difficult to achieve, specifically challenges that can be supported by massive statistical inference
- Data and information gathering that can support at-risk children through physical tracking (minimize abduction threats, self-harm)
- Level the playing field by identifying social-emotional, cognitive, or physical issues that interfere with learning.
- Provide companionship, and immediate and accessible feedback through environmental interactivity
- Offer humans a cooperative tool that can enhance their creative and productive endeavors (think SciFi personalized assistants through both child-directed AI and caregiver-directed AI)
- For AI meant to interact with children, one can imagine smart applications that can adapt smartly to a child's needs and growth (personalized learning).
- Off-load some of the work of caregivers or collecting and evaluating data about the children and noting patterns that might help caregivers be more effective, for example tracking children who are more often alone and need help connecting.
- Better outcomes through assessments, safety, and bias reduction.
- Provide personalized, adaptive experiences in real-time.

2. What is your opinion about the biggest risk of AI for early childhood?

- Control and manipulation of big data by governments, corporations
- Some students may not master certain things without a teacher's instruction; human substitution.
- Public perception that it's a cure-all or that it replaces human judgment.
- Risk that already underserved/at-risk communities receive "hand-wavey" products that tax resources but don't deliver real benefit.

- Machine learning systems can replicate and scale bias, reflect programmers' unconscious bias, cause entrenchment of statistical patterns.
- Corporate greed often controls the data.
- That people rely on technology as a replacement for real human interaction.
- Data security and privacy. Technology is developing faster than privacy laws can keep up with.
- Racial equity and privacy.
- The belief that computers, statistics, math, AI provide objective truth.
- AI will disrupt the critical relationships that young children need to form with caring adults.

3. How would you suggest adding to or modifying the following three headings? (suggestions in bold)

1. Promote societal and environmental well-being
2. Prioritize children's development, privacy, and well-being
3. Address economic and asset inequities
4. Empower educators to build stronger relationships with children and parents.
5. Participatory design practices that closely involve stakeholders most affected

4. What are your experiences in discussing new technologies (e.g., Alexa) with children?

- Help shift the tech/media experience for children from being a consumer to a builder/knower.
- Children are digital natives and are more willing (and trusting) than adults in using new tools and technologies
- It's important to explicitly address capabilities and limits of technologies, for children (and adults) to know not only what these devices are capable of, but how they can "fake" capabilities that are not really there, and to learn how to figure this out.

5. NHSA has been a strong proponent of "shared governance" i.e. rather than professionals making all the decisions, parents should be involved as active participants with real powers. How important is shared governance, in your view?

- Involving parents and caregivers leads to better outcomes
- Protects the rights of children
- It requires leadership, real-life examples, and expertise to teach the skills that make shared governance successful. [looking to NHSA to provide that]
- Shared governance is absolutely necessary. Engineers, EdTech professionals, data scientists educators, parents, and ethicists should all be involved in decision-making.
- This is of utmost importance: Parents of all races/ethnicities and socio economic statuses must be at the table with real social capital/power.
- Shared governance is critical to developing high quality programs that support the whole family and empower parents to be their child's best teacher and advocate

6. Should parents be more involved in the discussion of AI? What strategy might engage more parents in the discussion of the role of AI in early childhood?

- Invite parents to attend an event to talk through their ideas, concerns and values
- Set up a well-informed parent committee at key decision-making organizations.
- Find ways to help them be empowered in relationship to AI tech
- Speak about specific technologies, not in vague or general terms about AI
- Parents have to be involved as they must advocate for and represent children whose rights are generally not recognized.
- Share an accessible layperson's guide to what AI is (and isn't)
- Introduce parents to the same technology their children are being introduced to.
- Involve parents in development and assessment of AI products to spot unintended consequences that researchers or developers might miss.

7. On the positive side, what is your thought on how AI can be used properly to support empathy and creativity in early childhood?

- AI can provide a safe and patient space for children to express and enjoy themselves.
- [Mindscribe](#) can help children tell stories about the things they create: these may help children gain insight about what they want to create next, and help their caregivers provide the appropriate scaffolds to do so.
- Consider app-enabled vs app-dependent, or passive vs active app use. For example, a geocaching app could use AI to improve location mapping and user

trends, but the app itself promotes users to go out into the community and interact with other geocachers.

- AI can harness visual and auditory cues, and be used as a means of offering talk therapy or digital journaling to those who might need someone to talk to but who lacks the resources.
- AI-enabled art programs unleash kids' imagination and artistry, like the 3D brush-painting game, which is unimaginable in a 2D world.
- Technology could help expose children to people who are / look different, encouraging a capability for empathy.

8. On the negative side, how might AI be misused to hinder empathy and creativity?

- Easy to objectify and feel alienated in virtual worlds.
- Children and parents need to feel empowered in their relationship with AI; AI is not smarter than they are.
- By providing answers on demand it can discourage conversation, speculation, imagination, group problem solving, creativity and social interaction in general.
- By supporting power structures that indirectly hinder empathy.
- Disrupts relationship-building, learning social norms and values (inclusiveness, kindness, etc.) from other humans (caregivers)
- Young children often don't know what is real and not real; requires careful thought and training of adults in AI's use.