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KIDS INCLUDED

Enabling Meaningful Child and Youth
Participation within Companies in a Digital Era

FOREWORD

Julia Goldin
Global Chief Product &
Marketing Officer
at the LEGO Group

Digital technology plays an increasingly formative role in the lives of children and young people growing up today.

This reality represents a great opportunity for companies designing digital experiences to positively impact the well-being of children, by putting children's needs and interests first. It also represents a clear need for companies to do so as a matter of urgency.

The journey to making this opportunity a reality has to begin by listening to and learning from children and young people. This must be done in a way that is safe, respects their rights, and has a genuine impact on how we as businesses think and act as we shape the online world.

At The LEGO Group, we have worked hard for 90 years to inspire and develop the builders of tomorrow by bringing the joy of play to children around the world. Throughout this time, we have had the privilege of being consistently inspired by children's boundless creativity, curiosity, and imagination.

Meaningful child participation has brought so much to our company, our colleagues, and ultimately to the children who benefit from child-centred experiences.

Many other companies are also on this journey towards meaningful child participation, supported and empowered by a range of experts working tirelessly to promote good practice. This collection of thought pieces comes from them, and we hope it will inspire and enable other businesses wherever they are on this journey.

We don't pretend to have all the answers. Yet there is a common belief that, by working together and exchanging ideas and experiences, we are in a better position to find solutions and to make meaningful child participation a reality in a digital era.

As we see the emergence of new frontiers of digital innovation and the continued extension of childhood into online environments, children and young people, their interests and involvement, must come first if we are to achieve a sustainable digital future.

INTRODUCTION

As the impact of digital technology on children's lives continues to grow, there are mounting calls for businesses that engage with children to deliver meaningful child participation throughout the design and development of their operations.

Engaging children in how you take decisions and in how you design your digital products and services can, if done responsibly, create substantial value for both businesses and children. However, it also presents a broad number of challenges that businesses will need to address.

This report is a practical tool intended for businesses that are embarking on a journey towards meaningful child participation and encountering the challenges that come with it. It brings together expert voices from across sectors, including those of children and young people, to reflect on the following questions:

1. What is meaningful child participation?

2. Why is it important for children and businesses in relation to the digital environment?

3. What are the key challenges to achieving this?

4. How can businesses overcome these challenges?

While the report's contributors passionately believe in the importance of meaningful child participation, they also recognise that nobody has all the answers. As such, this report is not intended to be referenced as an exhaustive resource, and is intended to be used together with the many other valuable resources for businesses.

However, we do hope it will inspire and enable businesses to move towards a future where children's beliefs and perspectives are central to the design and development of the digital world.

Children are asking to be heard. It's time for businesses to sit up, listen, and learn.

PROCESS OF BUILDING REPORT
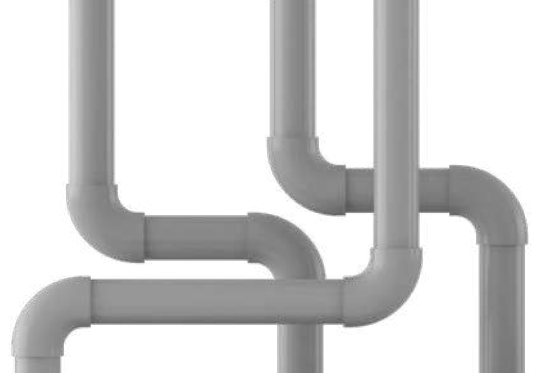
Rationale

The concept of child participation has been well-established within the fields of education, civil society, and healthcare and is of increasing importance to governmental organisations in the development of policy. The primary objective of this report is to make a positive impact towards greater child participation in corporate practice. This recognises the role of businesses in protecting children's rights and fostering their well-being and represents an important step towards a future where children are more systematically engaged and represented in how companies behave.

This report references children and young people as a broad term for people under the age of 18.

Contributors

This report sought to draw on the experiences of a handful of experts in the field of child participation, sourced through networks and recommendations, including academia, corporate practice, civil society, and government. Collaboratively, contributors reflect on current principles, resources, and their past experience to develop a clear broad statement on the importance of child participation.

Panel of Children and Young People

Enabling child participation, such as the inclusion of active contributions by children and young people, was of paramount importance in the development and execution of the report.

A group of 8 children (aged 9-16) from the United Kingdom were invited to participate in a series of workshops. The panel members were introduced to Phillip McCormick and Erik Legernes , designers from The LEGO Group, and encouraged to consider what it takes to be a designer before being tasked with the challenge of creating their own new products. The panel reflected on their experience of creating new products, placing particular interest on the challenges they faced, who they would want to work with, and their feelings towards working with adults. In follow-up sessions, they considered the ways in which children were able to contribute actively to product development in a way that adults couldn't and the benefit of their participation both for business and themselves. The panel also reviewed the report and its formatting, ensuring they felt adequately represented in the report, to which they were central.

"We spoke to Phil and Erik, the LEGO designers, about their jobs and what they do and we thought about what it was like to be them. And it all helped with the challenge of trying to be a designer."
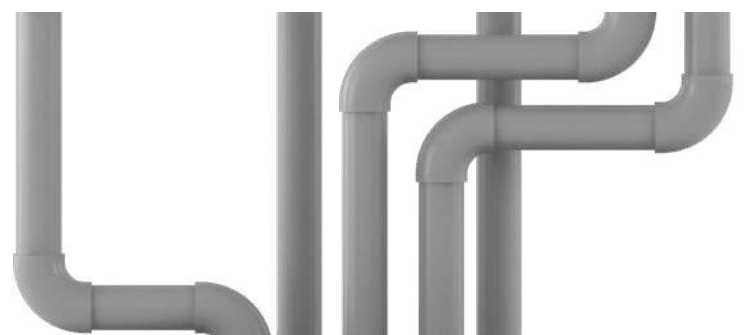
Boy, 11, UK

"We've been working on how children can work alongside adults in companies and workplaces without one being superior to the other."

Girl, 14, UK

"Getting different people's perspectives on designing products and marketing, and how we can all contribute no matter what age."

Girl, 15, UK

TOP 5 TIPS

Why Child Participation Is Important to Businesses:

1. **Supporting children's rights** - Child participation is a right that every child has. Businesses that prioritise meaningful child participation, empower, and enable children and young people demonstrate their commitment to the rights of the child.
2. **Increase brand reputation and trust** - Prioritising meaningful child participation will help to foster a sense of community and collaboration between children and young people, parents/caregivers, and business. This is critical to maintaining trust with consumers in a rapidly evolving and complex digital environment.
3. **Enabling better products** - Engaging regularly and meaningfully with children and young people is essential for understanding how they use digital technology. This increases the likelihood that products and services meet their needs, protect their rights, and foster their well-being. It will also make it more likely that digital experiences remain relevant for children and families.
4. **Boosting employee creativity and motivation** - Engaging with children and young people can significantly increase both the creativity and motivation of employees as they learn and become inspired. Equally, delivering meaningful child participation supports companies' responsibility agenda and commitment to children's rights, building a strong sense of pride in working for the organisation.
5. **Achieving sustainable collaboration** - Through collaborative research and design relationships, organisations can create content, regardless of technology, curricular focus, or target population, built to fit those who will use it.

Why Child Participation Is Important to Children and Young People:

1. **Increased safety and well-being** - Designing experiences meant for children and young people with children and young people is more likely to promote safety and well-being outcomes for all those who engage with it. A key part of this comes through products and services that understand and adapt to children's unique needs, creating appropriate experiences that empower children.
2. **Empowered through inclusion** - Meaningful participation will better highlight the variety of user needs, cultivating a deeper sense of inclusion and belonging amongst children and young people, parents, and caregivers. Children are more likely to see themselves reflected in the digital products and services they are using.
3. **Opportunities for learning and skill development** - Bringing children into the product and service development process and business environment, even for a short time, provides the opportunity to apply their innate creativity and curiosity, and to be recognised and supported in doing so. They also have the opportunity to learn how digital products and services are designed and developed in the workplace, inspiring potential future designers.
4. **Social connectivity** - Participatory frameworks allow for children and young people to engage with others, whether with other children or with their parents and caregivers, in a collaborative environment. Working on a project together can create strong social connections.
5. **Fun and Joyful** - Let's not forget that engaging with companies that make digital products and services that children and young people enjoy can be fun if the right space is created where children can thrive.

CONTRIBUTORS

Randy Gomez
Principal Scientist
Honda Research Institute Japan
https://www.linkedin.com/in/randy-gomez-7802b516b/

Fabio Friscia
Adolescent Development and
Participation Manager
UNICEF

Dan Jacobs
Research Executive
KidsKnowBest

Chris Payne
Director, Digital Responsibility,
Government and Public Affairs,
The LEGO group

Aimee Bryan
Head of Play Propositions,
Creative Play Lab
The LEGO group

Dr Ronah Harris
CEO, Play Pattern LLC
Adjunct Lecturer, New York University

Pete Robinson
Chief Strategy Officer
KidsKnowBest

Josianne Galea Baron
Programme Specialist
Child Rights and Business
UNICEF

Sam Clough
Strategic Insight Director
Super Awesome

Roshni Patel
Creative Computing Educator
Play Pattern LLC
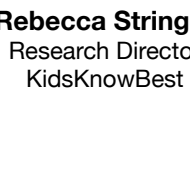
Rebecca Stringer
Research Director
KidsKnowBest

Hans Martens
Head of Digital Citizenship
European Schoolnet

Max Bleyleben
Managing Director &
Chief Privacy Officer
Super Awesome

Quentin Felton
Creative Computing Educator
Play Pattern LLC

Aimee Duran
Sr. Privacy Program Manager
Microsoft

Sandra Cortesi
Director of Youth and Media
Berkman Klein Center
for Internet & Society,
Harvard University

Prof. Amanda Third
Professorial Research Fellow,
Institute for Culture and Society and
Co-Director, Young and Resilient Research
Centre, Western Sydney University
Faculty Associate, Berkman Klein Center
for Internet and Society,
Harvard University

Becca Seibert
Manager
Content Research
Sesame Workshop

Emi Gunér
Copywriter
Toca Boca

Corey
Age 15

Leia
Age 9

Maria Hallgren
Head of Marketing
Toca Boca

Emily Reardon
Director
User Experience
Sesame Workshop

Elijah
Age 13

Petter Karlsson
Senior Play Designer
Toca Life World

Nathan
Age 11

Kim Foulds, Ph.D.
Vice President
Content Research and Evaluation
Sesame Workshop

George
Age 12

Vicky Charisi
Research Scientist
Joint Research Centre
European Commission,
for the European Union

Sophie
Age 15

Heddy Ring
Sustainability Manager
Children's Rights Lead
Telia Company

Jaelyn
Age 14

Wouter Sluis-Thiescheffer
Professor Media Design
HAN University of Applied Sciences
Board member Designing for
Children's rights

Tyler
Age 11

CONTENT PAGE

CHILD CONSULTATION AND RESPONSIBLE BUSINESS CONDUCT IN THE DIGITAL ENVIRONMENT:
RIGHTS, RISKS, AND OPPORTUNITIES

JOSIANNE GALEA BARON
FABIO FRISCIA

From misinformation to online safety, the child rights impacts of digital technologies have been brought into sharp focus during the COVID-19 pandemic[1]. Increased attention is now being paid to the accountability of companies for human rights impacts related to their digital projects, products, and services[2]. This contribution sets out crucial steps for businesses to take when conducting child consultations in the context of identifying and accounting for their child rights impacts in the digital environment. It also focuses on potential risks involved in such consultation activities, along with practical considerations for companies to ensure they are appropriate and conducted safely and meaningfully.

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1. See UNICEF, "Children's Rights and Digital Business During COVID-19 and Beyond" (2020) for additional context.
2. Danish Institute for Human Rights, "Guidance on Human Rights Impact Assessment of Digital Activities: Introduction" (2020).
3. The Convention on the Rights of the Child elaborates the human rights of children, recognizing the interdependence of their civil, political, economic, social and cultural rights. Article 12 of the Contention states that 'States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.' Click here for the Convention text in Arabic, English, French and Spanish.

Understanding Child Consultation As a Form of Participation

The right of all children to be heard and taken seriously is one of the fundamental values of the UN Convention on the Rights of the Child[3]. The modes of child and adolescent[4] participation can be conceptualised as 'consultative', 'collaborative', and 'child/adolescent-led', depending on the level of engagement and influence in decision-making (see Figure 1). While the term 'child' refers to a person under 18 years of age, needs and capacities evolve greatly within this range. Consequently, in implementing the concepts presented below, adjustments would be needed to respond to the specificities of the target age group and the capacities of the children being consulted.

While governments have the primary responsibility to create an enabling environment that allows the views of children to be heard, other actors also have responsibilities to listen to children's views and take these seriously, including those in the business sector. The Committee on the Rights of the Child has stated that 'it can be critical for business to seek the views of children and consider them in decisions that affect them.'[5] 'Consultative' modes of participation are particularly relevant to human rights due diligence processes conducted by companies to 'know and show'[6] they respect human rights, including children's rights (which apply equally in the digital environment as they do offline).[7]
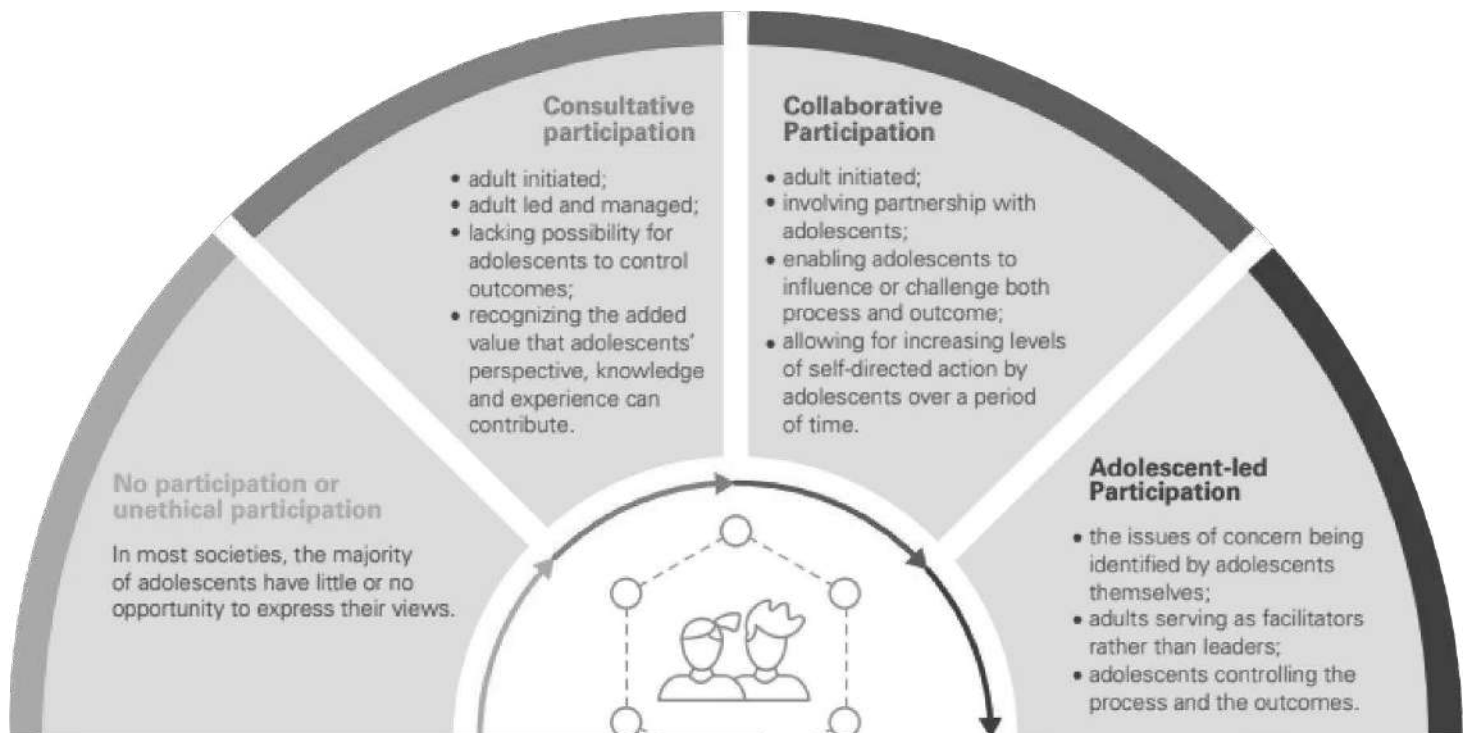
Figure 1: Modes of Participation[8]

4. The term 'adolescent' refers to persons aged 10–19 years.
5. UN Committee on the Rights of the Child, "General Comment No. 16: State Obligations Regarding the Impact of the Business Sector on Children's Rights," (2013).
6. Office of the High Commissioner for Human Rights, "UN Guiding Principles On Business and Human Rights" (2011).
7. UN Committee on the Rights of the Child, "General Comment No. 25: Children's Rights in Relation to the Digital Environment," (2021).

Child Consultation As a Core Component of Child Rights Due Diligence

Child consultation by companies can serve multiple objectives, including informing the development of company policies, feeding into the company's broader sustainability strategies and long term goals, or developing appropriate grievance and remediation mechanisms.[9] From the perspective of children, participation in consultation activities can serve as a channel through which to draw attention to issues they are experiencing in digital environments and create opportunities for growth (provided all the required measures around ensuring safe and meaningful consultation are put in place as a prerequisite – see below).

Business and human rights frameworks imply that companies, including those providing digital products or services accessed by children, should consult with rights-holders as a core component of responsible business conduct. The UN Guiding Principles on Business and Human Rights (UNGPs) state the process of gauging human rights risks by companies should 'involve meaningful consultation with potentially affected groups and other relevant stakeholders'.[10] Building on the UNGPs, the Children's Rights and Business Principles (CRBPs) also state companies should identify and assess any actual or potential adverse impact on children's rights, including through 'meaningful consultation with children and other potentially affected groups and relevant stakeholders'.[11]

With respect to technology, Human Rights Impact Assessment (HRIA) or Child Rights Impact Assessment (CRIA) as aspects of human rights due diligence are rapidly gaining momentum. The HRIA process involves meaningful participation of affected or potentially affected rights-holders through local and context-sensitive approaches.[12] The Committee on the Rights of the Child has also confirmed that 'parties should require the business sector to undertake child rights due diligence, in particular to carry out child rights impact assessments' in relation to the digital environment.[13] This is a promising trend. Children have unique perspectives on digital technologies that cannot always be seen and articulated by their adult representatives. Because children are a vulnerable population, it is also possible that a business activity that does not impact the rights of adults does adversely impact the rights of children.[14]

However, consulting with children as part of CRIAs or related activities must meet minimum standards to have significance. For example, ensuring diversity and representation in consultation activities is paramount.[15] This means selecting children to be consulted must follow a sampling method that ensures representation of children in the most vulnerable situations (while also accounting for the fact that children who are not direct users of services may still be negatively impacted by them). Translating consultation activities into positive change also requires companies to remain accountable for acting on the impacts surfaced.

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8. A more detailed exploration of adolescent participation, including key definitions and concepts, can be found in UNICEF's "ENGAGED AND HEARD! Guidelines on Adolescent Participation and Civic Engagement," (2020). While beyond the scope of this contribution, collaborative modes of participation are also highly relevant for companies with respect to the digital environment (e.g. engaging children as co-creators in the diligence of digital tools).

9. Ibid.

10. Office of the High Commissioner for Human Rights, "UN Guiding Principles On Business and Human Rights" (2011). Refer to the B-Tech Project for guidance and resources on implementing the UNGPs in the technology space.

11. UNICEF, UN Global Compact, and Save the Children, "Children's Rights and Business Principles," (2012).

12. Danish Institute for Human Rights, "Guidance on Human Rights Impact Assessment of Digital Activities: Introduction," 2020. The Danish Institute has also produced a specific resource on stakeholder engagement in relation to digital activities: "Cross-Cutting: Stakeholder Engagement - Guidance on HRIA of Digital Activities," 2020.

Practical Implementation: Risks and Key Pointers for Meaningful Consultation

If not implemented safely and ethically, consultation by companies can result in more harm than good. Having explored the rationale for and expectation of companies to consult with children in relation to impacts within the digital environment, it becomes critical to explore how these activities can be carried out.

In General Comment Number 12, the Committee on the Rights of the Child expands on nine basic requirements that must be respected for participation to be meaningful and safe, stating all processes in which children are heard and participate must be: transparent and informative, voluntary, respectful, relevant, child-friendly, inclusive, supported by training, safe and sensitive to risk, and accountable.[16] One critical consideration for companies to prioritise in relation to the 'safe and sensitive to risk' criteria is safeguarding. UNICEF's 'Child Safeguarding Toolkit for Business' provides guidance and practical tools for developing a child safeguarding programme, with relevance to any consultation activities.[17]

In addition to the nine basic requirements outlined above, four essential features of meaningful child participation must be put into place:

Space: Children need safe and inclusive opportunities to learn about the issue and discuss it with each other.

Voice: Children should be able to use the media of their choice to communicate their views and to negotiate decisions.

Audience: Children's views must be respectfully heard by those with the power and authority to act on them.

Influence: Children's views should receive proper consideration, and children should receive timely feedback about the outcome(s) and the extent of their influence.[18]

13. UN Committee on the Rights of the Child, "General Comment No. 25: Children's Rights in Relation to the Digital Environment," (2021).
14. UNICEF, "Engaging Stakeholders on Children's Rights: A Tool for Companies," (2014).
15. For example, see "Two clicks forward, and one click back", which highlights experiences of children with disabilities.
16. UN Committee on the Rights of the Child, "General Comment No. 12: The Right of the Child to Be Heard," (2009).
17. Child safeguarding can be defined as 'all of the actions a company takes to keep all children they come into contact with safe – and includes the proactive measures put in place to ensure children do not come to harm as a result of any direct or indirect contact with the company. Child safeguarding encompasses the prevention of physical, sexual and emotional abuse, neglect and maltreatment of children by employees and other persons whom the company is responsible for.' Read more in UNICEF's 'Child Safeguarding Toolkit for Business' (2018).
18. UNICEF, "ENGAGED AND HEARD! Guidelines on Adolescent Participation and Civic Engagement," (2020).

When it comes to implementing these features, there are a number of concrete actions companies should consider before, during, and after consultation. To help companies get started, some of these considerations are set out below.[19]

Before Consultation:

Ensuring that direct consultation with children is appropriate (as opposed to triangulation with other sources) and conducting prior engagement with child rights stakeholders and experts to help identify facilitators.[20]

Ensuring the company has a genuine motivation to engage (e.g., for the purposes of understanding impacts vs. for the purposes of tokenism or publicity) and intention to act upon outcomes.

Ensuring voluntary participation, with informed assent from children and informed consent from parents/guardians, and ensuring individuals are aware they can opt out if they change their mind.

Supporting representation and participation of children of different genders, ages, abilities, ethnicities, geographies, and backgrounds, with proactive efforts to include children from marginalised groups.

Ensuring children know their rights and know who to report to if they feel uncomfortable, unsafe, or unwell.

During consultation:

Respecting children's time commitments to study, work, perform family/household duties, engage in leisure, etc., and plan activities at times that suit them.

Creating space and modalities for adults to respond to children's questions and recommendations. Be transparent with children about which decisions they are and are not able to influence (and which may be uncertain!)

After consultation:

Ensuring managers share feedback with children about the extent to which they have acted upon their insights and advice (along with a summary of the points captured to make sure children's views were interpreted accurately, as well as an explanation for why certain suggestions may have been rejected). This requires follow-up meetings, emails, calls, and/or SMS.

For further guidance, UNICEF has created a tool for companies on 'Engaging Stakeholders on Children's Rights' that offers practical guidance applicable to all companies.[21] The tool points out that companies should partner with third-party facilitators and the local community to plan for the consultation with considerations given to child protection, location, accessibility, timing, logistics, and facilitation. While not designed for an industry audience, further direction and inspiration can be taken from UNICEF's risk assessment tool for adolescent participation[22] and guidance on ethical research involving children.[23]

Future directions

Consulting children as part of child rights due diligence in relation to the digital environment is not only increasingly expected of companies to demonstrate responsible conduct, but also promises to be a valuable tool in identifying and managing child rights risks arising from digital technologies, while creating value for business.

While several pointers on implementation are outlined above, many questions remain. For example:

• What do companies need to feel confident implementing appropriate child consultations as part of child rights due diligence processes safely and ethically?

• How often (or at what trigger points) should companies consult with children given the rapidly evolving nature of technology?

• When can consultation be considered representative of the diversity of children's experiences of digital products and services across regional contexts?

• When it comes to the design of new digital products and services, is consultation sufficient to ensure respect for children's rights, or should children be involved continuously via collaborative modes of participation throughout the process?

Answering these questions will require action from industry professionals to demonstrate efforts and share their methods and results, with research and sustained multi-sectoral collaboration. As children's engagement with digital technologies, from education to entertainment, continues to grow over the coming years, action on these issues could not be more urgent or timely.

19. See 'Tip sheet for adults on adolescent and youth participation in an advisory group' (p.39) for a more complete set of considerations before, during, and after consultation activities.
20. Further guidance on identifying when to consult children directly can be found in UNICEF, "Engaging Stakeholders on Children's Rights: A Tool for Companies" (2014).
21. Ibid.
22. See Appendix 10: A Risk Assessment Tool and Additional Guidance to Enhance Safeguarding (p.59) available in UNICEF, "ENGAGED AND HEARD! Guidelines on Adolescent Participation and Civic Engagement."
23. UNICEF Office of Research- Innocenti, "Ethical Research Involving Children," UNICEF-IRC, (2013).

WILL UX TEACH US HOW TO GET TO SESAME STREET? INVESTING IN CHILD-CENTERED RESEARCH TO DEVELOP SESAME STREET'S DIGITAL DESIGN

Since its beginning in 1969, *Sesame Street* has centered preschool children's participation in the content creation process, regarding young children as meaningful and active stakeholders. We place preschoolers at the heart of the experience through child-centered formative research, empowering children to lead the evolution of content designed to support their holistic development. Implementing this iterative process of content creation also serves a critical business need: investing in child-centered formative research during the design and development stage generates valuable findings and recommendations prior to product finalization and distribution.

Interactive digital experiences foster comprehension and cognitive development by allowing for exploration beyond everyday lives, encouraging children to be active participants in the learning process, and providing detailed, appropriate feedback about the children's actions. While UX research has obvious benefits, it might be challenging to see how young children can meaningfully contribute to it. At Sesame Workshop, the customary inclusion of preschoolers and their caregivers in formative research is a testament to how complex, capable, and perceptive we know children to be. From this place of respect, our work with children leads to valuable insights.

We begin with research questions and a structured practice. UX research methods, like observing children's interactions with early prototypes, provides actionable insight into how children use and understand a variety of new and curricular digital experiences.

Working with preschoolers, however, presents unique challenges specific to both curriculum and usability; they are in a period of rapid physical, cognitive, motor, and social development, meaning "early childhood" encompasses a wide range of skills and knowledge., meaning that "early childhood" encompasses a wide range of knowledge and skills. Their developing language skills often prevent them from articulating what does or does not work about a game, what they do or do not like, or what and how they are learning.

From an understanding of child development and educational technology, our teams interpret children's behavior into digital experiences that fit into our audience's needs. The findings from our child-centered research, like prior knowledge children bring to a digital experience or how cognitive abilities may limit their ability to engage, lead directly to actionable recommendations that help guide design to better suit the child user. Our approach is rooted in constructivist learning theory, the concept that children "construct" their own knowledge by actively exploring the world around them in structured and systematic ways, and content that is informed by research with children and empowers them with choice and control fosters comprehension and cognitive development through that exploration.

We will explore three examples: *Sesame Street Alphabet Kitchen app*, *Give Me a Clue* voice recognition prototype, and *Making It Work* digital game to discuss how we developed our questions, what we learned, and how that shaped design.
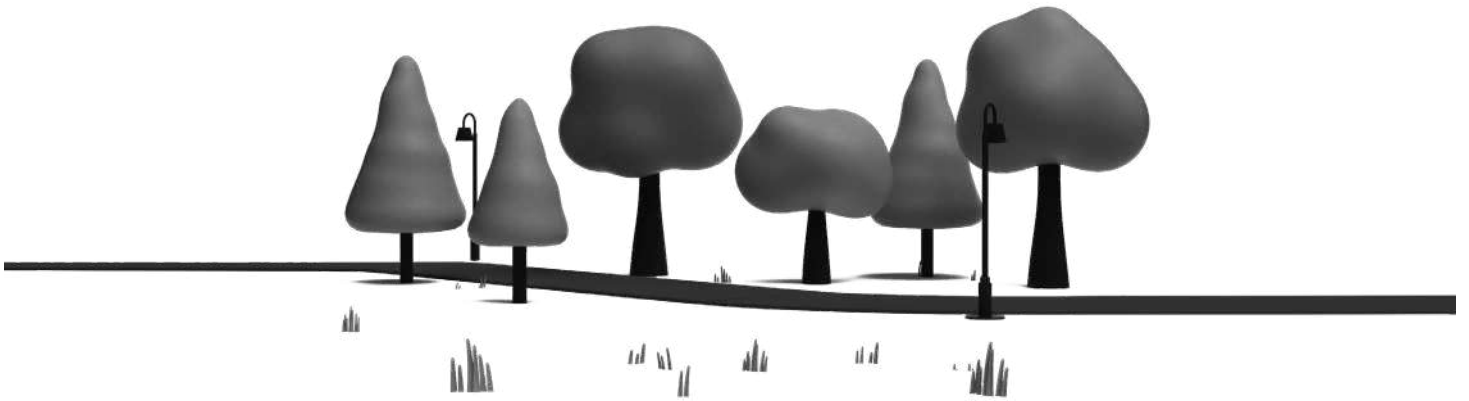
SESAME STREET ALPHABET KITCHEN: NEW PLAY PATTERNS

For our Sesame Street Alphabet Kitchen app, the design team wanted to combine a familiar literacy curriculum with a new kind of play combining physical manipulatives placed on a tablet screen and detected by an app. Given this intersection of a familiar premise with a new type of play, the research question was "**How might children combine classic, physical play patterns with digital play?**" When children were provided with physical manipulatives (small plastic vowels) during playtesting, researchers found that combining classic toys with digital play required children to learn some new rules to engage effectively. The voiceover in the app instructed children to "place" the toys, and, as they might "place" a puzzle piece, children would put the letter on the screen and not remove it, causing letter pieces to pile up on the screen or triggering unanticipated responses from the game. Children were interpreting the word "place"

as they would with puzzle pieces or blocks—place it and leave it there! Researchers tried prompting children with the word "stamp," which began to encourage children to place and lift the toy pieces on the screen to make the appropriate letter appear on the screen and continue with the game.

These findings led to changes in the voiceover instructions that remind children to use only one toy at a time or to stamp the toy on the screen. Researchers also found that children would sometimes place the letter toys upside down. The letter recognition technology (unique magnets on the back of each letter) that allowed the app to recognize the letter toys did not allow it to recognize the orientation of the letter. Sometimes, research recommendations are not feasible due to time, budget, and/or scope constraints, but those findings can inform future work.
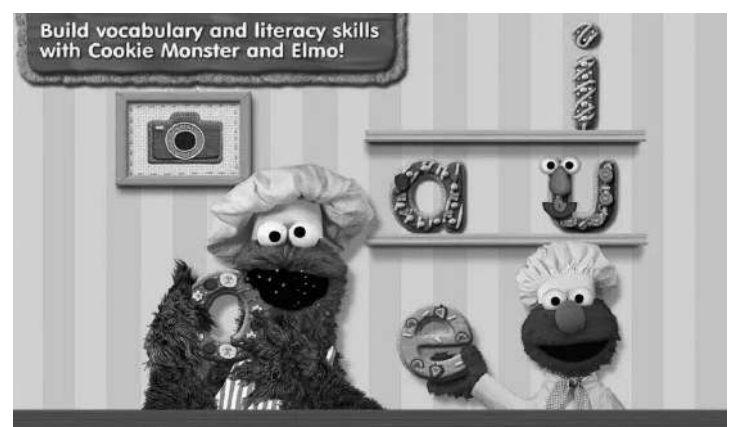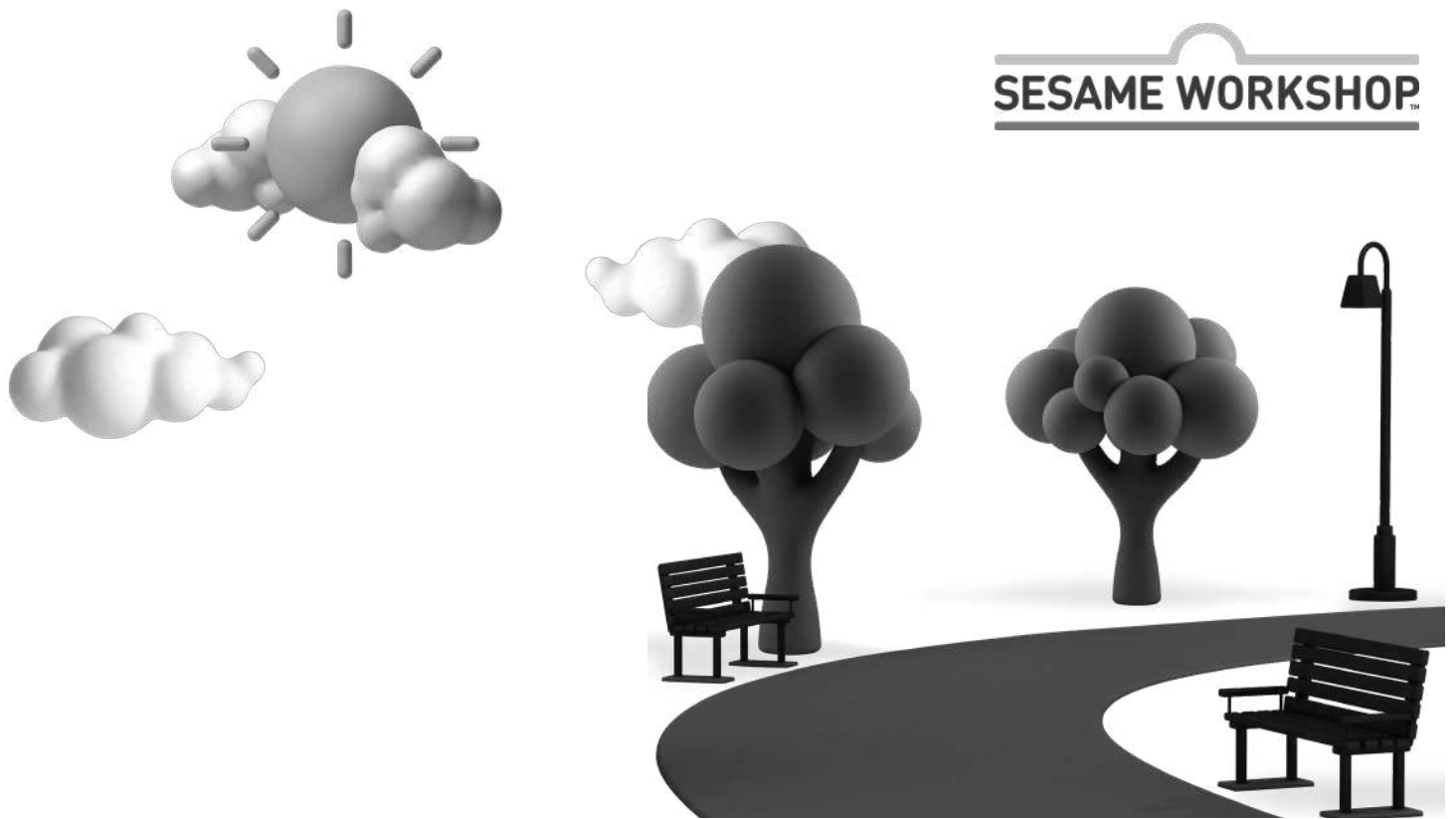
SESAME STREET GIVE ME A CLUE: TECHNOLOGY DEVELOPMENT

Other times, designers create a brand-new technology. Our digital team worked with a well-known industry leader in voice recognition to develop a technology specifically for children. In Give Me a Clue, Cookie Monster and the child player are partners in a pyramid-style game show and must speak clues to each other and guess a secret word. In this case, our research questions were, "**How might children use voice recognition? In what ways would the software need to be adapted for children's speech patterns, expressive language, and engagement?**" Voice recognition software is not optimized for children, so we planned Give Me a Clue with a deep yet highly stable and structured curriculum—animals and their attributes—to limit the variability in child responses. Before any technology was put in front of children, researchers did a form of paper testing where they played guessing games with children. By showing pictures of animals and having children describe the image to the researcher, the testing mimicked how the Give Me a Clue gameshow would work and provided information about the kinds of language and grammar. when playing this game. The ways children described animals and the words they used to guess animals when given clues (e.g., cat, kitty, kitten, kitty-cat), were then used to build technology that could recognize the specific language and grammar of young children.

SEE AMAZING IN ALL CHILDREN - MAKING IT WORK: TAILORING CURRICULUM AND USABILITY

When creating content to fit the needs of targeted populations within the preschool audience, research questions must be further specialized. Making It Work, a digital game within our See Amazing In All Children autism initiative, is focused on utilizing calm-down strategies in the face of disappointment, surprises, or change. In this case, our research questions focused on the developmental needs and user experiences of children with autism: "**How do children with autism interact with digital experiences for play and learning? What can we best use technology to support autistic children learning this curriculum?**" When we cannot work with children directly, parents, teachers, and other caregivers provide helpful insights into how young children play and learn. In early 2021, logistics of the pandemic made it impossible to engage directly with preschoolers. Instead, we conducted focus groups with teachers of preschoolers with autism, who told the moderator how their students use and love technology, are familiar with touch gestures on tablets and phones, and have a wide spectrum of support needs. Teachers' knowledge of child development and their experiences of autistic students created a valuable perspective.

From these focus groups, researchers recommended changes to simplify instructions and visuals, vary curricular moments, and modify calm-down strategies to be more like those that children already know. While some teacher recommendations were beyond the scope of the project, most could be directly incorporated into the art, script, and functionality of the game to support the varied ways children with autism learn from and interact with digital media.
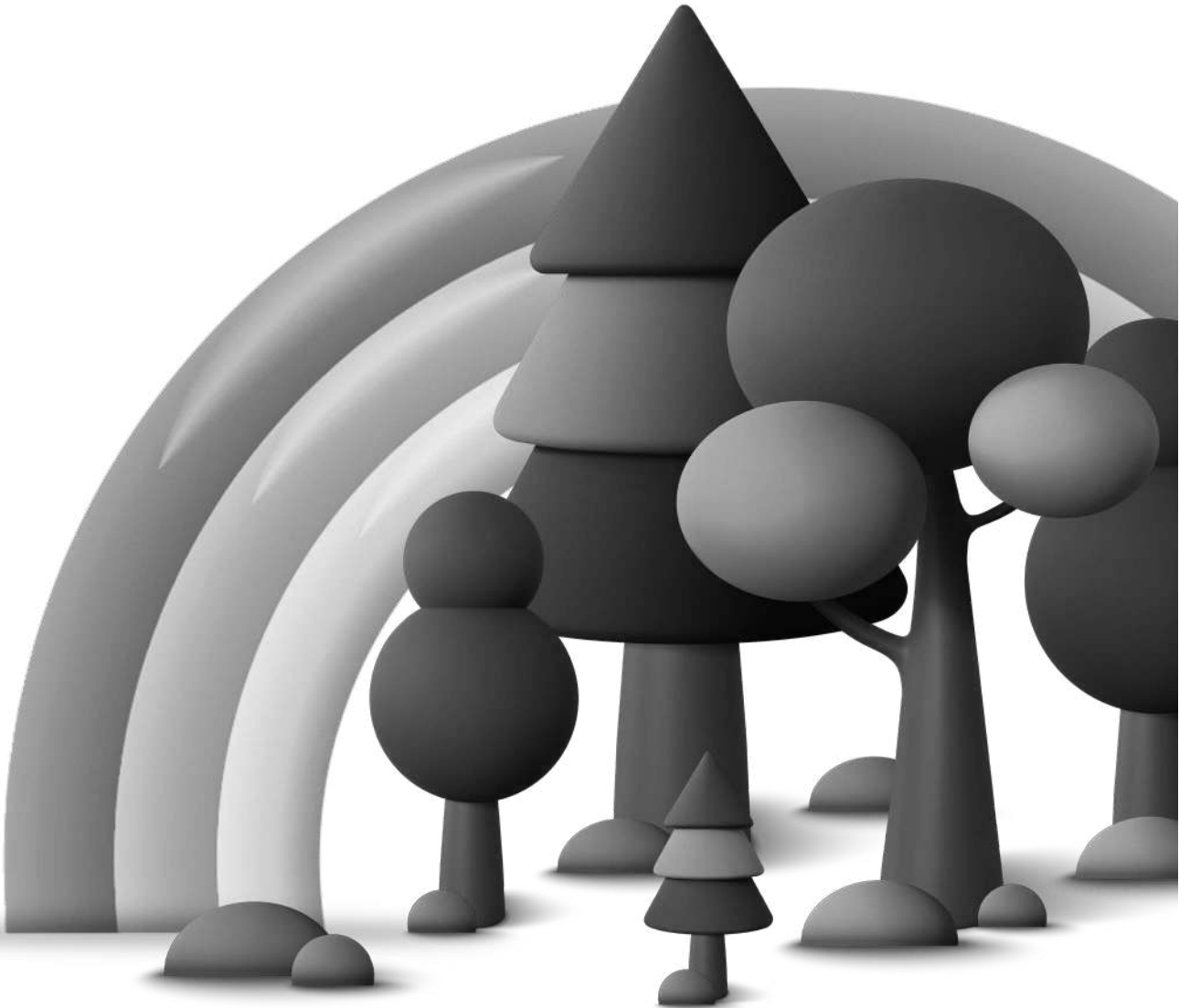
KIDS INDEED KNOW BEST!

In designing and playtesting digital experiences, conducting research with preschoolers offers important value to design processes and becomes a critical business practice. The value of child-centered research lies in the improvements that can be implemented after playtesting content directly with preschoolers and, sometimes, the adults in their lives. The examples here highlight the critical insights even very young children can provide during product development for digital experiences and the importance of investing in that testing during product conceptualization and prototyping.

Had the team not invested in child-centered research, Sesame might have produced and disseminated preschool content that children struggled to navigate—either because of confusing or unclear language or challenging interfaces—and, thus, would be unlikely to use. When children are better able and more likely to use our content, we are better able to meaningfully contribute to their growth and development. Through collaborative research and design relationships, organizations can develop meaningful, positive digital experiences for children by optimizing technology and curricula specifically to children's needs.

10 PRINCIPLES TO RECOGNIZE CHILDREN'S CREATIVITY AND THEIR UNIVERSAL RIGHTS IN DESIGN

WOUTER SLUIS-THIESCHEFFER

Children's creativity is increasingly valued by adults and, subsequently, their impact on society. On the other hand, there is a strong technology push that often violates children's rights and needs to be mitigated. Both forces lead to an increased demand for including children in the design process of new technology. The International Association for Children's Rights in Design proposed a set of guidelines for design professionals to consider children's rights in a creative process.

Children's creativity has traditionally been seen as 'child's play', defined as 'little-C creativity'[1]. The term little-c creativity and its counterpart, big-C Creativity, discriminates everyday creativity (e.g., creatively arranging photos, creating a new menu from left-overs) from eminent creativity (e.g., the creative genius required to make a societal or cultural impact). However, we need to revisit this view. There are an increasing number of examples where children have created or contributed to solutions that have had a societal impact. Recent examples are Emma Yang (app to support elderly with Dementia[2]), Kelvin Doe (engineered a battery from scrap materials), and Zea Tongeman (game to increase motivation to recycle). With the plethora of generative tools available (such as coding platforms) and the knowledge to deploy them (in wikis and videos), children now find themselves within a perfect storm of opportunity to transform their situation. Therefore, society must reform its 'small c' perceptions of children into being 'pro-C creative,' in other words 'capable of creative acts within an organisation, community or domain'[1], and proactively include them in the design process.

While early access to digital tools and content has created opportunities for children, innovations in this space are increasingly being used to target children for commercial purposes. Facebook and Google explicitly aim to target children as young as six years old to monetise their behaviour. For some years, concerns over how to keep children safe when interacting with intelligent, online technology have grown, as proven by the introduction of the Children's Online Privacy Protection Act (USA, 1998), De Code voor Kinderrechten (the Netherlands, 2021), the Age Appropriate Design Code (UK, 2021), and General Comment 25 on 'Children's Rights Concerning the Digital Environment', adopted by the UN Committee on the Rights of the Child in 2021. These kinds of regulations and recommendations focus on prescribing a safe, healthy, and appropriate outcome and how to assess that. However, design experts and child experts realised this approach only allows for the evaluation of technology after its release. To guarantee that a released product respects children's rights, health, and development, a focus on children should take place during the creative process. But how do we do that?

1. Kaufman, J. C., & Beghetto, R. A. (2009). Beyond big and little: The four c model of creativity. Review of General Psychology, 13(1), 1–12. https://doi.org/10.1037/a0013688
2. Yang, E. (2018). Timeless - A Mobile App for Alzheimer's Patients | Indiegogo. Indiegogo Project. https://www.indiegogo.com/projects/timeless-a-mobile-app-for-alzheimer-s-patients#/
3. Bughin, J., Brussels, |, Hazan, E., Paris, |, Lund, S., & Washington, |. (2018). SKILL SHIFT AUTOMATION AND THE FUTURE OF THE WORKFORCE.

In 2018, a group of designers, psychologists, neuroscientists, health care specialists, educators, and children's rights experts collaborated with UNICEF to create the first version of a guide that includes children's rights in a design process. Since then, it has been further developed into a set of design principles and methods to help create a design process that companies can adopt. This contribution will conclude with the latest version of these principles, including the wording chosen by children worldwide.

The initiative materialised into an association to maintain these principles and describe methods to implement them in the creative process. The association aims to spark local chapters worldwide to help designers get experience working with these principles. The first companies have been reported to include (some of) these principles in their ethical code.

The increased recognition of the impact of children's creativity parallels interestingly with the forecast of the World Economic Forum for 2020 and 2030: creativity is in the top three assets of the future workforce[3,4]. Recent studies with adults also demonstrate designers create more innovative concepts and ideas when working within a co-design environment than when creating ideas individually[5,6]. The paragraphs above provide evidence for the idea that the creativity of (some) children counts as 'pro-C creativity.' Subsequently, it would be logical to assume designers could also be more creative when working with children within a co-design environment. Evidence for that assumption requires insights about the design activities that yield the best contributions in terms of creativity when applied with children. So to design something truly creative and, at the same time, inclusive of children's needs, let's include children's creativity and their rights in the design process.

4. World Economic Forum. (2016). The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution. Growth Strategies, January, 2–3. https://doi.org/10.1177/1946756712473437
5. Mitchell, V., Ross, T., May, A., Sims, R., & Parker, C. (2016). An empirical investigation of the impact of using co-design methods when generating proposals for sustainable travel solutions. CoDesign, 12(4), 205–220. https://doi.org/10.1080/15710882.2015.1091894
6. Trischler, J., Pervan, S. J., Kelly, S. J., & Scott, D. R. (2018). The Value of Codesign. Journal of Service Research, 21(1), 75–100. https://doi.org/10.1177/1094670517714060

In 2018, the association D4CR started with 10 principles phrased by professionals in children's rights and design. Since then, they've continued to evolve, for example, by having them rephrased by children. The principles are actively maintained by D4CR, where you can find the latest version and information: https://designingforchildrensrights.org/.

PRINCIPLE 1

"Include me and my friends equally."
Boy, 15 year old, Helsinki

Explanation
I need a product that does not discriminate against characteristics such as gender, age, ability, language, ethnicity, and socioeconomic status. Support this diversity in all aspects of your company's design (including advertising). Expect me to use your product in unintended ways and keep in mind that I might use your product even if it's not designed for me.

Example
Consult and regularly evaluate the current attitude and use of your products with a panel of children. A panel of children who work with you for a few years helps gain more in-depth insights. For more concrete examples, look at the work of Fails and Druin[1] or the Designathon movement[2].

Everyone can use
RIGHT TO NON-DISCRIMINATION

PRINCIPLE 2

"Let me grow at my own pace and I will ask for support when I need it."
Preisha, 12 year old, Vantaa

Explanation
I need to experiment, take risks, and learn from my mistakes. If or when there are mistakes, support me to fix them by myself or with an adult. Encourage my curiosity but consider my capabilities based on age and development. I need support to acquire new skills and encouragement to try self-driven challenges.

Example
Define your target group of children clearly in terms of age and associated capabilities and development. Design for a persona and think about how your product supports that persona from one relevant milestone to the next. For example, make use of the Developmental Situated Design cards[3].

Give me room to explore and support my growth
RIGHT TO DEVELOPMENT

PRINCIPLE 3

"I am and I can, so take my ideas into account first."
Karolin, 11 year old, Tallinn

Explanation
Help me understand my place and value in the world. I need space to build and express a stronger sense of self. You can help me do this by involving me as a contributor (not just a consumer).

Example
If your product involves, for example, a support platform, allow children to contribute solutions. If your product supports a maker community, allow children to develop skills based on their level of competence with your product rather than their age. Allow for safe, appropriate, user-generated content. A great example is LEGO building community (https://ideas.lego.com/howitworks).

I have purpose so make my influence matter
RIGHT TO PARTICIPATE

PRINCIPLE 4

"Offer me ways to protect myself and to help me and my friends understand how to stay in control of our safety."
Girl, 11 year old, Bengaluru, India

Explanation
Make sure your products are safe for me to use and do not assume anyone else will ensure my safety. A marked path or 'lifeguard' can tell me why something is unsafe and inform me on how to stay safe.
Help me to improve my digital literacy. Give me tools to distance myself from those I do not want to have contact with, making unwanted content or contacts easy to block. Do not expose me to unwanted, inappropriate, or illegal content. Provide me with a model for healthy behaviour and make sure you equip my guardians with an understanding of this.

Example
Make access to helplines very obviously accessible for children, for example, using chat functionality with typing, but also consider voice services for the age that cannot read yet. Consider an alert button for children to mark unwanted, inappropriate, or illegal content. Include parents and children in the design process to ideate acceptable and practical solutions. Examples are the report buttons in Facebook or a browser plugin similar to the Dutch initiative https://meldknop.nl

Offer me something safe and keep me protected
RIGHT TO BE PROTECTED

PRINCIPLE 5

"Respect the data you get, and let me know who will have access."
Mark and Gerben, 11 years old, Amsterdam

"I'm okay with sharing my achievements, not my activity."
Myra, 4 year old, Boston

Explanation
Help me keep control over my data by giving me choices about what data to share, for what purpose, and let me know how my data is used. Do not take any more than you need, and do not monetise my personal data or give it to other people. Care about me by respecting my data.

Example
Reconsider your technological options; online storage and internet connections are not the only way to communicate between devices. Local networks and/or ad-hoc communication can be realised in several ways, without online access. Make sure you only implement what you need.

Do not misuse my data
RIGHT TO PRIVACY

1. Fails, J. A., Guha, M. L., & Druin, A. (2013). Methods and Techniques for Involving Children in the Design of New Technology for Children. Foundations and Trends in Human–Computer Interaction, 6(2), 85–166. https://doi.org/10.1561/1100000018
2. Beamer, E., & Conkic, I. (n.d.). Design Thinking | Children | Designathon Works. Website. Retrieved December 1, 2018, from https://www.designathon.nl/
3. Bekker, T., & Antle, A. N. (2011). Developmentally Situated Design (DSD): Making Theoretical Knowledge Accessible to Designers of Children's Technology.

PRINCIPLE 6

"Give me more time to play, allow me to use my time to play."
Olympia, 9 year old and
Kostis, 10 year old, Thessaloniki

Explanation
When using your product or service, consider different moods, views, and contexts of play. I am active, curious, and creative but guide me to have a break and do not forget to offer me some breathing space. Foster interactive and passive time and encourage me to take breaks. Make it easy to set my limits and help to develop and transform them as my understanding of the world around me broadens.

Example
Current casual games and social media platforms are optimised for lengthy screen times and strong retention. Include in the user journey a possibility to take time off the screen and maybe extend the journey to physical activities. Some powerful examples of these mechanics can be found in Animal Crossings and Pokémon Go.

Create space for play, including a choice to chill
**RIGHT TO DEVELOPMENT, RIGHT TO LEARN,
RIGHT TO LEISURE AND PLAY**

PRINCIPLE 7

"Make a product with which I can make something of my own together
with my friends, learn something and share it with others."
Mehmet, 12 year old, Amsterdam

Explanation
My well-being, social life, play, creativity, self-expression, and learning can be enhanced when I collaborate and share with others. Provide me with experiences to help me build relationships and social skills with my peers and community, but also give me the tools to distance myself from those I do not want to have contact with. Encourage equality in your product or service by not highlighting differences that can be used in discrimination, such as the number of friends or likes.

Example
If your products use avatars, make their representation relatable for all children, both visually and in their behaviour. Implementations of products with inclusive avatars can be found in, for example, the products of LEGO Friends and the games of Toca Boca.

Encourage me to be active and play with others
**RIGHT TO DEVELOPMENT
RIGHT TO PARTICIPATE**

PRINCIPLE 8

"Ads should be different from the content I am expecting, and use questions instead of "do-sentences" when making me an offer."
Myra, 4 year old, Boston

Explanation
Label advertising clearly, so I do not confuse it with other information. Transparently indicate when actions in your product or service commit me to download content or commit to exclusive use of your product. Make sure I fully understand all purchases before I am paying for those in or through your product or service.

Example
Test early with children of different ages to learn what and how they distinguish commercial activities. Also, observe how quickly they learn to distinguish commercial activities from actions that belong to your product. Consult with parents to understand what they think is appropriate and acceptable exposure to commercial activities.

Help me recognize and understand commercial activities
RIGHT TO INFORMATION

PRINCIPLE 9

"Use clear and understandable pictures and sentences. Let me answer in
a way that suits me."
Mark and Gerben, 11 years old, Amsterdam

Explanation
Make sure I understand all relevant information that has an impact on me. This includes the terms and conditions of your product or service. Consider all forms of communication (visuals, sound etc.) and make it accessible to all. Keep in mind that age, ability, culture, and language impact my understanding.

Example
Involve children in the design process, create communication with them, and test the results early in the development process. If you release internationally, make sure to run local studies in key markets.

Use communication I can understand
RIGHT TO INFORMATION

PRINCIPLE 10

"Let me show you how I live my life and what is
important to me."
Girl, 9 year old, Helsinki

Explanation
You should spend time with me when you design a product or a service I may use. My friends, parents, teachers, and communities also care about your product or service, so include them in the process. We have good ideas that could help you. Also, ensure that you talk with people who are experts on my needs.

Example
Incorporate the views of young people by working with a panel of children you can consult with to evaluate your products. Ensure children of different ages and backgrounds are represented to work with you for a few years to gain more in-depth insights. For more concrete examples, look at the work of the Designathon movement[1].

You don't know me, so make sure you include me
RIGHT TO BE HEARD, RIGHT TO PARTICIPATE

The principles were worded by children with the help of the following grown-ups:

Eva Liisa Kubinyi
Hanna Kapanen
Manos Kasapikis
Mydhili Bayyapunedi
Nehal Jain
Vrikson Acosta
Wouter Sluis-Thiescheffer

Grown-up version: https://childrensdesignguide.org/principles/

The principles are maintained by the design for the children's rights association.

1. Beamer, E., & Conkic, I. (n.d.). Design Thinking | Children | Designathon Works. Website. Retrieved December 1, 2018, from https://www.designathon.nl/

THE KIDS FIRST APPROACH
TO CO-CREATION

TOCA BOCA

WHY AND HOW TOCA BOCA
FACILITATES KID PARTICIPATION

Toca Boca's main guiding principle is simple: kids first. This kids-first approach means we consider everything we do and say primarily from a kid's perspective rather than a grownup's.

It's a fine line to tread between being the true childhood ally we want to be and being someone who tries too hard to be down with kids. Luckily, we have expert help, and yes, that means kids. Since the launch of Toca Boca, involving kids in our work and world has been at the top of our agenda when creating our apps. It's the only way we can be sure what we make is relevant and fun for our target audience. It's also a lot more fun for us since kids bring joy, curiosity, and energy to the process.

We have an extensive framework in place for idea development and play testing that helps us get qualitative feedback and input from kids around the world in a constructive, fun and safe environment. The user generated content created by kids is extremely valuable for our understanding of how our audience actually uses our games and how we should develop the games to suit kids even better. Kids are also regularly invited to come over to our office to share their ideas and get hands-on with our game prototypes. Since our apps are designed with the intent of being as intuitive as possible, we need to check that our assumptions work. If kids start playing in a different way than we had perceived, it's back to the drawing board to figure out if we need to change the game plan or the basic game idea.

Every game and app we create should primarily be interesting and appealing to kids and designed in such a way that they can figure out how to play them on their own. They should never have to ask an adult how to play the games (unless they want to do so).

We have other important guiding principles too. Without exception, our games are non-competitive, gender-neutral, and aim to reflect the diversity of both our player community and the world at large. If we swear by the kids-first principle, then kids must also feel seen, heard, comfortable, safe, and at home in our world... otherwise, our ambition doesn't make a difference to the kids we want to reach.

With this in mind, Toca Life World (our biggest app to date) offers the player hundreds of characters to choose from, as well as a character creator with which the player can tailor additional characters to suit their own ideas. Our characters come in all ages and ethnicities, with a wide variety of dress, looks and aids, such as glasses, hearing aids, prosthetics, and wheelchairs. Our communication features same sex parents and all kinds of blended families, as well as households with a kid and a grandparent, since we know no two families look alike, and we want all kids to feel included. In the same way, we want kids and tweens to know and feel that social and emotional representation is just as important to us as physical representation.
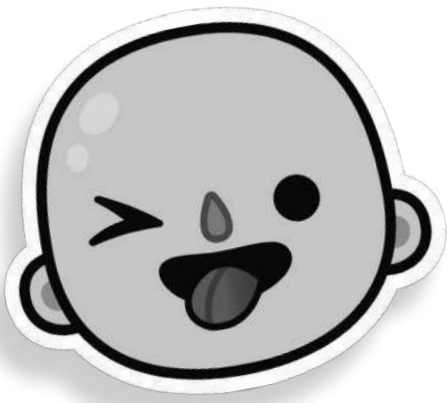
Matters of inclusion and representation are crucial and lie at the core of our games and everything we do. But are we doing it right? It seems we're on the right track. The feedback kids (and their families and caregivers) have given us regarding the diversity aspect of Toca Life World has been phenomenal.

One clear signal we've been getting from kids is that they appreciate and desire more ways to co-create and impact game design and development. We've taken that to heart and have implemented kids' ideas into the games and asked kids for input regarding character and location design. For instance, we recently asked kids what new character expressions we should incorporate into the game. The result: four new expressions built from kid input, released in late 2021.
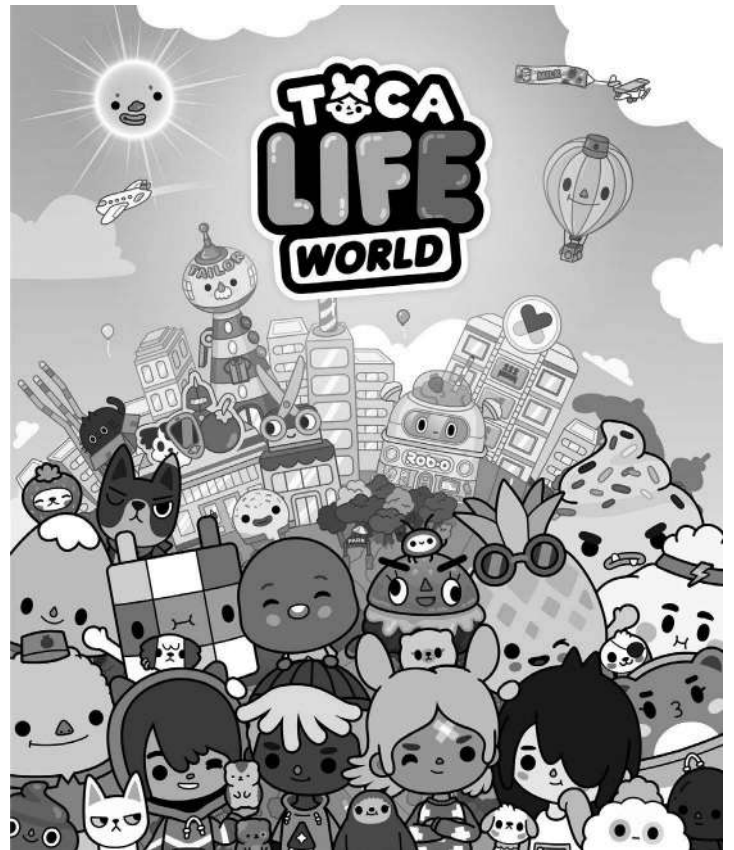
Toca Boca was founded in 2010 and has enjoyed steady growth over a decade. But in the past two years, the number of players and subscribers to our social media channels has grown in an unprecedented way. Toca Boca's games now have over 74 million monthly active users while 1.4 million (and counting) subscribe to Toca Boca's YouTube channel.

But more important than counting followers is the content the kids are creating. Every day, we're amazed by what the kids make with the creative tools and interactive content we present them. They compose, design, act out, record, edit, and add soundtracks in ways that are mind blowing.

It's the ultimate proof that our belief in providing kids free reins and letting them figure things out their way is something that works and, even better, sees their creativity thrive.

Amelia's drawing:

Final expression:

Like all companies that create products and experiences for kids, we must ask ourselves:

1. How exactly do we reach the kids whose opinions we need?

2. How do we (ideally) reach kids of all socioeconomic standings and backgrounds all over the world?

3. How do we know we get the most honest replies from kids when their parents are around?

4. When performing interviews over video or audio, what input do we miss out on that doesn't translate the way it would if we met in person?

We don't have the full answers to these questions, but we will keep trying to find them to do what we have always done and always will: transform the input from kids into creative, relevant and innovative game experiences that resonate with them, the kids-first way.
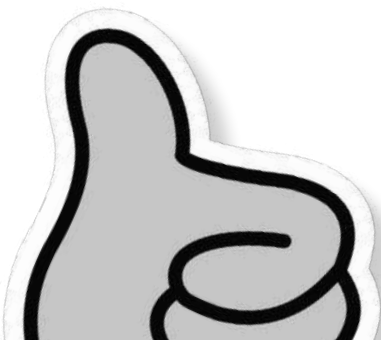
MAKING THE VOICE OF CHILDREN AND YOUNG PEOPLE MATTER IN THE BETTER INTERNET FOR KIDS INITIATIVE

HANS MARTENS

For good reasons, child and youth participation have become an inevitable, and perhaps even fashionable, dimension of private and public decision making in the safer and better internet ecosystem. In this contribution, we reflect on the promise and pitfalls of the involvement of children and young people in product and policy development cycles, while pointing to possible ways forward.

We will make our case building upon European Schoolnet's recent experiences with consulting children and young people as part of the Better Internet for Kids (BIK) initiative[1], which we coordinate on behalf of the European Commission.

The UN Committee on the Rights of the Child has long argued, "appearing to 'listen' to children is relatively unchallenging; giving due weight to their views requires real change. Listening to children should not be seen as an end in itself, but rather as a means."[2]

Borrowing from Laura Lundy's Model of Participation[3], our key point will be that good progress is being made to create opportunities for involvement. It is now common practice to give a voice to children and young people to express their views with an audience in place with a responsibility to listen. The main challenge, however, remains to ensure those views are acted upon, finding ways to increase the transparency of and accountability for important decisions made and the reasons why.

1. https://www.betterinternetforkids.eu
2. https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CRC%2fGC%2f2003%2f5&Lang=en
3. https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1080/01411920701657033

THE PROMISE

Child rights advocates often emphasise the need for all public and private stakeholders to draw upon genuine child and youth participation activities[4] to understand and respond to risks and opportunities in the online world.

Educators should build upon the views, experiences, knowledge, and abilities of the groups they work with, exploring and testing which pedagogical or awareness-raising approach is most likely to make a meaningful difference. This is a matter of making the process inclusive, child-centred, and age appropriate, while ensuring that intended outcomes are relevant to the everyday lives of children and young people.

Likewise, parents and carers should engage in an open and ongoing dialogue, involving children and young people as active participants in the parental mediation process. They should sustain "an appropriate balance between the child's protection and emerging autonomy, based on mutual empathy and respect, over prohibition or control."[5]

Industry and policy makers have a responsibility to ensure children and young people can actively participate in decision-making processes that might impact their rights in a digital world, as enshrined in the Article 12 right to participation or right to be heard of the Convention on the Rights of the Child (CRC).[6]
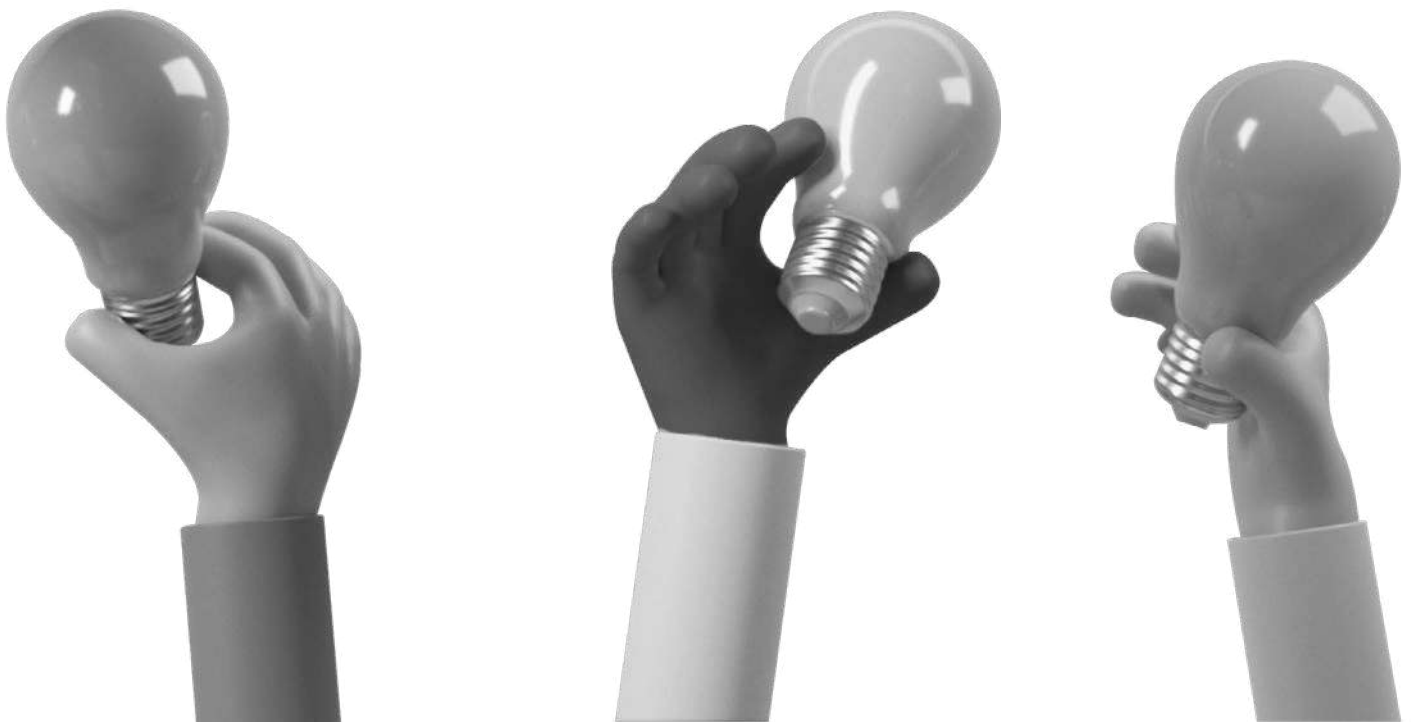
4.   https://www.unicef-irc.org/publications/pdf/childrens_participation.pdf
5.   UN Committee on the Rights of the Child, 'General Comment No. 25 (2021) on Children's Rights in Relation to the Digital Environment' https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CRC/C/GC/25&Lang=en
6.   https://www.ohchr.org/en/professionalinterest/pages/crc.aspx

FROM THEORY TO PRACTICE

As part of the Better Internet for Kids initiative, European Schoolnet has been coordinating several consultation activities on behalf of the European Commission, aiming to put into practice a rights-based co-creation and consultation approach, with industry players and policy makers.
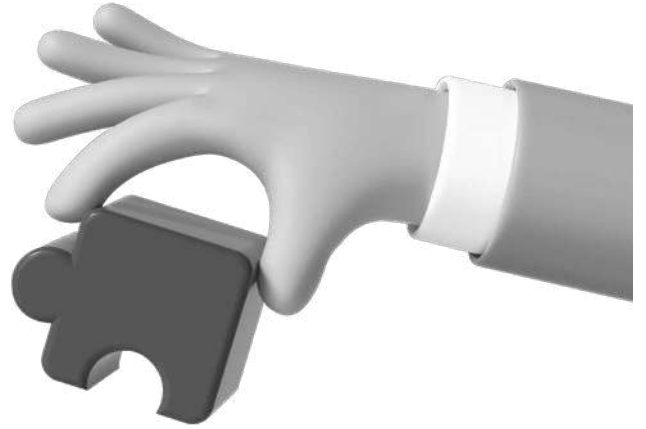
#PLEDGE2YOUTH CHALLENGE

From an industry point of view, talking to children and young people about the design and evaluation of services can be inspiring and can influence change at company level.

Within this context, "child-centred design refers to designing products for children by incorporating children's perspectives, needs and rights at the heart of the design process."[7] If children are not involved as co-creators and designers when products and services for children are being created, the possibility arises that "companies end up basing their designs on myths and stereotypes, generational-gap fears and misunderstanding of children's perceptions."[8]

In celebration of Safer Internet Day 2020, six BIK Youth Ambassadors launched the #Pledge2Youth challenge9 in the presence of

a group of company signatories to the Alliance to protect minors online.[10]

Based on a preliminary mapping of the apps and online services used most often by children and young people across Europe, the BIK Youth Ambassadors provided a first indication of priorities they see for the design of online platforms and services to ensure they are age appropriate for and meet the development needs of children and young people.

This resulted in a year-long work programme, organised in an online, decentralised, and industry-led manner. Five companies set a more specific goal or challenge to be resolved, following a pre-established protocol. They broke down a concrete business problem into a more specific set of challenges or tasks for children and young people to work on.

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7. Shuli Gilutz, 'Child-Centered Design: Integrating Children's Rights and Ethics into the Heart of the Design Process' in Chip Donohue (ed), Exploring Key Issues in Early Childhood and Technology. Evolving Perspectives and Innovative Approaches (1st Edition, Routledge 2019), https://www.taylorfrancis.com, accessed 20 January 2020.

The table below briefly outlines the focus, aims and methodology of the five challenges:

	Focus	Aim	Methodology
Facebook/ TTC Labs	Transparency and control, age-appropriate safeguards, age verification.	Make data policies and privacy controls easier to understand. Strengthen privacy for young people. Consider fair and balanced age verification systems.	TTC Labs Design Jam one-day events. Virtual global roundtables. Creation of Facebook Youth Ambassador programme.
Samsung	Privacy settings on Samsung devices, awareness of online safety risks and well-being.	Help parents and young people understand privacy settings on Samsung devices. Raise awareness around online safety issues such as fake news, online behaviour, and digital well-being.	Offline (prior to the COVID-19 pandemic) and online workshops. Three phases – Discover, Ideate, Prototype. Use of local education partners in four target countries to provide access to children and young people.
Sulake	Users' understanding and visibility of terms and conditions.	Empower users to make informed decisions by increasing the transparency and visibility of terms and conditions. Consider ways to simplify terms and conditions and make them more engaging.	Co-creation sessions run within the Habbo game environment. Sessions run by Sulake staff.
Super RTL	Users' understanding of data collection, giving consent, parental involvement.	Discover what children understand about data collection and protection. Explore ways to redesign the TOGGO Radio consent form to aid understanding and accessibility.	Use of SUPER RTL's UX Labs. Frequent feedback sought at all stages of the design process.
Twitter	Media literacy, digital empathy.	Design and run media literacy and digital empathy campaign. Empower young people to develop critical thinking skills and resilience.	Twitter training session with BIK Youth Ambassadors. Media literacy/digital empathy awareness session with young people. Monthly online discussion sessions with BIK Youth Ambassadors. #TwitterForGood campaign

8. ibid.
9. https://www.betterinternetforkids.eu/policy/youth-pledge-for-a-better-internet
10. For more information on the Alliance to better protect minors online, see https://ec.europa.eu/digital-single-market/en/alliance-better-protect-minors-online.

#DIGITALDECADE4YOUTH

Likewise, from a public policy perspective, children and young people should have a voice in decision making when laws and measures concerning them are prepared and evaluated. Again, the notion of participation highlights the need for dialogue and information, so the views of children and young people can shape the outcome of such processes.

In line with this, European Schoolnet was tasked by the European Commission to organise the #DigitalDecade4YOUth consultation in preparation for a new European Strategy for a Better Internet for Children, published in spring 2022.[11]

In terms of process and results, the learnings from this line of public policy work are directly transferable to the private sector.

From March to August 2021, over 70 consultation sessions were carried out with support from the Insafe network of European Safer Internet Centres and a wider range of European online safety and child rights organisations.[12]

While the majority of groups consulted were adolescents (age 12-18), 21 out of 71 consultation groups primarily consisted of children under 12, with the youngest respondent being 5 years old.

To make the consultation process inclusive, substantial time and effort was invested to reach out to children and young people specifically in vulnerable and marginalised situations. As a result, 30 out of 71 consultation sessions included (at least some) children and young people with various types of disabilities (intellectual, hearing, visual and physical impairment), children and young people with emotional and behaviour problems, migrants, Roma children, children in care, LGBTQ+ children, children and young people from rural and isolated regions, and children from disadvantaged or dysfunctional families.

For each consultation session, a series of hands-on activities were organised, in participants' national language, following a structured protocol building upon the following best practice principles.[13]

- Being transparent and informative.

- Participation should be voluntary.

- The work methods will be child-centred, age-appropriate and youth-friendly.

- Participant views will be treated with respect.

- Participants will be able to address the issues they identify as important and relevant.

- Participation will be inclusive.

- Facilitators will be trained.

- Facilitators will create a safe space where participants can choose to speak or not.

- Participants will be informed about how their views are being considered and used.

In this way, the voices of more than 750 children and young people across Europe were heard in a transparent and systematic way, gaining a better understanding of how the digital world impacts (the rights of) children and young people.

It was clear from the consultation sessions that the internet plays a crucial role in almost every aspect of children's and young people's lives. It allows them to stay connected with friends and family, it offers various opportunities for entertainment and to escape boredom, and it presents an important source of information and learning.

Children and young people have a good understanding of both positive and negative aspects of the internet and a clear vision about which issues need to be tackled as a priority. They are able to form original and specific guidance and recommendations for various actors, including but not limited to policy makers and digital operators, on how this should be done in practice.
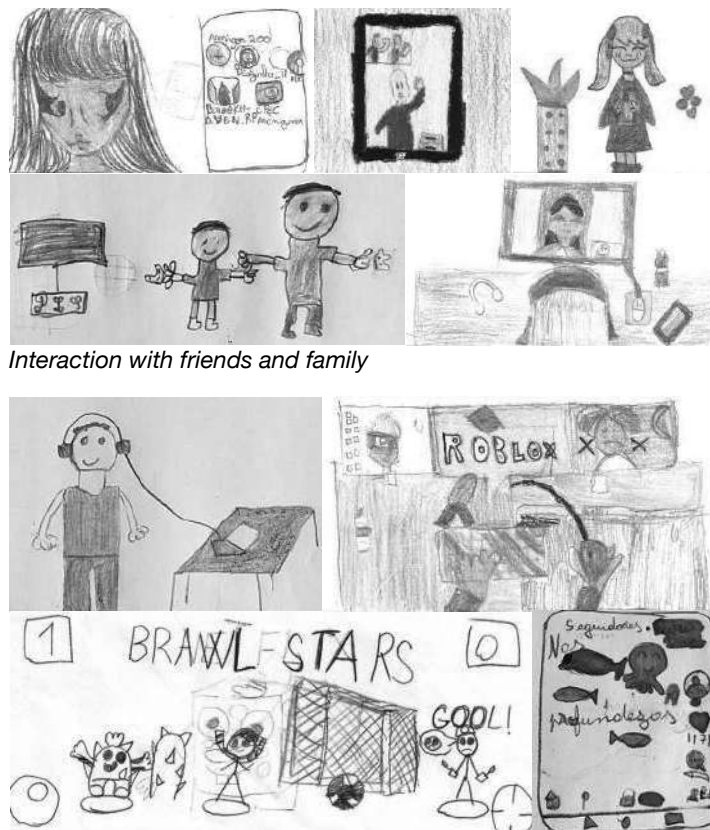
Interaction with friends and family

Digtal media and entertainment

Figure 1. As part of the DigitalDecade4YOUth consultation, children and young people were asked to draw a picture of the online activity they liked most.

Key concerns?	What change do we need and how?
General concerns: • Lack of awareness among children and young people, but also parents and other adults, about online risks and potential mitigation measures. • Younger children are less experienced and may be particularly vulnerable. Specific concerns: • Cyberbullying. • Harmful and hateful content. • Fake news and disinformation. • Privacy and data protection. • Lack of inclusion and accessibility.	All relevant actors should take up their respective roles and collaborate to ensure: • Harmonisation at EU level. • Improved media literacy and online safety education in schools and at home. • Improved monitoring and enforcement of existing rules. • Increased pressure on industry to provide safe and child-appropriate services and platforms. • The development of innovative technological solutions.

11. https://digital-strategy.ec.europa.eu/en/library/digital-decade-children-and-youth-new-european-strategy-better-internet-kids-bik
12. https://www.betterinternetforkids.eu/digitaldecadereport
13. https://www.betterinternetforkids.eu/practice/articles/article?id=6834852

MOVING FORWARD WHILE AVOIDING PITFALLS

Both the #Pledge2Youth and #Digital-Decade4YOUth initiatives illustrate how participatory approaches can help industry and policy makers envision the way forward, building upon the needs, challenges, and opportunities children and young people see in the context of digitalisation.

Clearly, a lot of creative ideas and good practice experience exist to provide opportunities for involvement, giving a voice to children and young people to express their views in the presence of an audience with a responsibility to listen.

At the same time, in our experience, many pitfalls lurk around the corner, for example:

- Time, effort and resources: While the process and outcomes of youth participation tend to be very rewarding, it requires careful strategic and operational planning, mindful of the practical and ethical hurdles that will inevitably arise.

- Representativeness, reliability, and validity: Because of how youth participation is typically organised, participants tend to be engaged, confident, and articulate, and they often do not represent the population of minors as a whole. Because context matters, results may often not replicate or apply across time or settings.

- "It's complicated…": While children and young people can be considered experts of their own experiences in the digital world, they may have less time (or appetite) for the erratic flow of corporate or political decision making. Equally, as they grow older, many personal and professional interests will compete for youth participants' attention and interest. To keep the process going in a sustained manner, short- and long-term incentives need to be put in place. Proper recruitment, induction, peer- to-peer exchange, and outreach mechanisms can help to ensure continuity.

More fundamentally, given the wider strategic interests at stake, one could rightly wonder whether child-centric consultations and co- creation processes will have a structural impact on product and policy development cycles in a fast-innovating, highly commercialised, and globalised digital environment. To state the obvious: What happens if a child or youth perspective conflicts with the business or policy strategy? Regardless of the commitment and effort going into the #Pledge2Youth line of work, there is little tangible evidence of significant changes in terms of the products and services these companies provide.

Meanwhile, given the pace of EU policy making, it remains to be seen if the children and young people we closely worked with will end up feeling that their views have not only been listened to but also acted upon. #DigitalDecade4YOUth was just one part of many consultation steps to be taken in the revision of the European Strategy for a Better Internet for Children, with the views from a larger variety of other stakeholders also considered, and for good reasons.[14]
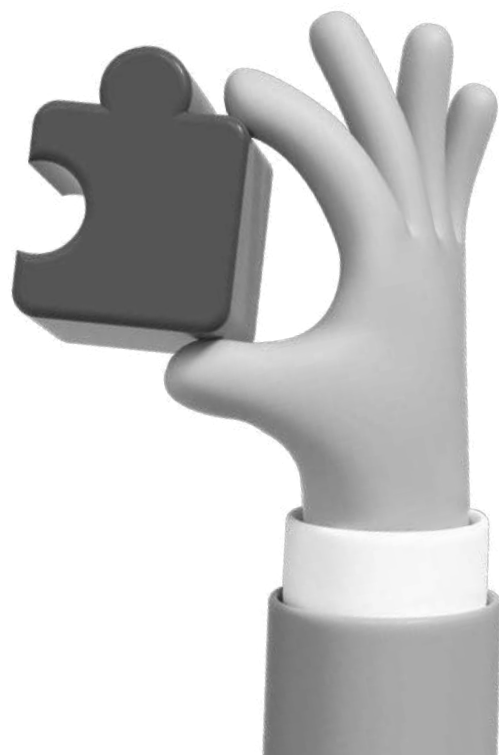
This is exactly why, in Lundy's words, voice is not enough. In our view, one promising way forward is to require companies and governments to make youth participation part of so-called child rights impact assessments when a new digital product, service, or policy that may directly or indirectly impact children's rights is designed, deployed, or evaluated.[15]
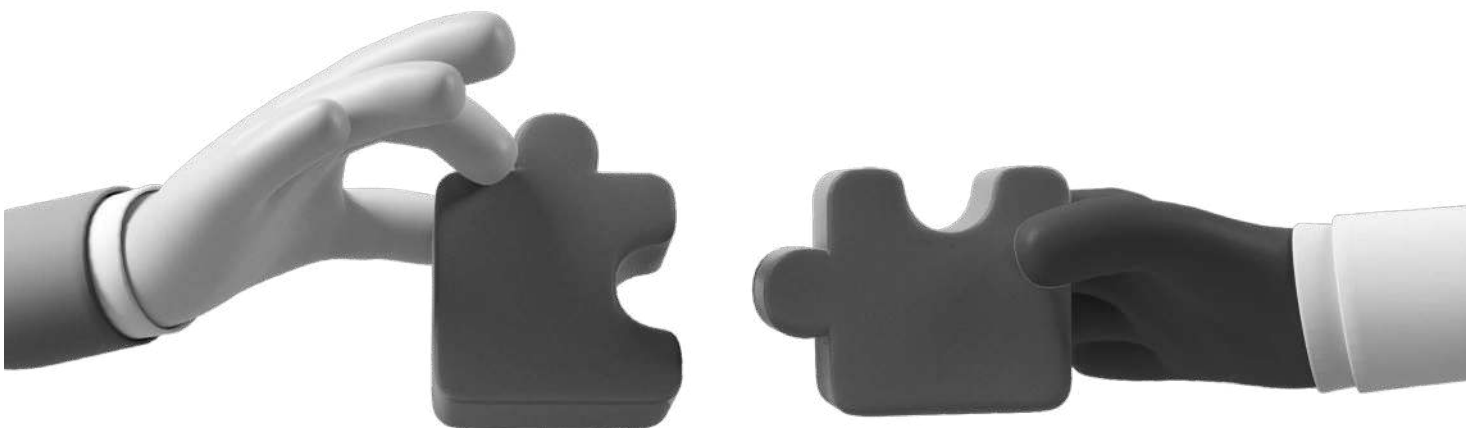
These impact assessments should primarily follow a risk-based, age-appropriate, safety-by-design approach, trying to anticipate and mitigate systemic risks to children's rights, while factoring in existing or new inequalities that digital technology may reinforce or generate.[16]

At the same time, citizens in a digital world are entitled to expect more positive and aspiring standards. How will companies and governments ensure all children are able to access, create, and share a diversity of information and content? Will the product or policy foster opportunities for imaginative play and experimentation?[17] Will it encourage children and young people to explore and develop their ideas, identities, and relationships in an open, constructive, and responsible manner?[18]

These are the kind of questions that can only be resolved in a meaningful way when the voices of children and young people are heard and listened to. To ensure transparency and accountability in terms of how the views of children and young people were taken into account and why action has proceeded in one way or the other, child rights impact assessments should be made public, with clear follow-up activities to ensure impacts are monitored and reassessed as necessary.

In the European policy landscape, the pressure on industry is clearly building, with various important legislative and regulatory initiatives launched or underway. This substantially raises the bar for digital service providers as the burden of proof is on their side to show that, indeed, the best interest of children and young people has been a primary consideration in the business development cycle. Those who get ahead of the curve today are likely to be tomorrow's winners.

14. https://digital-strategy.ec.europa.eu/en/european-strategy-better-internet-kids-bik-consultation-summary
15. https://digitalfuturescommission.org.uk/wp-content/uploads/2021/04/CRIA-Report-revised-final.pdf
16. https://www.unicef.org/globalinsight/media/2356/file/UNICEF-Global-Insight-policy-guidance-AI-children-2.0-2021.pdf.pdf
17. https://digitalfuturescommission.org.uk/wp-content/uploads/2021/11/A-Vision-of-Free-Play-in-a-Digital-World.pdf
18. https://www.positiveonlinecontentforkids.eu

CHILD PARTICIPATION THROUGH CULTURE, CO-CREATION AND INSPIRING CHANGE

" Children are our role models "

For 90 years, our mission has remained consistent, to inspire and develop the builders of tomorrow by bringing the joy of play to children around the world.

As you can imagine, we have spent a lot of time thinking about how children play and how, through play, children learn. We know that, when children play, their creativity and imagination are stimulated, they learn to solve problems, and they build resilience helping them to thrive in a rapidly changing world. As the context of 'play' evolves in our digital world, so we believe must the role of children in shaping how we innovate and develop the play experiences of the future.

We know who the real experts are when it comes to play. You guessed it; children are. We believe this so strongly that sitting at the top of our guiding LEGO® Brand Framework, you will find the statement, "Children are our role models." They inspire us, they turbo-charge our creativity, and ultimately, they help us to make better play experiences, bringing more value into children's lives.

Equally, we recognise every child's right to participate and the value this creates for them, including their skills development, empowerment, and sense of belonging.

That is why child participation isn't just a "nice to have"; it's a critical component of our history and of our future. It runs from our early conception of products, services, and initiatives through to the core nature of the LEGO® System in Play, where children are given the tools and the freedom to create whatever they can imagine.

We are on a journey to engage children actively in the co-production of every new product and experience we breathe life into, whether physical, digital, or a combination of both.

Meaningfully involving children isn't always straightforward, and we continue to learn as much from the children as they do from their engagement with us. Yet, we have no doubt about the value it creates for children, our products, and our people.

All good words, right? But what does it look like in practice?
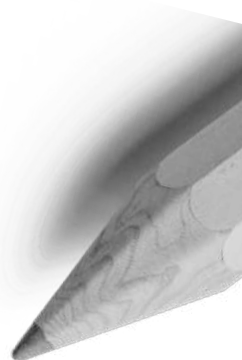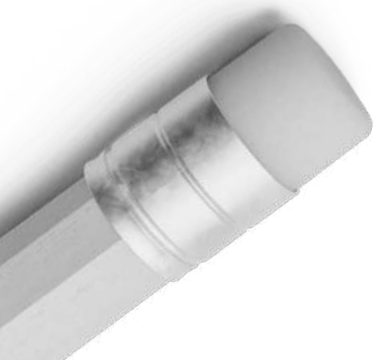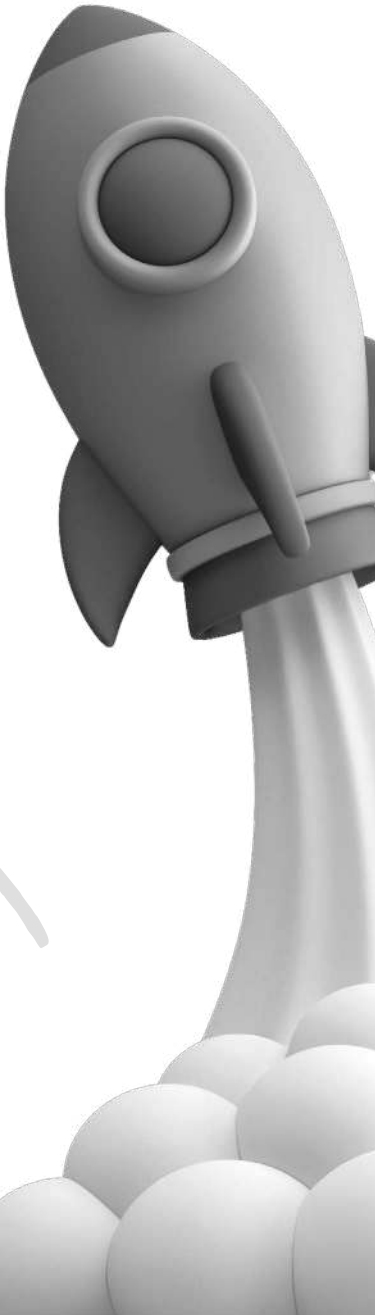
Safeguarding As a Foundation

Before we jump into child participation in action, we want to be clear that, for us, meaningful engagement with children has to go hand-in-hand with child safeguarding.

To enable our ambitions on child participation, we have built a robust global safeguarding framework that includes national and regional processes, so all employees interacting with children on behalf of The LEGO Group receive the same high standard of screening and training. This includes a process for delivering mandatory background screenings as part of our hiring process for all employees in roles that require regular interaction with children. All new employees are introduced to our approach to children's rights and safeguarding early in the recruitment process.

While implementation is an ongoing process, our framework has established an essential foundation for safeguarding the well-being of children across our child participatory activities.

Involving Children from Inception Through to Post-Launch

So, how do we involve and include children throughout our product and service development journey and in shaping how we behave as a responsible brand? Our approach prioritises four areas: observation, validation, ongoing communication, and amplification.

1.

OBSERVATION

It's not enough to think we know 'play'. It's imperative that we observe and engage with how children play today if we want to be relevant to their lives. This combination of active and passive engagement enables us, as adults, to understand the needs we aim to meet. Only by engaging and playing with children can we unlock and understand life through a child's eyes.

Case Study: Exploring the Role of Music in play.

Our designers wanted to understand what role music plays in children's lives and how children are bringing music and play together. So, we let ourselves be inspired.

Through a multi-phased, ethnographic study across the homes of 12 children aged 7-10, we set out to observe what role music plays in children's lives. In-home observation provided our designers and researchers with a deep, naturalistic understanding of the opportunities for music, play, and digital technology to come together.
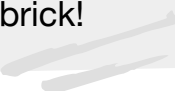
As one of our researchers put it, "Observing people makes you feel it more than PowerPoints ever can, and feeling is critical to understanding."

Our research found that music plays a range of roles in children's lives and in how they play. We found, for example, for older children in particular, music is a passion point and fandom facilitates social belonging, whereas for younger children, music is a source of inspiration for storytelling and role play. These different roles served as the springboard for our ideation and led us to prioritise product designs that could satisfy a variety of children's social needs.

Top Tip:
Managing Expectations & Interpreting Outputs

It is important to be clear that, at the exploratory stage, you are unlikely to come out with a single, matured idea. Outputs can be messy. The key is to find those one or two nuggets of insight that can underpin the next step in the process. Taking it brick by brick!

2.

VALIDATION

However much our designers connect with their inner child during the development process, it's children who validate whether our play experiences meet their needs and those of their caregivers and gift-givers.

Once we've identified a new play pattern or product, we embed qualitative and quantitative testing within the development cycle. We invite children to interact and feedback on early-stage concepts, prototypes, and products, inviting parents and caregivers to observe the co-production and share their thoughts within the process.

Case Study: Bringing a New Co-Building Experience to Market

Recognising the opportunity that the pandemic presented for more 'Build Together' experiences, we invited children and their families to co-design and test a more collaborative building experience in 2021. We involved around 30 children (aged between 7-12) through a series of remote, asynchronous testing before releasing a new digital Build Together experience within our LEGO® Building Instructions app, all in time for Christmas.

As our facilitators were unable to be present during these sessions, the design teams created a test framework that included a neutral non-player-character (affectionately called Botty) that guided the children and their parents or caregivers through the experience.

We were able to identify a number of child-adult play patterns from our research that fed into how we designed and took the update to market. We also collected several insights around child usability, such as the fact that younger children struggled to use QR codes printed on the box to access the experience, requiring us to think differently to ensure accessibility.

Top Tip:
Removing Adult Bias and Empowering Children

It's important to minimise adult influence during child participatory activities. By using objective facilitators in human or tech form, such as Botty, who help children understand it is the product and not the child being tested, we can empower children to see themselves as the experts. This puts them more at ease to speak openly and honestly.

3.

ONGOING COMMUNICATION

Embedding feedback loops ensures that, even after deployment of our digital products and services, we can continue to align those experiences with the evolving perspectives and needs of children. Inviting children into regular testing panels or community discussions also enables us to stay in touch with evolving play patterns.

Case Study: Refreshing LEGO® Life

In 2017, we launched LEGO® Life as a safe, social network for children under 13. After 2 years in the market, we recognised the need to give the experience a fresh and relevant look and feel for children.

So, we teamed up with a small group of children to sit, in-person, alongside our designers in our Denmark HQ. The children, after being given their official 'designer' badge, were asked to create a mood board to help us understand how the LEGO® Life feed should look, feel, and function. The designers then took this 'brief' and translated it into prototypes that were then pitched to the children, who made the final decision on which creative moved forward into build and rollout.

A key takeaway from this was that children are brilliant at breaking down stereotypes that we adults tend to build. Pink, for example, was proven to resonate just as strongly with boys as with girls.

Top Tip:
Show Children the Impact
They Have Had.

Showing children the impact of their participation by providing transparency on the decisions and outcomes helps children to see their value and encourages more open and powerful ongoing communication.

4.

AMPLIFICATION

An exciting avenue of discovery for us at The LEGO Group is how we can leverage our brand and platforms to amplify children's voices on matters of importance to them. We're on a mission to include and involve the voices of children from all walks of life, particularly committing to giving space to those voices who have no accessible platform to make their voices heard today.

Case Study: Boosting Children's Voices on Climate Change

In the run up to COP26 in 2021, we adapted our Build the Change programme to understand how children felt about climate change and the environment and to push children's vision for the future into the hands of decision makers. Digital participation tools were central to our ability to do this at scale.

We crowdsourced advice from more than 6,000 kids on what world leaders should do to protect the planet through an online survey, bespoke workshops, and our partnership with SuperAwesome's platform, PopJam. Through this engagement, we created a manifesto with 10 recommendations (designed as a digital LEGO® building instruction) that was presented to every child who engaged with the platform, to decision makers at COP26, and to the world online.

We have exciting cases of amplification in the pipeline as well. For example, we recently worked with Western Sydney University and UNICEF to deliver creative and participatory workshops with over 300 children across 13 countries. The purpose was to build a better, more child- centric understanding of children's well- being in a digital era and of how our digital design choices impact upon that well-being. Through this, we aspire to put children's perspectives at the centre of our digital world and how it is designed.

**Top Tip:
Authentic Amplification.**

It's important that, as adults, we allow the authenticity of children's voices to be heard, however uncomfortable it might be for us to hear. It's not our right to manipulate or shape what is shared to suit our own needs or agenda. It is our responsibility to listen and learn from those voices.

Children Will Always Be Our Role Models

We believe in the value of including children in how we build our future, value for the children that participate in shaping our decisions, value for the millions of children and families that benefit from better play experiences, and, subsequently, value for The LEGO Group.

As digital technology plays an increasingly defining role in how children develop, play, and learn, we are committed to giving children a say in what that future looks like. We are excited about the opportunity that digital technology creates to empower children and to foster their well-being on a whole new level, but unless we collectively put children front and centre, we risk missing out on this opportunity. It's why we are committed to engaging children meaningfully in every product we make for them, from inception through to launch and beyond.

At The LEGO Group, Children Remain Our Role Models, and We Look Forward to Being Inspired by Them for Years to Come.
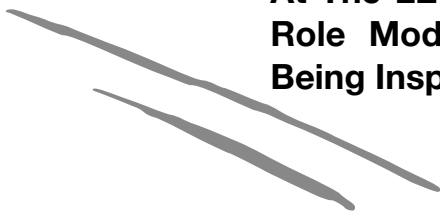
"WHAT WE HAVE TO SAY": THE CHILDREN AND YOUNG PEOPLE PANEL

Enabling child participation throughout the development and execution of the report and including active contributions by children and young people was of paramount importance to this report.

While inviting adult contributors, we invited six 9-16-year-olds to create their own contribution on the topic, help us with the design and impact of the report, and have some fun along the way.

Our first session was to get to know each other and to find out what we all knew about inventing new products, and to help with this, we brought along LEGO designers Phillip McCormick and Erik Legernes. The young panel had a lot of questions for them...

"How do you come up with new ideas and new ways of inventing and designing different LEGO sets?"

"Do you guys like to ask for lots of opinions before you make the toys? I know, like everyone in your workspace, had an opinion on what to do. But like, did you guys fill out a survey for, for example, younger kids to say what they're most interested in? So that's like what your new toy could be."

"How would you decide which ideas to use and not to use, because if there is a case where there are too many good ideas, like how do you pick which ones are the best ones?"

"Have you ever had an idea but chose something different and regretted it?"

"Are LEGO going to make all their bricks sustainable?"
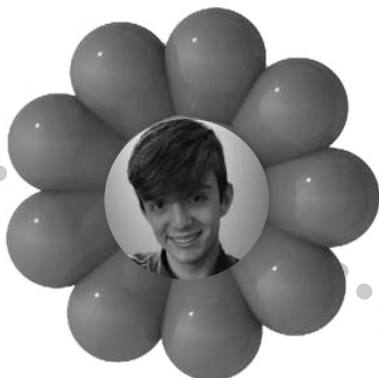
Corey, 15

Elijah, 13
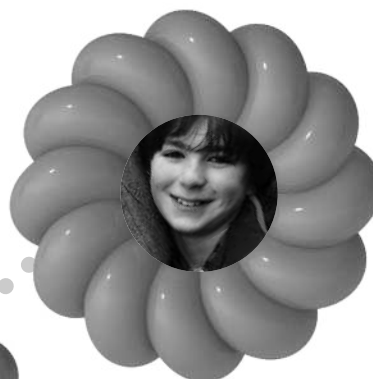
George, 12
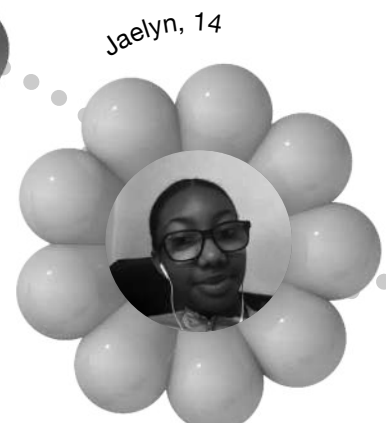
Jaelyn, 14

We encouraged everyone to consider what it takes to be a designer before being tasked with the challenge of creating their own new products. The panel reflected on their experience of creating new products...

WHAT WAS THE BEST BIT OF THE EXPERIENCE?

"When we were designing our different things and kind of brainstorming about how to make them better and when we were thinking about how adults and children don't really work together very often. When we were designing our stuff, it was kind of like a time to let your imagination go free and create what you wanted to. And then when we were thinking about children and adults not working together very often, it was kind of like, it got you really working and thinking of when you haven't worked with an adult very well, or if you have, how badly it's gone."

"Definitely hearing other opinions and hearing more about LEGO and the design process in that company."

"Thinking about our own kind of creation because it was quite fun, and it kind of got my mind working and thinking about what I could do, and I didn't realise that I was that creative."

WHAT WAS THE HARDEST PART OF THE EXPERIENCE?

"The hardest bit was the design process of our items, because it just required us to think, to be asking people. Also learning about the process of children working with adults, I found that quite challenging as well because it required lots of thinking and to imagine working together and how it would go."

"Coming up with the initial idea for the project."

"Designing the thing we wanted to build because there were so many different negatives with it as well like how much it would cost, how big it was."

"I think it's the actual process of thinking about what you could create because there's a lot of variables that can be decided on, like how it would actually work and how it wouldn't work."
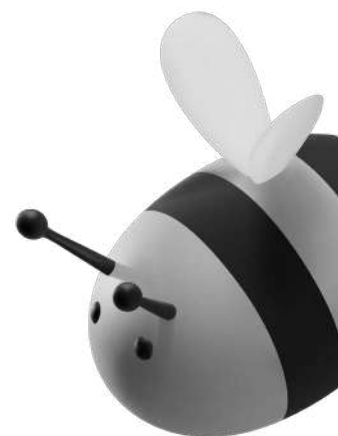
Nathan, 11

Tyler, 11

Leia, 9
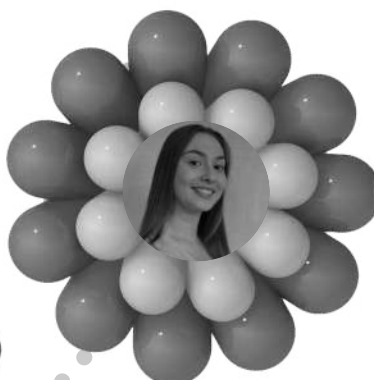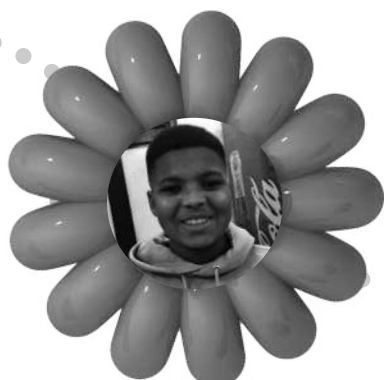
Sophie, 15

The sessions that followed reflected on the fact that children are able to contribute actively to product development in a way that adults can't, placing particular interest on the challenges they face, who they would want to work with, and their feelings towards working with adults. The panel believed it was important to share the benefit of their participation for business and for themselves.

WHAT IS MEANINGFUL CHILD PARTICIPATION

"The inclusion of children. Not just children, if it was children and adults, or mainly adults, but children were involved as well, then I think that would be child participation."

"The collaboration of adults and children working together to make products that children and adults have both agreed work for children to play with or use."

"The opportunity to have your thoughts and views heard and to bring out the creativeness inside of you."

"Introducing children to being part of a team and making meaningful decisions and letting them be involved in those meaningful decisions."

"Having a lot of ideas and teamwork."

"Letting children have an input and their say, whether that be on marketing products or like just having them involved in the process and taking on their ideas and not un-including them, making sure their opinions are listened to."
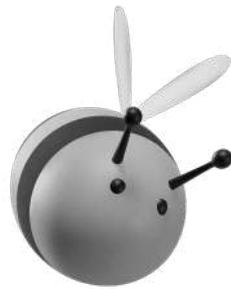
WHY IT IS MEANINGFUL

"You're basically listening to who the future are, and the people who are going to be the head of things, so it's good to have different perspectives and age groups."

"Working with the big brands and stuff makes it meaningful, like it's a lot different."

"Some children don't really get their voices heard, so I guess it would be quite a nice opportunity for people to get listened to and have their ideas taken in and considered by top brands."

"I think it's meaningful because it's important to do, because it just is, it's helpful. It could make things more efficient. It can make things work better. It can make a product sell better, and it will make everyone feel more included and get to know each other better."
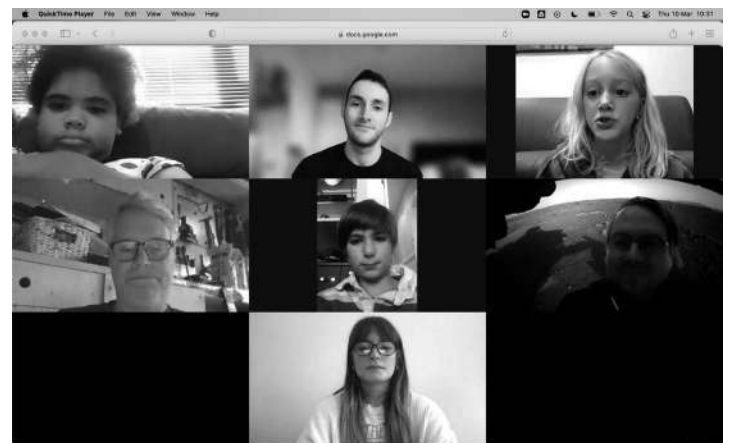
HOW IT BENEFITS BUSINESSES

"To have different perspectives, young people can bring different things that old people can't always think of."

"Children can make it relevant to that time period. Adults can make it old-fashioned. We have different experiences and different childhoods to what adults have had."

"If you have children to help, the design process can be quicker and help a business thrive and succeed, because it's impossible for an adult to come up with ideas that are suitable and helpful for every child."

"Children and adults have different levels of creativity."

"Experts could benefit from having new ideas and validation that their ideas are good."

"Because children know what could be suitable for other children, because they are children, and they would have friends and they could ask their friends what's suitable for them. So it would help a lot, whereas an adult might not know any children that they would be able to speak to on a regular basis."

"Children have less limitations than adults, they go beyond the boundaries than adults would. They don't see the dangers of their thoughts."

"For a product, to make them actually sell well, you'll need to know what children like. If you try to think, try to assume what they think they like, then they probably won't actually like it. Plus, since children are actually some of the main buyers of some products, children are the big parts, the big consumers. And even some adults get things because children will recommend it to them."

HOW IT BENEFITS US (CHILDREN AND YOUNG PEOPLE)

"It's fun and cool to get to help create something."

"Decisions made about kids' lives should be based on kids' perspectives."

"For children to feel included in the decision making, they can feel their importance to the business."

"It's important for children to work alongside adults. It shows them a working environment and what you have to do. It teaches you to be responsible and understanding, to represent your place of work, to work as a team and be respectful."

"It's good for children to be doing things like this because they have different views for products and items. To design a product for children, you need to know what children like."

"It's just such a great opportunity, and it's exciting and inspiring to work with big brands."
"Working with people with different skills would help me develop what I can do to work together with different people."

"People can feel just left out, really. If a child gets to work with a big company to create a product, then they'll feel included, they'll feel happy, and they'll feel part of the process of the design. But if they don't get a say in anything, then they'll just think that they're not a part of it and they don't really matter."

"It's good for the child to see their ideas brought to life and being sold in the market. It also gives them future experience for team working."
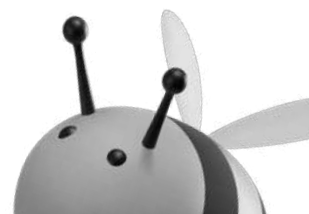
HOW TO DO IT

1. Be **adaptable**, **honest** and **open-minded**.

2. Work equally, as a team, listening to everyone's ideas and giving everyone the chance to be heard. Everyone deserves a chance.

3. Be **accepting** of our ideas and opinions. Sometimes children don't get taken seriously and they're not listened to and that's not fair.

4. Remember children are not all the same - speak to lots of different children of different **ages** and with different **likes**, **hobbies** and **interests**.

5. Keep the experience **fun** and **entertaining**

Josianne Galea Baron and **Fabio Friscio** touch upon the importance of being transparent with children as to what decisions they are able to influence. **Sandra Cortesi** discusses the need to be open and honest with participating youth, articulating the purpose for their engagement, how it can be a valuable experience for them, and its value for the business.

During their workshops, **Microsoft** set the tone that the employees present were not the 'experts', acknowledging that young people are experts in their own lives. **Hans Martens** details how industry and policy makers have a responsibility to ensure children and young people can actively participate in decision-making processes that might impact their rights in a digital world, as enshrined in the Article 12 right to participation or right to be heard of the Convention on the Rights of the Child (CRC). **Honda Research Institute Japan** describes how they utilised ideas that emerged during child participation and implemented them into Haru's platform, enabling children to create and share their own stories and give them direct control of Haru's interactivity.

Dr Ronah Harris describes the importance of including individuals with neurological variations, affirming the needs of people with variations rather than treating them as having conditions that need to be cured. **Wouter Sluis-Thiescheffer** details core game design principles, including the right to non-discrimination and right to participate. **Vicky Charisi** discussed an ethnographic-inspired approach and practices that give space, respect, and value to local habits, needs, and culture.

6. Use various methods for us to communicate with you and express ourselves. Think discussions, quizzes, creative tasks and games.

7. Not everyone should be spoken to the same; some people won't be able to understand the way things are phrased. Grown-ups have to remember that a child might not always know what you mean or you're talking about. So you should always check that they know what you mean, and if they don't, you need to try to explain it in a better way.

8. It shouldn't be children doing all the work. The adults should be supervising because some things they might want to make or design won't be realistic, and if they try to do that, then it's quite dangerous. They might hurt themselves. I think adults should be there to supervise as well.

9. Adults and children should be working together. One shouldn't be controlling what they're doing or what they're trying to make. It's a joint piece of work. Not one adult or child is doing more than the other.

**10. Take our ideas seriously and keep us in the conversation –
children know children best!**

In their contribution, **Super Awesome** details the numerous methods they use to involve children and young people on an ad hoc and continuous basis.

Wouter Sluis-Thiescheffer defines children's right to information using communication they can understand. **Sesame Workshop** describes their work with preschoolers, whose developing language skills often prevent them from articulating what does or does not work about a game, what they do or do not like, or what and how they are learning. Instead, their teams interpret children's behavior during playtesting into digital experiences designed to fit the audience's needs.

Telia Company run co-creative workshops that are carried out by trained volunteers with safeguarding routines in place.

The LEGO Group elaborate on the need to break down adult-child power dynamics, which is key to avoiding children saying what they think the adults in the room want to hear rather than expressing their genuine feelings and reactions, and to provide valuable solutions to overcome this challenge. **KidsKnowBest** reflects on how and why to make an experience that is memorable for children and young people and the importance of recognising that children are the experts in their own lives.

Hans Martens identifies this as a key challenge and stresses the importance of finding ways to increase the transparency of and accountability for important decisions made and the reasons why. Toca Boca explains how they transformed input from children into creative, relevant, and innovative game experiences that resonate with them, the children first way.
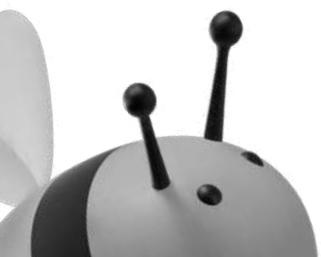
ENGAGING CHILDREN CROSS CULTURALLY IN THE DESIGN OF PRODUCTS

PROF. AMANDA THIRD

As businesses work to respect, protect, and fulfil the collective rights of all children, it can be easy to overlook the incredible diversity of those we think of as young. Gender, class, age, geography, and other differences structure the lives of the children with whom business seeks to connect. Strategy and product and service development thus need to be responsive to the dynamics of children's diverse experiences and contexts. This is especially important for those child-facing businesses expanding into different markets across the globe.

Meaningful, cross-cultural engagement with children can give substance to ambitions to localise strategy, products, and services for different markets, potentially increasing their positive impacts on children's rights. However, even among those enterprises for whom children are the target demographic, the value of child participation in business is frequently underestimated, and it rarely becomes a permanent feature of core business. Indeed, there is a prevailing sense that children's insights and expertise are 'nice to have' but are of limited value when compared with the 'serious' contributions of adults. Alternatively, a misconception that child participation entails adults ceding all control over decision-making to children can prompt dismissal of proposals to work with children.

Yet, given space, time, the right support, and a sense that their opinions count, children across cultures can be powerful agents of change. Time and again, I've seen first-hand how children from diverse contexts use their participation to imagine a better world and to contribute to their communities and the decision-making that impacts their everyday lives. Over the last decade, collaborating with outstanding child-facing organisations internationally, my team and I have led projects supporting over 5000 children in more than 70 countries to reflect on the impacts of digital technology, violence, climate change, diet and nutrition, play, and mental health[1,2,3,4,5].

These are not small topics. Nor have children's contributions been trivial. Their insights have led to significant change in policy, education, legislation, professional practice, and children's lived experiences[6]. Most recently, over 700 children in 27 countries contributed to the drafting of UNCRC General Comment 25 on children's rights in relation to the digital environment, which provides important guidance for states about how to realise children's rights in the digital age[1,7]. Children greatly value participation opportunities:

"[Being consulted] enriched my experience and knowledge." (boy, Bulgaria).

"I like that adults are listening to me." (gender not specified, United Kingdom)

1. Third, A. & Moody, L. (2021) Our rights in the digital world: A report on the children's consultations to inform UNCRC General Comment 25. 5Rights Foundation and Western Sydney University. https://www.westernsydney.edu.au/__data/assets/pdf_file/0011/1845497/Our_Rights_in_a_Digital_World_-_Full_Report.pdf
2. Fleming, C. A. K. et al. (2021). Fix my food: Children's views on transforming food systems. Sydney: Western Sydney University. https://www.westernsydney.edu.au/__data/assets/pdf_file/0009/1872999/Fix-My-Food.pdf
3. Third, A. et al. (2020). Child-centred indicators for violence prevention: Report on a Living Lab in the City of Valenzuela, Philippines. Sydney: Western Sydney University. https://www.end-violence.org/knowledge/child-centred-indicators-violence-prevention

In short, thoughtfully executed, children's cross-cultural participation can be a game changer.

That said, implementing cross-cultural child participation can be daunting. The bar for 'good' child participation is rightly set high. Doing it well requires dedicated resources: time, smarts, and funds. Child participation efforts must be safe, respectful, inclusive, and meaningful for all children who participate. This applies to children's immediate experiences of participation as well as how businesses activate their insights. And it requires from businesses a sustained commitment to scrutinising their motivations, practices, and impacts on children's rights.

Consequently, facilitating children's participation, particularly cross-culturally, has come to be regarded as a specialised expertise, but this should not make private enterprise overly wary of trying it.
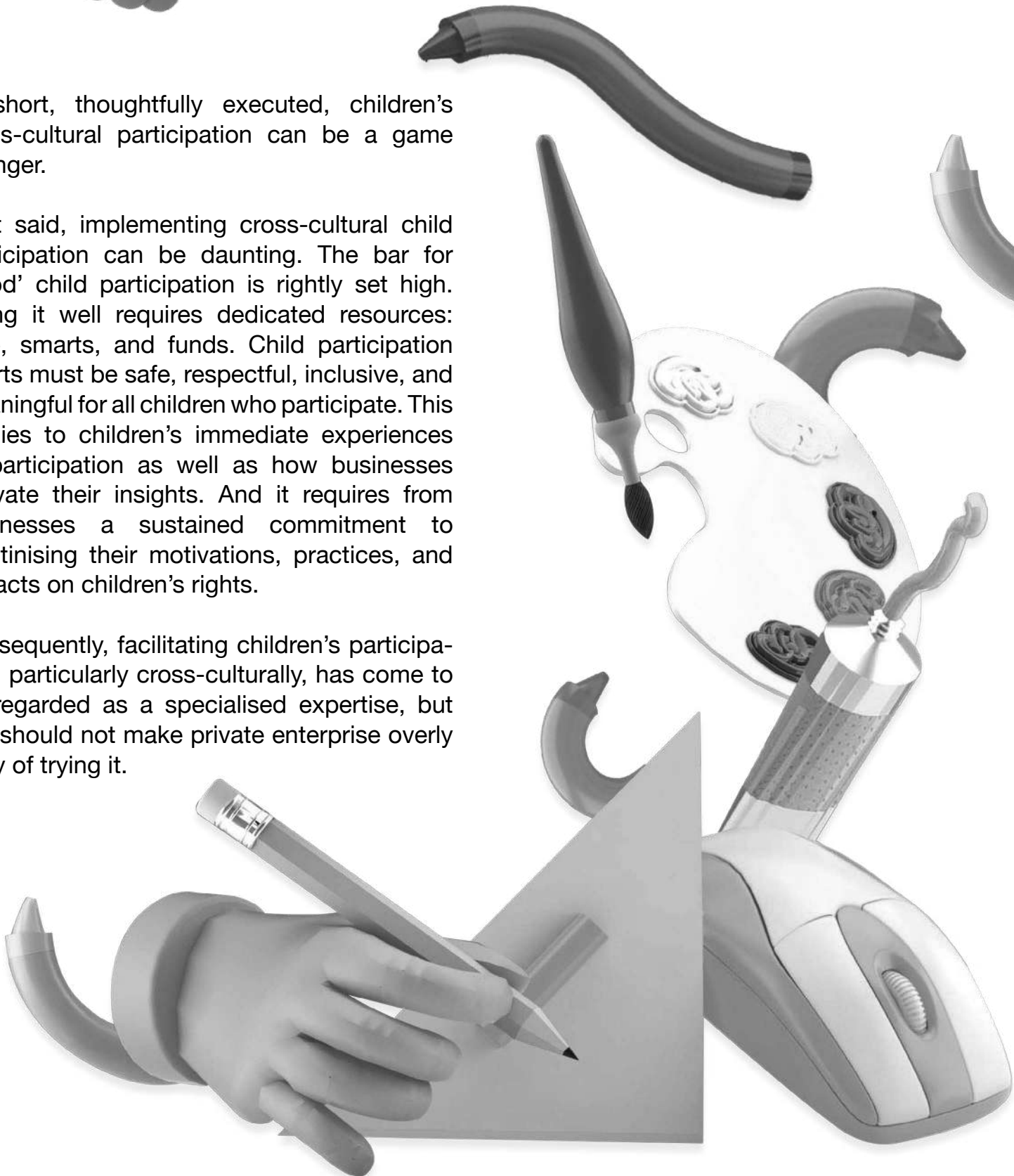
4.   Third, A. et al. (2017) Young and Online: Children's Perspectives on Life in the Digital Age (The State of the World's Children 2017 Companion Report). Sydney: Western Sydney University. Available at: https://www.westernsydney.edu.au/__data/assets/pdf_file/0006/1334805/Young_and_Online_Report.pdf

5.   Third, A. et al. (October 2014) Children's Rights in the Digital Age: A Download from Children Around the World (second edition), Melbourne: Young and Well Cooperative Research Centre and UNICEF. https://www.unicef.org/malaysia/Childrens-rights-in-the-digital-age.pdf

6.   Third, A., Lala, G., Moody, L. & Theakstone, G. (2021) Children's views on digital health in the global South: Perspectives from cross-national, creative and participatory workshops. In Lupton, D, & Leahy, D. Creative approaches to health education. London; New York: Routledge.

7.   UN OHCHR (2021) UNCRC General comment No. 25 on children's rights in relation to the digital environment. https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-25-2021-childrens-rights-relation

There is no single 'right way' for children to participate meaningfully in business. Children's participation ideally responds to specific objectives and circumstances and feels relevant and meaningful to children. As a child participant recently said, "[Effective child participation] actually places children in positions where they feel as though they are doing meaningful work" (girl, Australia). How businesses engage children will inevitably change over time, in response to new insights, shifting priorities, and the growing sophistication of their child participation strategies. The key is to understand what cross-cultural child participation can offer business, to be crystal clear about why your business wants to do it and what participation can offer children, and to be willing to do some hard thinking about what the ethics and pragmatics of child participation could and should look like.

So, what are the different kinds of cross-cultural participation businesses might consider?

Models of Participation

Roger Hart's 'ladder of child participation'[1] distinguishes different child participation approaches and is a tool for businesses to think through how and why they do child participation, and the strengths and limitations of different approaches. Hart's eight approaches are often distilled into three[2]:

1. **Consultative approaches** are perhaps the most conventional form of child participation. Generally instigated and steered by adults, these configure children as informants in an intelligence gathering process. Common methods include interviews, focus groups, and surveys. While consultative approaches can elicit children's insights and experiences, they often focus on 'hearing children's voices' about adult-defined agendas. Children rarely actively contribute to decisions or outcomes. It can be appropriate to use these methods when, for example, limited funds or time constraints prohibit a more collaborative participation process. As with all forms of participation, it is important to manage children's expectations about how they will participate and what will happen from their participation.

2. **Collaborative approaches** conceive participation as a process of co-creation between adults and children and frequently draw on co-research and co-design methods. While adults may instigate the process, children are conceived as its co-authors, working alongside adults to identify the challenges, to design and implement the participation methods, to analyse the results, and to channel the resulting insights into processes of change. Effective collaborative participation requires constant attention to how adult- child power dynamics shape interactions in the process.

3. **Child-led approaches** involve children directing the process from beginning to end. Adults' role is to ensure children have access to the necessary resources, expertise, and other forms of support to realise their self-defined goals. Child-led approaches seek to empower children to the maximum, relative to their evolving capacities. One potential shortcoming of these approaches is that, rather than modifying adult ways of doing things to make them more child-centred, they can result in parallel child-led processes and outcomes.

With this in mind, below are some strategies to ensure business can do cross-cultural child participation well.
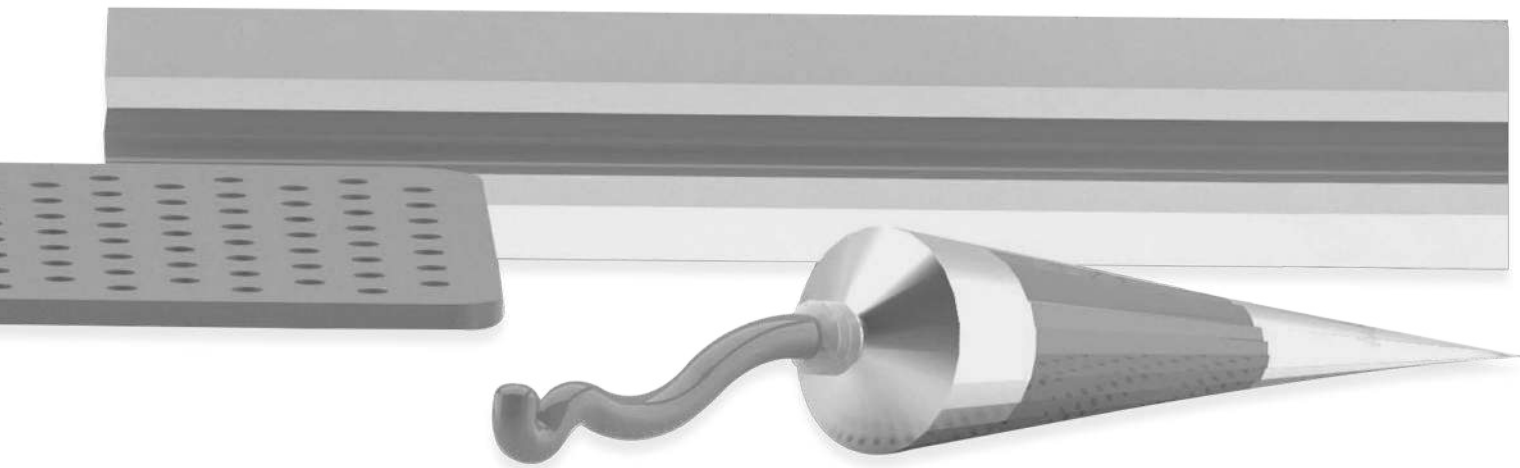
1. Hart, R.A. (1992) Children's Participation: From tokenism to citizenship, Innocenti Essay no. 4. UNICEF. https://www.unicef-irc.org/publica-tions/100-childrens-participation-from-tokenism-to-citizenship.html
2. Hart's typology also calls out non-participation, which includes engagement that fails to inform children about what they are participating in or why; that does not create adequate space for children to explore issues and formulate their opinions; or that use children merely to publicly endorse adult-defined agendas.

CROSS-CULTURAL CHILD PARTICIPATION

Reach Beyond the Usual Suspects

Maximising the value of child participation and ensuring it positively impacts the greatest number of children means working not just with the 'usual suspects'[1], those children that are easy to reach and who have the cultural capital and competencies to participate, but also those who are not always heard. As a participant in one of our studies said, "Make it clear that children from all backgrounds are welcome and that their ideas matter" (boy, Australia). When working cross-culturally, in often unfamiliar settings, it can be difficult to identify ways to reach a more diverse group of child participants. It is useful to build relationships with trusted child-facing organisations and/or regional and national networks that routinely work with children in-country. Such organisations are best placed to facilitate a broad range of diverse children to participate and to guide other dimensions of your participation strategy.

Value and Invest in Local Expertise

Undertaking child participation across cultural contexts requires sensitivity to contextual dynamics, which requires connecting to local expertise. One way to ensure a business's child participation methods are culturally appropriate is to opt for a collaborative approach that configures trusted local partner organisations, alongside children, as key interlocutors. In our cross- cultural projects, my team works closely with child-facing organisations, supporting them with training, resources, and guidance to work face-to-face or online with children, in local languages. This instigates a mutual learning process whereby child-facing organisations can experiment with different participation methods and hear directly from children on issues that affect them, while our team learns about local issues and practices and ways of adapting participation methods for specific contexts. Wherever possible, we compensate partner organisations, as well as children, to acknowledge the value of their time and expertise.

Acknowledge and Work with Difference

Developmental expectations and the experience of childhood can differ vastly from one cultural setting to another, so it is important to work closely with personnel in-country and to compensate them for their inputs. Even when deploying a more conventional, consultative participation approach in a cross- cultural setting, tailoring tools to local contexts ensures they resonate with children's lived experience and can elicit useful insights. Children often have a keen sense of how to shape participatory tools to take account of their ways of communicating with each other, and child-facing organisations have wisdom to share about how things need to be adapted so that children are safe and being asked to participate in activities that are age-appropriate in that cultural context. When children participate using local languages, prior to implementing a participation strategy, spending time with in-country colleagues to find appropriate translations for key concepts can help to minimise misunderstanding and enhance children's experiences of participation.

Set Expectations and Deliver on Them

"[Good child participation] listens to and enacts any advice given by children" (girl, Australia). Businesses need to plan how they will use children's insights, what this will deliver for diverse children, and how they will explain these things to child participants.

1. Banaji, S., & Buckingham, D. (2013) The civic web: Young people, the internet and civic participation. Cambridge, Massachusetts: The MIT Press.
2. Third, A., Lala, G., Moody, L. & Theakstone, G. (2021) Children's views on digital health in the global South: Perspectives from cross-national, creative and participatory workshops. In Lupton, D, & Leahy, D. Creative approaches to health education. London; New York: Routledge.

It is also best practice to devise a plan to keep children informed about the outcomes of their participation. When working cross-culturally, the expectations set for children must be carefully calibrated to local contexts. While children will generally participate enthusiastically when they can see their contributions will count, care must be taken not to raise children's expectations unreasonably for improvement beyond the capacity of their environments to deliver that change.

Devise Methods to Disrupt Power Dynamics

Children are often tempted to tell adults what they think they want to hear, particularly in contexts where local norms demand that children are obedient to adult authority. One good way to disrupt these power dynamics can be to use creative methods[2] that engage children in drawing, designing, interviewing, making collages, and so on. Creative methods can give children adequate time and space to explore how issues play out in their local contexts and to find ways of expressing their experiences and views.

Aim for Long-Term Child Participation

One-off, time-limited child participation initiatives are a good way to experiment with cross-cultural participation. However, by sustaining child participation over long time periods, businesses benefit from a cumulative wisdom generated in partnership with children. Consistent child participation can significantly build trust between business and community. It can also contribute to strengthening communities, thereby supporting stronger economies[3].

Sustained cross-cultural child participation can deliver deep and enduring value for children, businesses, and communities. Ultimately, for all parties to benefit, private enterprise needs to redouble their efforts to work ethically with children to realise their rights, to connect with diverse communities, and to invest more consistently in child participation.
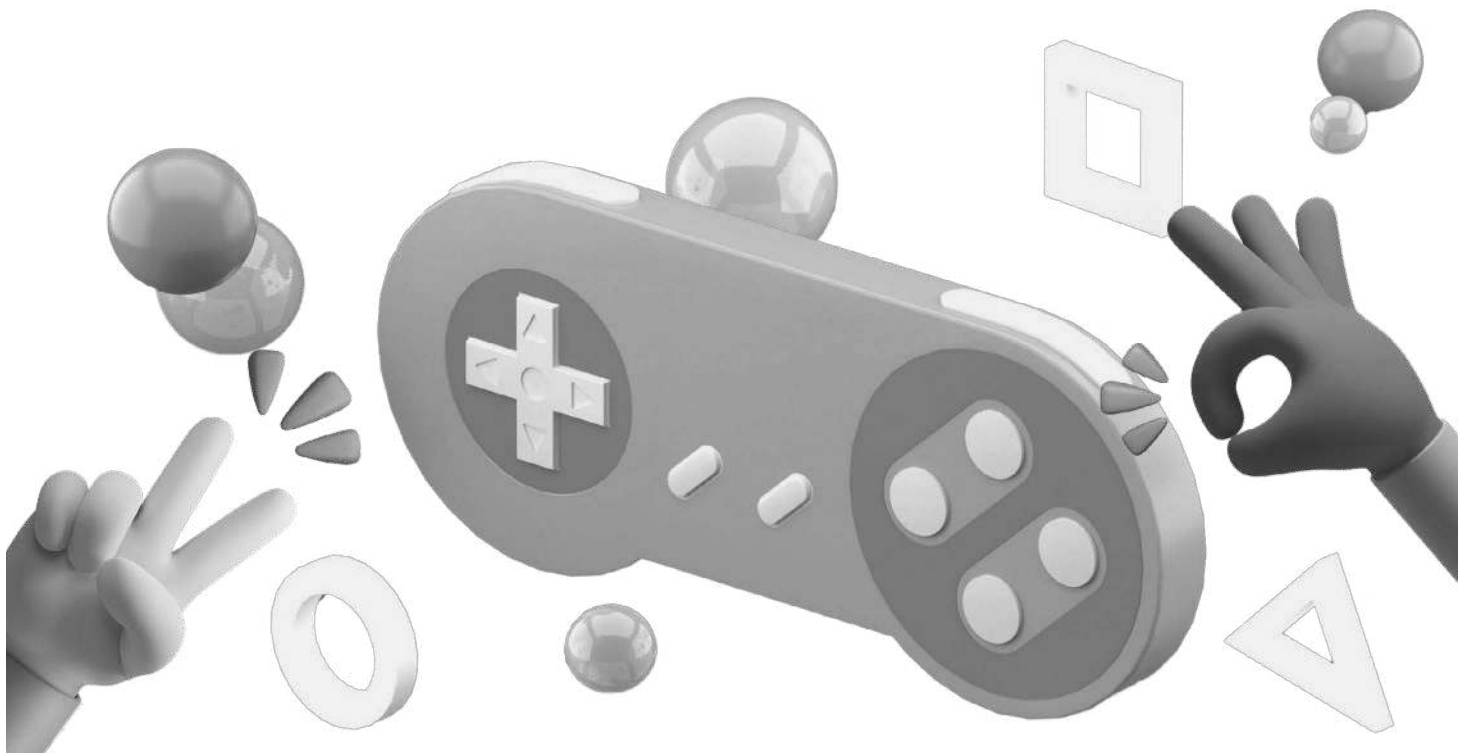
3. Save the Children (2015) Business and child participation: How businesses can create opportunities for children's participation. https://re-sourcecentre.savethechildren.net/document/business-and-childrens-participation-how-businesses-can-create-opportunities-childrens/

NEURODIVERSITY AND INCLUSION IN DIGITAL PLAYROOMS: PRACTICES IN VIRTUAL LEARNING
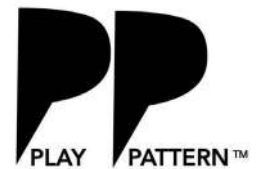
As a learning scientist and an entrepreneur creating children's media, I believe every company should have a goal for child participation. There are real benefits to creating solutions alongside your clients, and that includes children.

More than one in eight children are considered neurodiverse, according to a recent report by the World Health Organization (WHO, 2021; Brown, 2021; Krzeminska, 2019). Navigating the traditional learning environment can be a challenge for children who are not neurotypical. Understanding and leveraging children's strengths means considering the differences between students and how they think.

At Play Pattern, we believe educators and companies can do this without stigmatising said differences. Child participation is a key component to ensuring a child's education is personalised to their specific thought processes, backgrounds, societal outlooks, and neurodevelopment (Mirfin-Veitch, 20). Education systems and teachers have struggles to create solutions for supporting children with neurological differences. There is an opportunity for EdTech companies to get creative and try new methods. That could mean learning from parents and caregivers to find hands-on techniques to teach children. We have a real possibility to change the learning environment to support all children.

NEURODIVERSITY: WHAT IS IT?

The topic of neurodiversity rises to the top of our list of matters related to child participation for a number of reasons. We teach all children and that includes the wide range of students. We are intentional with all the ways our participants identify themselves - racial, ethnic, gender, socio-economic, linguistic; therefore, it would be impossible to leave out the diversity in thinking, because not all children think the same.

Neurodiversity refers to the variations in the human brain and takes into account sociability, learning, attention, mood, and other mental functions. Neurodiversity is a wide description that encompasses the autism spectrum disorder, ADHD, dyslexia, dyspraxia, dysphagia, Tourrette syndrome, obsessive compulsive disorder, and other cognitive variations. Additionally, we notice a remarkable rise of mental health diagnosis of trauma, anxiety, and depression in children, so we have chosen to embrace the variety of ways to support neurodiverse children, to support an even wider population.

Play Pattern has paid particular focus to the recent research and discourse about cognitive diversity. We design live workshops to bring experts in coding, gaming, and maker technologies into formal and informal learning environments. We work in so many communities throughout the United States and see the growing need for supporting children with cognitive variations. We are encouraged that other companies and organisations are increasingly recognizing neurodiversity as a major factor in the lives of children, and we consider this has been a major step towards creating a truly inclusive learning environment (NYT, 2022; Grandin, 2021,).

We consider numerous dynamics that impact children in our programs, from their environment, to their identity, to their understanding of our material, to the variety of ways they participate online. We believe
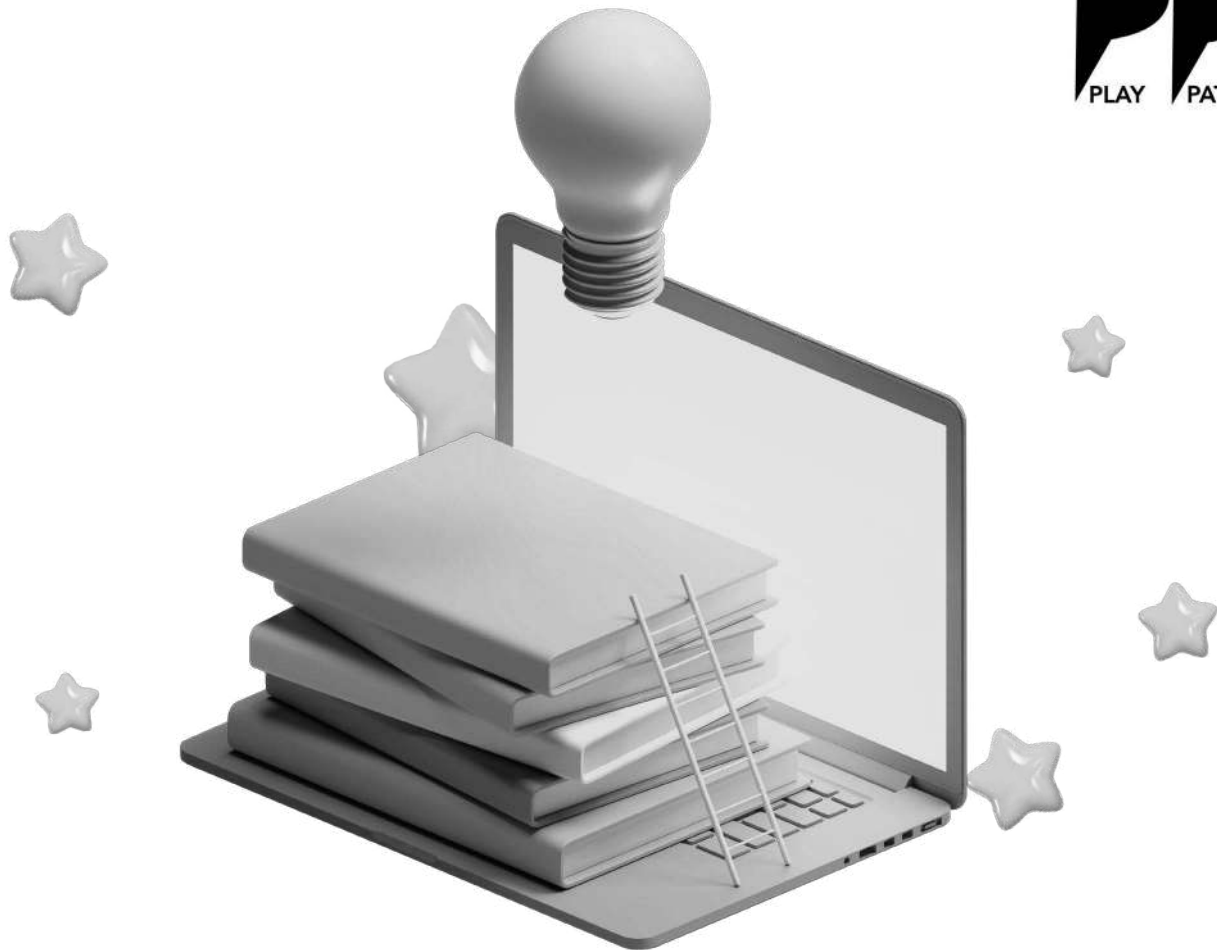
all children should have a voice in our communities, so we intentionally create those opportunities.

We do not embrace the deficit or pathological model. We suggest that any company seeking to create a live interactive experience pace activities that support real-time communication with all children. When online, use videos, chat features, and emojis to connect with students. We ask lots of questions, written on screen, in our chat, and verbally during our lessons, so children can interact and receive live feedback to create a responsive environment.

In the design of our online and in-person communities, our primary goal at Play Pattern is to centre the teaching and learning around the real-world experiences of children. We strive for diversity, equity, and inclusion as we believe these goals make a compelling case and guide our major decisions about our product development.

Our company relies heavily on the participation of children, and this is the intentional feedback we ask from children. We reflect on their comments, ideas, our pre/post surveys to steer the development of new programs and to rethink the old programs. Our facilitators are trained not only to share content and create amazing lessons to introduce standards-based connections in STEAM, but also they are tasked to ensure our classes reach all students.

The virtual learning environment should be a space where neurodiverse students feel accepted and valued for being who they are, but we often find that many children who start our programs are challenged, bringing with them the habits of mind and experiences of isolation from traditional teaching and learning. We aim to help create a better space online to practice new skills and old skills that help communication.
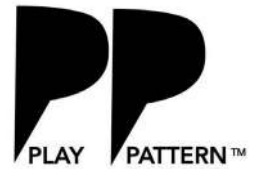
NEURODIVERSITY IN LEARNING

In both conscious and unconscious ways, many educators have developed teaching habits that further ostracise neurodiverse students within virtual learning environments. Techniques that may work in-person can be perceived by children differently online and affect a child's sense of worth as well, making them see their difference as a hindrance. However, as the discourse around neurodiversity becomes more widespread, it is known that both neurotypical and atypical children possess skills and outlooks that can better not only their learning, but also their impact on the larger community.

An example of this is when we ask children to design games. While some students thrive through having specific instructions, there are students who can take our instructions to design new content and ideas. We see their passion and creativity. Furthermore, embracing the many diversities in our students is key to fostering the minds of the future.

When neurodiverse students feel a sense of belonging, they are more likely to participate and engage actively with learning. Along with supporting students to build relationships with our facilitators, we create a structured, predictable environment with clear routines and rules. Students build a real relationship with our facilitators, so we try to be consistent with who teaches our workshops and what happens in our classes. This programming is essential in supporting neurodiverse students to flourish at our programs.

Our programs are designed to be project based, and this lends well the space for children to express themselves. We are also better able to value their unique way of understanding and interpreting the world. Whether a child creates an animation in our workshop or designs a virtual world, we leave space for unique stories to be told and shared. Our community is a space where our ideas are valued for their contribution to a common project, regardless of our different traits or individual likes or dislikes.

Understanding multiple types of diversity is particularly relevant when we consider how to broaden our Diversity, Equity, and Inclusion goals. Our educators spend time during each program to get to know the children, and we discuss the many intersections we can have in our communities. We have children who are diverse in a variety of ways, intellectual capabilities, social emotional understanding, trauma, communication skills. By doing this deep dive into our community, we build the relationship between children and educators. This reduces the student's anxiety and stress, making it easier to learn. We aim to ensure trust, so the child feels cared for by the very system that looks to teach.
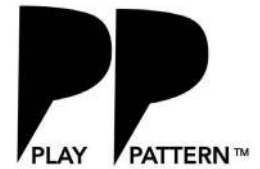
We suggest facilitators veer away from lecture-based instruction that systematically guides students through the scientific process. Most students will thrive in learning scenarios where there are hands-on interactions and when learning is peer led (Stevens, 2012). Consider how to incorporate physical learning with abstract concept comprehension. Since abstractions are central to mathematical, scientific, and computational thinking (Núñez, 2012; Wing, 2006), finding and disseminating effective ways for teachers to engage students in learning abstract concepts will yield greater learning outcomes within the STEM disciplines.

Our previous research on improving the pedagogy of abstract concepts has shown that, through the incorporation of several principles in teaching and learning, for example, physical embodiment (Fadjo, et al, 2009), students are significantly more likely to apply the abstract concepts in their own programming.

There are many cases to be made for the inclusion of more diverse educators within the classroom, highlighting access to differing perspectives of race, gender identity, economic background, or in this case, neurodiversity. With the digital age making its way into classrooms throughout the past decade, educators are finding that technology has the power to offer fresh opportunities to learn. From audio-visual learning tactics to virtual learning possibilities, creating an inclusive space for all learners can be achieved through embracing 21st Century technology.

We recommend companies learn that neurological variations are a common aspect of the brain and seek to include and affirm the needs of people with variations rather than treating them as having conditions that need to be cured. We run public programs, and because we specifically work with organisations that aim to service a diverse population, we have learned that children learn when they see themselves. We hire and train a diverse population that includes our facilitators. This means we have to adapt our models and learn from our staff and the children in the program, so adopting an iterative approach has benefited our company tremendously.

The neurodiverse participants provide us with a new perspective. In our classes, we offer an open-ended approach to project completion. This means we create challenges with physical materials or digital designs challenges. All projects can be completed with a certain amount of direction, but then can be rethought in a unique way. One project considered the design of 3D shapes, and one of our autistic participants chose to approach the entire project using materials in ways our other group members had never imagined. This happens all the time in our company.

We are learning from our clients, really innovative children, all the time. We actively co-design and ensure their participation and ideas are backed into our products and services.
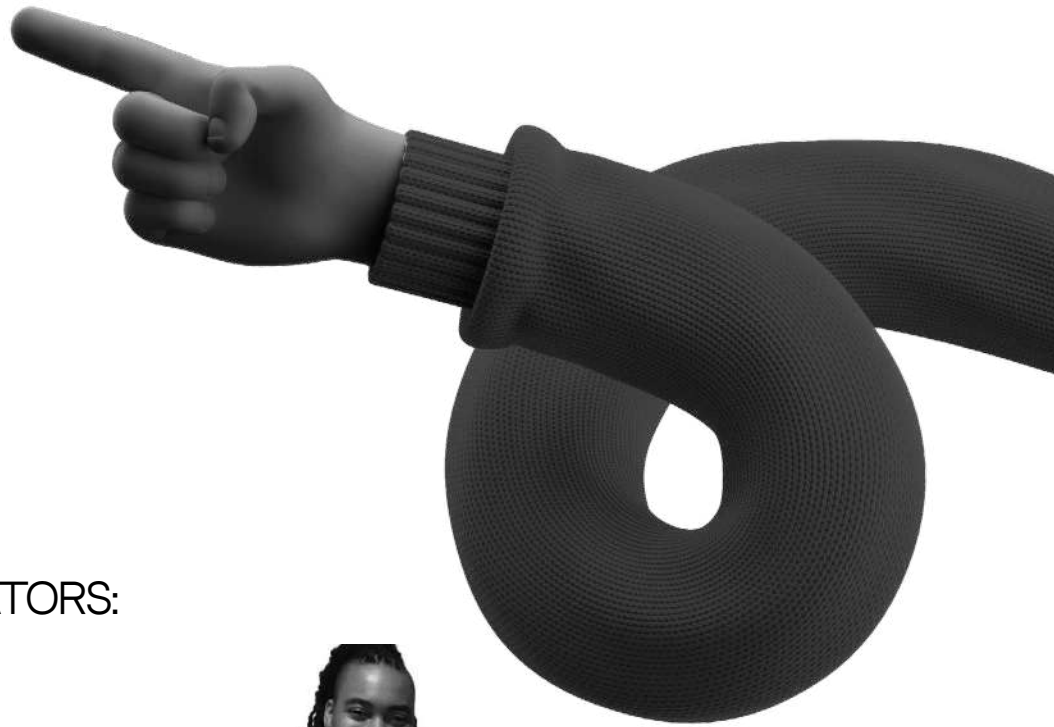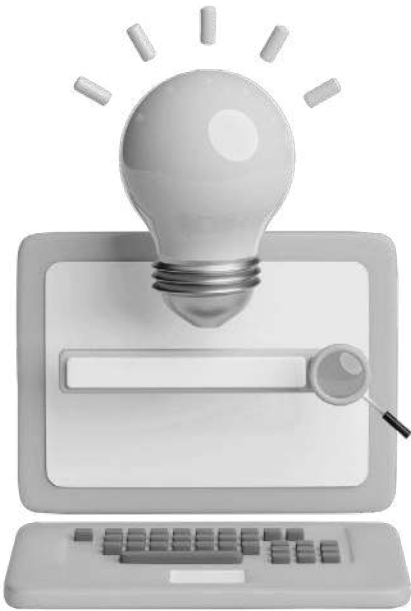
NOTES FROM FACILITATORS:

ROSHNI PATEL
CREATIVE COMPUTING EDUCATOR

QUENTIN FELTON
CREATIVE COMPUTING EDUCATOR

As an educator for Play Pattern, I often find myself developing practices that cater to our wide array of neurodivergent learners. One of the most important practices I keep in the classroom is providing students with broad prompts and directions, which allows their own imaginations, intuitions, and ideas to shine through. For neurodivergent and typical students alike, this approach allows them to create something at their own pace and comfort level but pushes them appropriately to learn and discover. Similarly, I always try to reduce the anxieties associated with group activities by allowing students to share at their own level of comfort, be it simply describing one element of their creation or showing the group their final product. I try to foster an accepting environment, which allows all my students to feel at ease and excited to engage.

For me, education is rarely one-sided. There's always a new perspective, outlook, or thought process that I can learn from my students, especially when taking into account their personal proficiencies in tech-based creation. Learning more about neurodiversity in the classroom, I started to think back to my own experience within the education system and how some of my peers had felt overlooked and undervalued as a result of their neuro-differences. More often than not, teachers did not fully allow students to voice the types of learning that would work best for them. It is for this very reason that Play Pattern forms programs based on student feedback. We need to know how students are feeling about our activities, for this makes way for a more genuine, well-rounded learning experience. Our programs being peer-led also allows our students to feel comfortable voicing their opinions, making them feel as though they are active participants in their own learning!

KIDTECH: THE NEXT GENERATION OF COMPELLING AND SAFE DIGITAL PRODUCTS

INTRODUCTION

SuperAwesome seeks to understand children and young people in the service of developing kidtech. Throughout our history, we have engaged with children through our platform and behind the scenes to inform the creation of products and services that keep them safe online. We consult with children across a range of projects, from UX prototypes to help with product design, to extensive qualitative and quantitative research that fuels our thought-leading understanding of kids' perspectives across the issues that affect them most.

With young people's (under 16s) online safety at the heart of our business, ensuring they play a part in the development of our products is critical. We need to understand how they prefer to consume media, how they interact online, and how they view their own safety and privacy. This allows us to deliver products meaningfully that not only keep them safe but are online spaces they want to engage in.

We employ a number of methods to involve children and young people on an ad hoc and continuous basis, including:

• Ongoing qualitative UX research with groups of children

• Results of direct surveys within our kid-safe social sharing app PopJam

• Regular qualitative & quantitative research in multiple countries

• Pre-pandemic, information-gathering sessions in schools to hear from children directly

• Ad hoc panel-based qualitative research

CASE STUDY: RUKKAZ

Qualitative research with a small group of children was particularly impactful for the design, development, and launch of our kid-safe gaming community Rukkaz. For this project, we commissioned research with a community of 20 children, aged 10-13, in the US to accompany the development and launch of this new app in 2020. We worked with a specialist qualitative recruiter who had a panel of parents that were open to their children taking part in research.

We then used an online qualitative research platform that allowed us to set the children's daily tasks to help us identify the most motivating features of the new app. The tasks included looking at different designs, giving us feedback on positioning statements, ranking attributes, and sharing how they would use an app like this. The results of this research helped us to create a compelling positioning for this new service.

What's more, our collaboration with children on Rukkaz caused us to pivot our thinking on how the application could be used by kids. Rukkaz was initially conceptualised as an app that would showcase gaming-related content from players, streamers, and influencers. The views of the kids we consulted highlighted the importance to them of connecting directly, and safely, with their icons and heroes among video game streamers.

The research helped us identify the potential of an experimental feature—'Game with Me'—that has now become central to the Rukkaz experience. Game with Me allows children to join live co-playing sessions with their favourite gaming streamers, in a private server moderated by SuperAwesome personnel. The children we spoke with identified the uniqueness of the feature and how appealing it could be (provided it could be executed well and safely). Our direct dialogue with children allowed us to take this initial concept and develop it into a core component of Rukkaz.

The diverse set of respondents benefited from taking part in the community, having their voices heard, and knowing their opinions directly contributed to the development of the new app.

METHODS

The pandemic necessitated a change in some of our usual methodologies and, as it was still important to conduct qualitative research for the depth of learnings, we used more online tools than in the past. We were concerned this would result in less depth and less impactful learnings, but we found this was not the case.

Whenever our research includes child participation, we work with trusted child and youth research partners (agencies and contractors) to coordinate the work and provide the relevant sample and reporting. Our experienced in-house insights team sets out the objectives, designs the project, and oversees delivery.

For the **Rukkaz** project, we had to navigate the challenge of international research during the first lockdown of 2020. We used a provider who was adept at managing online communities to create an engaging environment in which the respondents actively participated. We were able to observe and contribute questions in real time throughout the process, which meant we could react to their feedback and pivot our thinking as the project progressed.

Our sample was recruited by specialist qualitative recruiters in the US to find the right children for our project in terms of age, gender, and their relevance to the project, i.e., they were all gamers. The recruiter managed the process of obtaining consent from participants and their parents, ensuring everything adhered to the MRS Code of Conduct and the privacy requirements of GDPR-K and COPPA.

We used an online platform that allows the creation of a closed online space for a moderator and respondents to communicate. We set it up so kids could contribute their ideas via text, image uploads, and video diary entries. Over 10 days, the community was engaged by a skilled moderator to ensure our objectives were met. In part, the moderator's role was to ensure the project is not led by our own biases, i.e., influenced by our pre-conceived ideas of what the outcome would be, which can happen when a development team works on their own projects. Finding the right moderator was essential, as talking to kids and young people requires a specialist skill set to create the right rapport and trust. Moderators who work for a specialist youth research agency and who have experience with this audience will be able to understand the nuances of child development and youth / child culture, both of which are essential to interpreting responses meaningfully.

The platform allowed participant interaction when needed, so children could collaborate and build on our ideas by answering questions both individually and as a group. Interestingly, this enabled the research team to obtain high-quality individual opinions, sometimes a key challenge of conducting qualitative research with children who can be susceptible to agreeing with dominant respondents in live interview settings.

Although we initially intended the project to be primarily based on face-to-face qualitative research, we actually found that the online methodology had numerous benefits, including obtaining single and collaborative viewpoints, the ability to interact with the target group across platforms they are familiar with, avoiding respondent or moderator bias and leading questions, reducing respondent fatigue (as each daily interaction was only 30 mins in length), and increasing involvement from us as a stakeholder team. Although there is less spontaneity in online interactions, we were delighted by the depth of learning we achieved with this methodology. We would certainly use online methodologies in the future as part of our research tool kit.

CHALLENGES

The key challenges of child participation centre on three elements: consent, data privacy, and expertise. The compliance requirements are complex and have potentially damaging consequences if not handled properly; this can be a barrier to engaging children in a meaningful way.

Overcoming the challenges is mainly a case of being aware of the regulations governing research methodologies and data privacy (either in-house or via specialist external advisers) and finding the right partner who can navigate the complexities of compliance in market research, who knows how to talk to children in their own language and can translate their responses into actionable learnings.

FUTURE

Through this and other projects, we have seen how engaging with young people early can materially impact the way we design compelling and safe digital products. We will continue to invest in such research, in particular as new digital spaces emerge. With the explosion of experiences in 3D gaming and the emergence of the metaverse, which are being propelled by kids as early adopters through platforms such as Minecraft and Roblox, we have an opportunity to engage with kids as we build the youth-safe experiences and brand activations of the future.

In particular, we believe there are creative opportunities to engage kids in research directly within these environments, whereby we can interact with them in a digitally native way. Such virtual focus groups or community engagements could take established (but expensive) research methods from the real world and scale them up through the metaverse, enabling larger, more diverse samples and significantly lower cost.

While we are not yet in the metaverse, and there are still considerable challenges to doing this well and at scale, there is a huge opportunity to secure child participation in both physical and digital product development in a way that is more engaging than traditional research techniques.
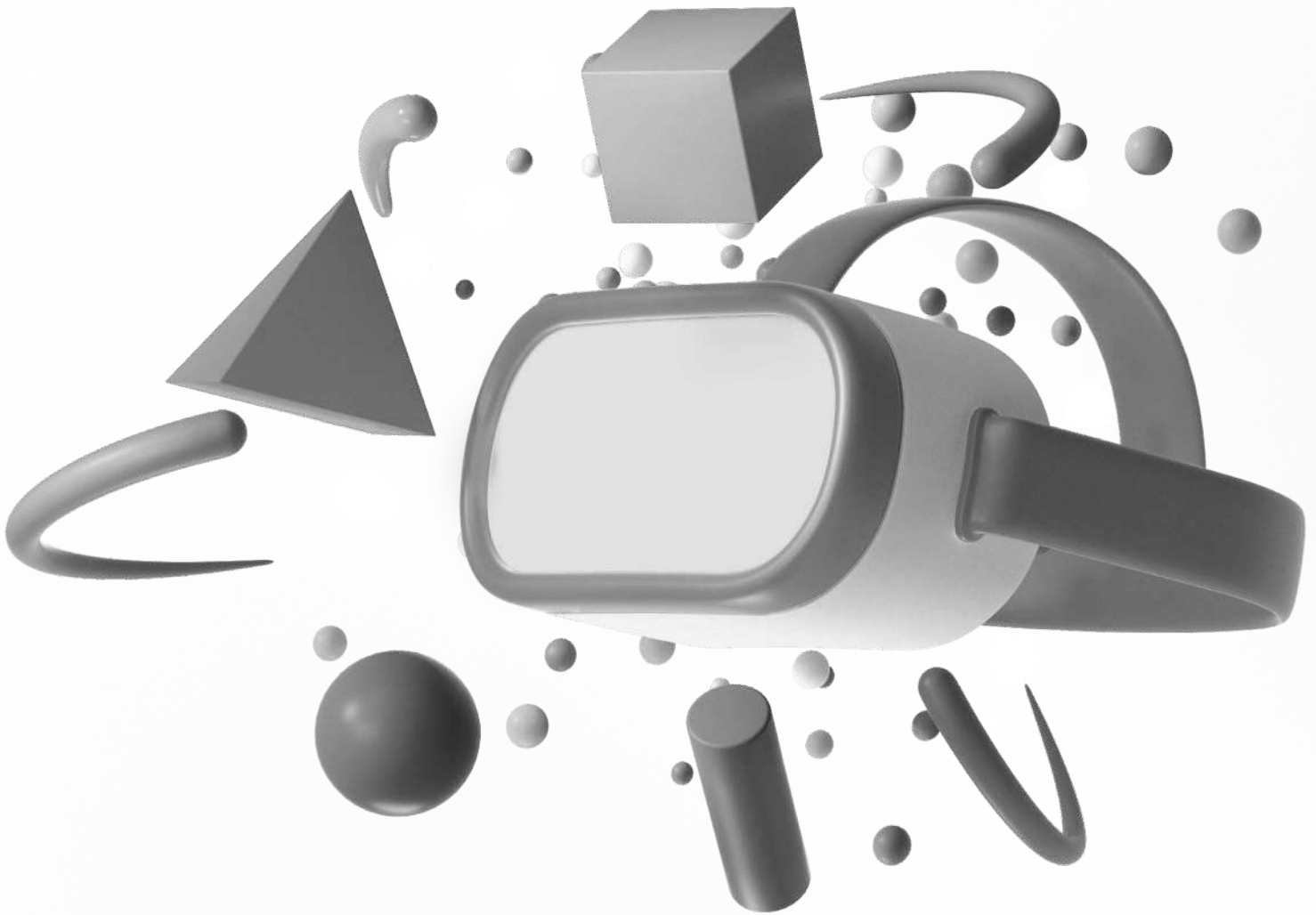
Key challenges that remain include how to:

- Engage kids for research in 3D gaming ethically, including how to secure appropriate parental consent.

- Ensure the sample meets demographic requirements, for example panels within the gaming space.

- Ensure that any incentives to participate in research are appropriate for kids.

- Develop the infrastructure to conduct research in the 3D gaming ecosystem, for example research 'islands', 'rooms', or clickable links for gamified surveys.

That said, the opportunities to engage with kids in their native digital space are boundless, and the scope for digital ethnography, observing how kids and young people behave and interact, is particularly exciting. Engaging with them at the actual point of consumption in their natural environment, with innovative new interaction formats, will bypass some of the artificiality of current research practices. Metaverse platform research will also enable global research at a scale not seen before.

At SuperAwesome, we continue to look at innovative ways to engage with kids in these new spaces to ensure children are meaningfully participating in the development of the next generation of kidtech and the new digital experiences it enables.

HOW TO UNDERSTAND WHAT IS MEANINGFUL TO YOUR AUDIENCE: AN HONEST CONVERSATION

REBECCA:

Hi. So we have KidsKnowBest CSO, Pete, Research Executive, Dan and me, Research Director, Rebecca, here today to discuss the bit that comes before child participation, how to understand what is meaningful to your audience. How do we make something meaningful? How do we find out what is meaningful to our audience to plan a meaningful child participation methodology? But to kick-off, what led everyone to work with children and young people?

PETE:

Pure accident, I enjoyed it because of two things. One, the topic is cool. You're working on games and toys and TV shows and stuff you loved as a child as well. So, if you've never really grown up, it's nice to play in that space. But second, it's the methods. In the world of traditional research methods, you tend to use surveys and focus groups, but with children, you just can't get away with that. It's important that you devise methods that children will actually engage with. I think that's probably true of all people. I just didn't realise until I started working with children that creating fun methods was a better way of getting good insights.

DAN:

I think I was about 11 years old and I went to have my tonsils out, and I remember coming home, and I turned to my parents, and I said, "I'm going to be a paediatric surgeon." That was my career plan. I went off to university. I went to medical school for a bit. I studied child psychology, child and adolescent mental health, and I quickly realised how much the digital world influences their cognitive development, general psychological development, and how instrumental it is in shaping their mental health and the people they go on to become. And then I found myself at KidsKnowBest about six months ago, coming from a completely different background. But yeah, it's definitely been a journey from paediatric surgeon to here.

REBECCA:

Since working with children and young people, has there been a conversation that stood out to you most?

DAN:

I had conversations prior to KidsKnowBest, when I was working in mental health that definitely shaped how I viewed children's voices and how being able to give them the ability to speak up and have a say in their own lives is so important. What about you, Rebecca?

REBECCA:

I was just always surprised at how articulate children are about what they want.

PETE:

I totally agree, Rebecca. When I started talking to children, I was shocked by how articulate they are. There are two conversations I can recall that are linked. I was building a model on emotional scheduling and looking at how fans were built on YouTube, and we spoke to this child in the UK who told us how he took his tablet to his mum and dad's bedroom because it's a quiet space in the house at 7 pm, and watched YouTube videos of gaming, long-form content because it was a chill-out space. It made me realise that, in this fragmented media world, children were finding their own spaces. Then I met a girl in the US who spoke about how she got stressed out at school sometimes, so when she came home, she put the duvet over her head, YouTube on her tablet, and watched her favourite influencer. And it was like having a coffee with a best friend, learning stuff, and talking about things. It was the idea that children were using media as a way of coping with life, and that was always interesting.

Then the other two stories are also linked to gaming. One was these three boys that came to the game studio and played Skyrim. They were cool children, like proper gamers, and two of them always played as males on Skyrim, but one always played as a female because the assets of the female character were nippy and nimble, which meant he could help the other two players who were strong. It was such a nice thing to hear children were starting to become more gender fluid with how they portrayed themselves and focusing more on personality traits.

THE PRINCIPLE

We can design methodologies for co-creation that are inclusive and engaging for children, but it can't be meaningful overall if we aren't asking them the questions that are important to them and questions that we (the business) can help answer. Before we design the approaches to child participation, there is real value in defining and refining the question to ensure the method is going to produce meaningful outcomes for both children and adults. The business may know why it is meaningful to them, but it is only meaningful if it is a question the audience feels needs answering too.

PETE:

That's the topic we're talking about, and if I think back to some of those examples I gave, it really relied on being confident enough to get off the discussion guide because this child needs to be doing something else with us. That is part of working with children, have structure to help you get through the conversation and help you meet objectives, but let the child lead because they should get to talk about what they want to talk about. Then you'll get the best insights.

REBECCA:

So what is meaningful child participation from your perspective?

PETE:

Be in their environment, in their rooms, at their sports club, at their schools, in their world. Not in your world. Be at their level, don't stand above them and look down at them. If you want to know how the child plays, put the camera on the floor, because that's where the child is. However, most importantly, just listen.

DAN:

I think you pretty much hit the nail on the head there, Pete. You need to leave the idea that you're the expert and that they're the child at the door. When you go into a room to speak to children, they are the expert in that room. Try to think about how you can make an experience that's going to be memorable for them, one that they're going to enjoy, rather than it just being something that benefits you. These experiences can be meaningful for a business, but they can also be incredibly meaningful for the children.

REBECCA:

What resonates with this is their thirst for knowledge, like the way Henry Jenkins talks about information hunter-gatherers, the way children are searching for information and questioning things. Children's participation can provide another environment where children and adults are all learning from each other. When you get those moments, I feel like you also know it's happening.

Can you think of a moment when your approach to a project could have been more meaningful for the child?

PETE:

All the time. Part of being a researcher is sometimes not meaningfully engaging with a child. It's just getting through a project because there's something very specific that you need to figure out, but that's OK. We must answer questions. One thing I learned very early is not to overcomplicate things. You need to get to know the child or parent and make sure the method works for them.

DAN:

I can think of an example where we asked a group of parents to teach their children how to do a simple activity. It came to light that the experience had been really meaningful and the children had spent quality time with their parents. We were oblivious to the fact that this was going to be a meaningful experience for the children and the parents that were involved until the very end of it. I think that's something we could have thought about at the beginning and explored further or built upon. This really demonstrated the importance of reflecting on our sessions and learning from every experience we have.

THE METHOD

What can you do to understand what is meaningful to your audience before you write up your questions or objectives? It is important to address this before designing child participation methodologies, and there are many ways to do so.

REBECCA:

So how can someone understand what is meaningful to children in today's society?

PETE:

Don't make every research project about an objective or a business goal. Actually invest money and time, or just time if you don't have money, in immersing yourselves in their world and listening to how they talk about things and what's interesting to them. Spend more time listening to the vernacular, the experiences they have. Rather than making the objective to build a product for them. If you don't have a budget for research tools, in an ethical way, you can join parenting forums and groups. Or if you're looking at older children, learn about the gaming platforms, like Roblox, Fortnite or Minecraft. Learn what players do in there, how they move around, how they build and design things, when they want to be creative, and when they just want to play.

REBECCA:

Also public chat spaces like Discord, forums, or chat functions on sites are filled with opinions and conversations on the topics that are important to the audience. I was on a site on sustainability resources for children, and there was a discussion box where so many children were posting their thoughts and views. There was so much information about what they knew, who they thought should be acting, and who's the responsibility was, and the type of language they used to speak about sustainability. There are a lot of places online where young people and children do feel comfortable sharing.

THE OUTCOME

By observing and listening to your audience, meaningful participation can be achieved, but what outcomes does this produce? Apart from ensuring the children and young people have a fun, enjoyable, and safe experience, a meaningful session also produces more authentic and real insights that will influence more accurate business decisions.

REBECCA:

Why is it important that companies should consider meaningful child participation? And why should they consider what is meaningful to children alongside what is meaningful to businesses?

PETE:

We should be aiming for people to be interacting with each other and thinking about something together. And I don't see why any method should not allow that, even with surveys. There are fun ways to do surveys now, and it's just a case of even being clear about this survey. It is going to be 10 minutes long, parts are going to be boring, parts of it are going to be fun, but this is why we need it. For me, there are two things. One, be clear and upfront about what you're doing and why you're doing it so that they understand that. Two, try to get to a flow where there's a two-way dialogue.

REBECCA:

Dan, do you have anything to add?

DAN:

I think it could be detrimental to consider the concept of meaningful to a business and meaningful to a child as mutually exclusive. They can be viewed as the same thing. If you have an experience that's more meaningful for a child, an experience that they're engaged in, that they feel natural in, then naturally, that's going to be beneficial to businesses who will gain extra insight from more naturalistic stances.
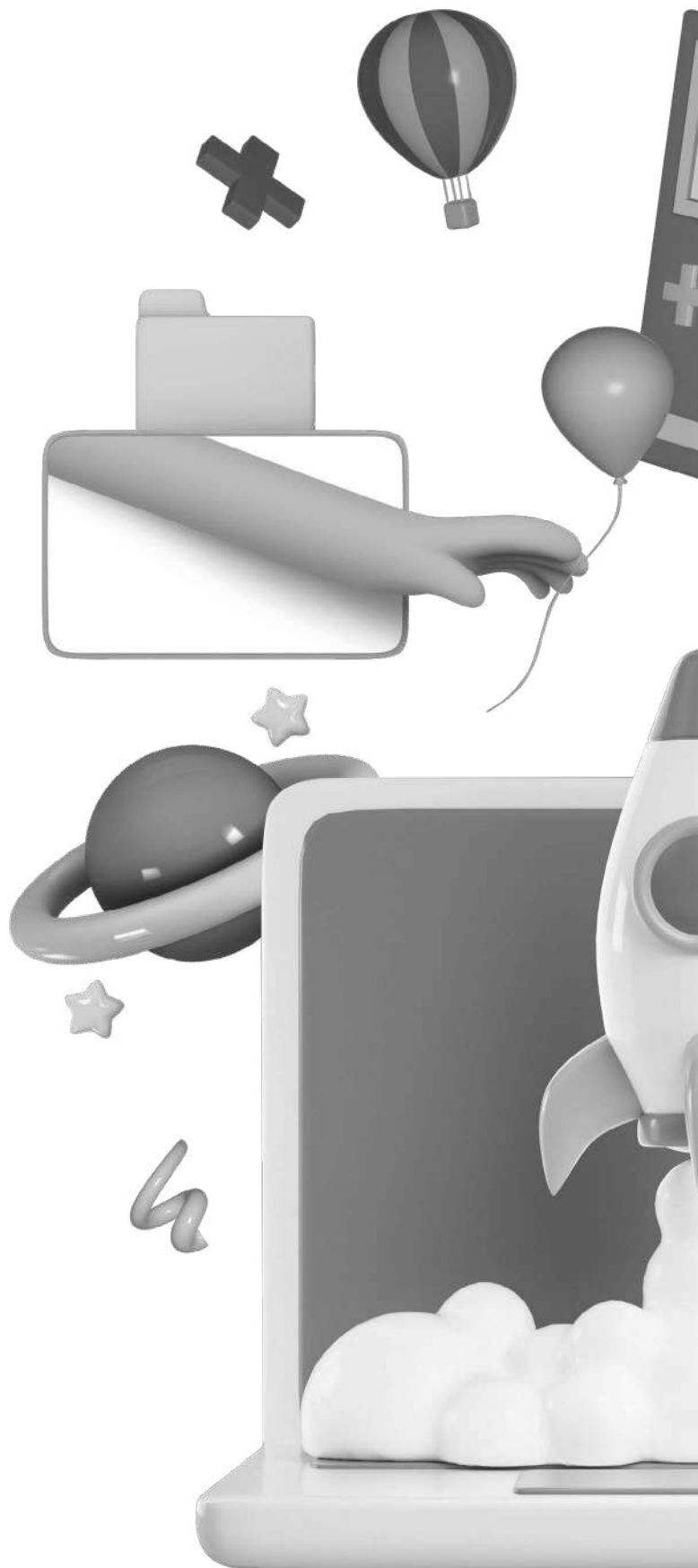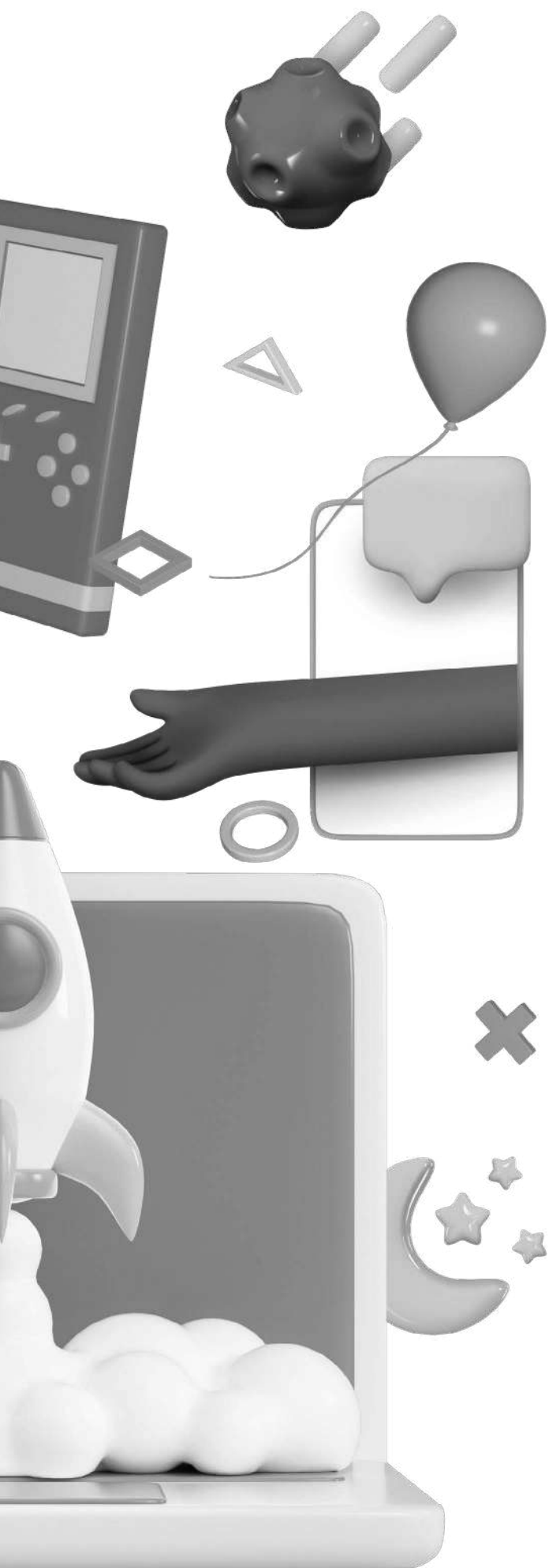
REBECCA:

What do we envision meaningful child participation to look like in the future?

DAN:

I'd like to see it as something that's slightly more ingrained into children's everyday lives, not an external call out. You can interact with children and young people in their world so making the best use of digital tools and spaces feels like a natural progression.

PETE:

Research methods shouldn't ask a child, or anyone, to step out of their world into the research world. However, the one caveat I'd put to that is just being fair. We've got to be so clear with what information we're collecting and why we're collecting it, how we're collecting it, when that's being turned off, especially when it comes to children. It has to be worth their time and effort to give it to us. So, I think one of the things that we should always be doing is feeding back. This is what your data allowed us to do. You can see this new product being designed. I think that, as we do more listening and embed more research tools into audiences' lives, it is imperative to make sure that they are part of the process in an explicit way. I think that's going to be the next big step in the world of research data, people understanding the information, the data they are providing, and the research and brand world understanding the value and paying for it as well.

REBECCA:

Children and young people want to be part of that.

15 WAYS TO ENGAGE YOUTH WITHIN YOUR COMPANY AND WHY YOU SHOULD DO IT

SANDRA CORTESI

Leaders in both the public and private sectors have increasingly acknowledged that society has an obligation to include the next generation in the decision-making processes that will shape their future. Young people (ages 12-18) seem to agree, and they have expressed a growing desire to be actively consulted on issues that matter to them. From environmental protection and climate change to social justice and mental health, youth are increasingly voicing their questions, concerns, and hopes about the future. Input from the next generation is particularly crucial when it comes to navigating the challenges of new technologies.

Youth movements, developments in the legal arena, and initiatives by corporations and NGOs offer the promise of enhancing youth participation in business and government for the decades to come. Gradually, the emphasis is likely to shift from arguing why we need more youth participation to the question of how to enable youth engagement in practice.
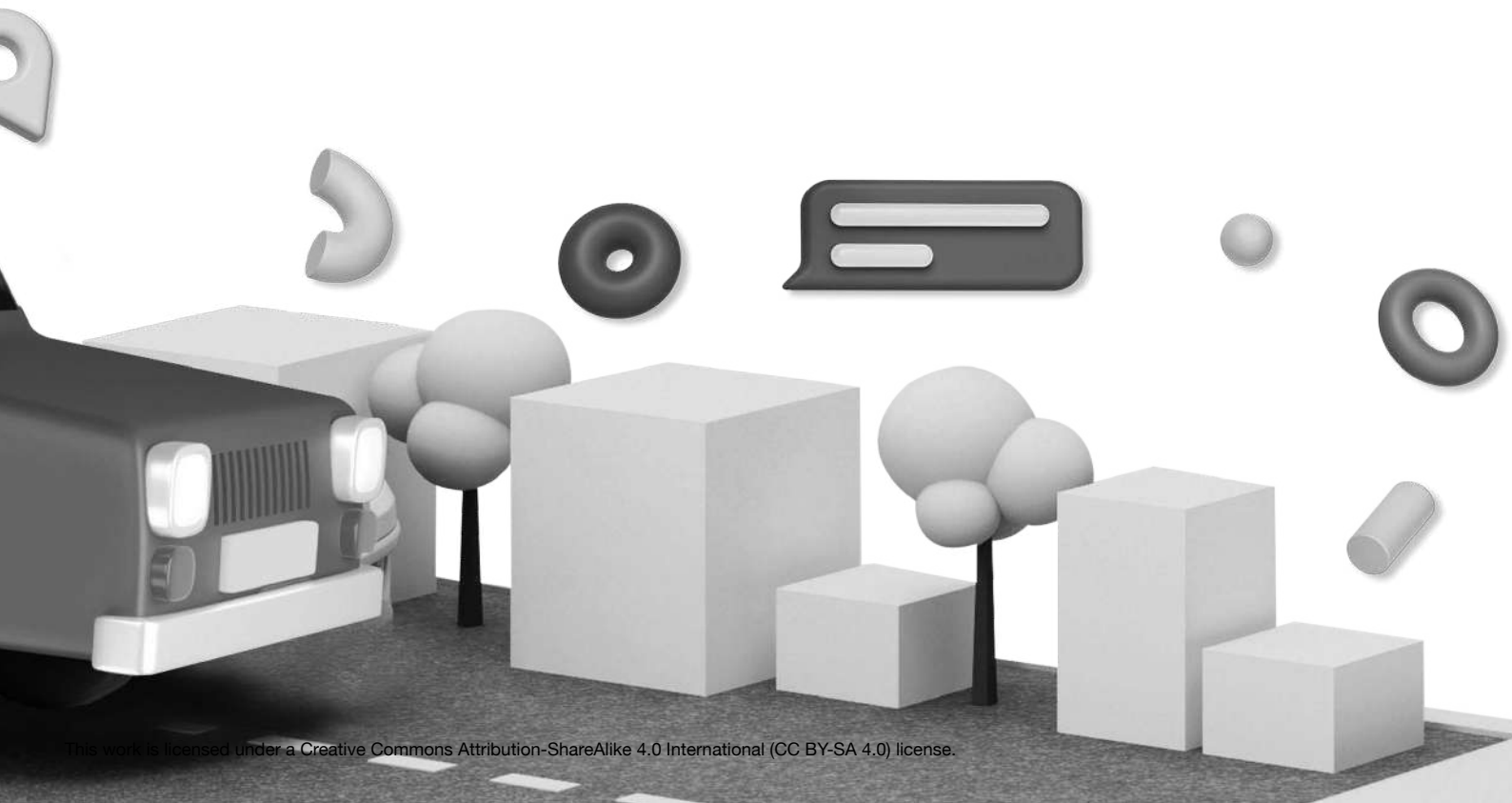
WHY YOUTH ENGAGEMENT?

There are manifold reasons, normative and practical, to engage youth when making decisions that affect their futures. The UN Convention on the Rights of the Child, to highlight a normative example, grants every child a right to express their views freely on all matters and decisions that affect them and to have those views considered at all levels of society. Or more recently, in response to a lawsuit brought by young climate activists, the German Constitutional Court ordered the government to expand a law aimed at bringing Germany's carbon emissions down to nearly zero by 2050, acknowledging that the young people have had their liberties violated by the government's failure to pass stringent enough legislation. Climate justice and social justice for the next generation are moral, and increasingly also legal, imperatives.

In addition to compelling normative positions that require us to take the next generation's interest into account, a wealth of insights and experiences gained through actual youth engagement suggest its promise. Our fieldwork, for instance, has revealed how youth involvement can support decision-making in a rapidly changing world where tech development and youth behaviour require real-time reality checks and evidence gathering. Youth engagement in critical areas, such as privacy, personalisation, or self-determination, can also help bridge the gap between adult and youth perspectives, thereby enhancing interoperability. Along similar lines, youth and adults may not always agree what the problems are in any given situation. This is not to say young people are always right; however, their unique perspective can help institutions identify blind spots and make better informed choices that are mindful of the diversity of youth attitudes, experiences, and background. Opening these channels of communication will help to ensure new technologies, services, and products are more inclusive and their benefits more widespread.

YOUTH ENGAGEMENT MODELS

With increased interest in engaging youth comes the question of how to engage youth meaningfully and what types of models, programs, spaces, and methodologies, youth would find most valuable to engage with. Across many different geographies and contexts, researchers have begun systematically documenting a broad range of models that can enable youth engagement within a company and across other sectors. The Youth and Media team at the Berkman Klein Center, for instance, has identified fifteen models and, with the International Telecommunication Union, asked youth through a global online consultation to share their perspectives on these models and identify which one they would find most valuable[1].

There is a diverse array of youth engagement models, entailing different goals, purposes, levels of commitment, durations, and modalities. Some models are more traditional (e.g., summer internship or a paid job) while others are newer/less established (e.g., youth lab, youth board, co-design spaces). When selecting an engagement model, it is key to identify where within the company the youth engagement should take place and which model is best suited for that space. For example, when thinking about current or future products, a lab bringing together youth with a product development team might be a good choice. However, if the goal is to think critically about a company's strategy, then a board that brings together youth with senior executives might be more helpful. Also, these models are not mutually exclusive (e.g., one can host a youth lab over the summer and frame it as a summer internship opportunity), and they can take place simultaneously (e.g., one can invite youth lab participants to meetings/ conferences/summits).

Results from the study showed that, across models, youth are interested in participating and sharing their perspectives and ideas with others, but the findings also make clear that engaging youth is not a simple undertaking; most engagement models require a great deal of investment, thought, and energy both from the company (and its employees) and the young people involved.
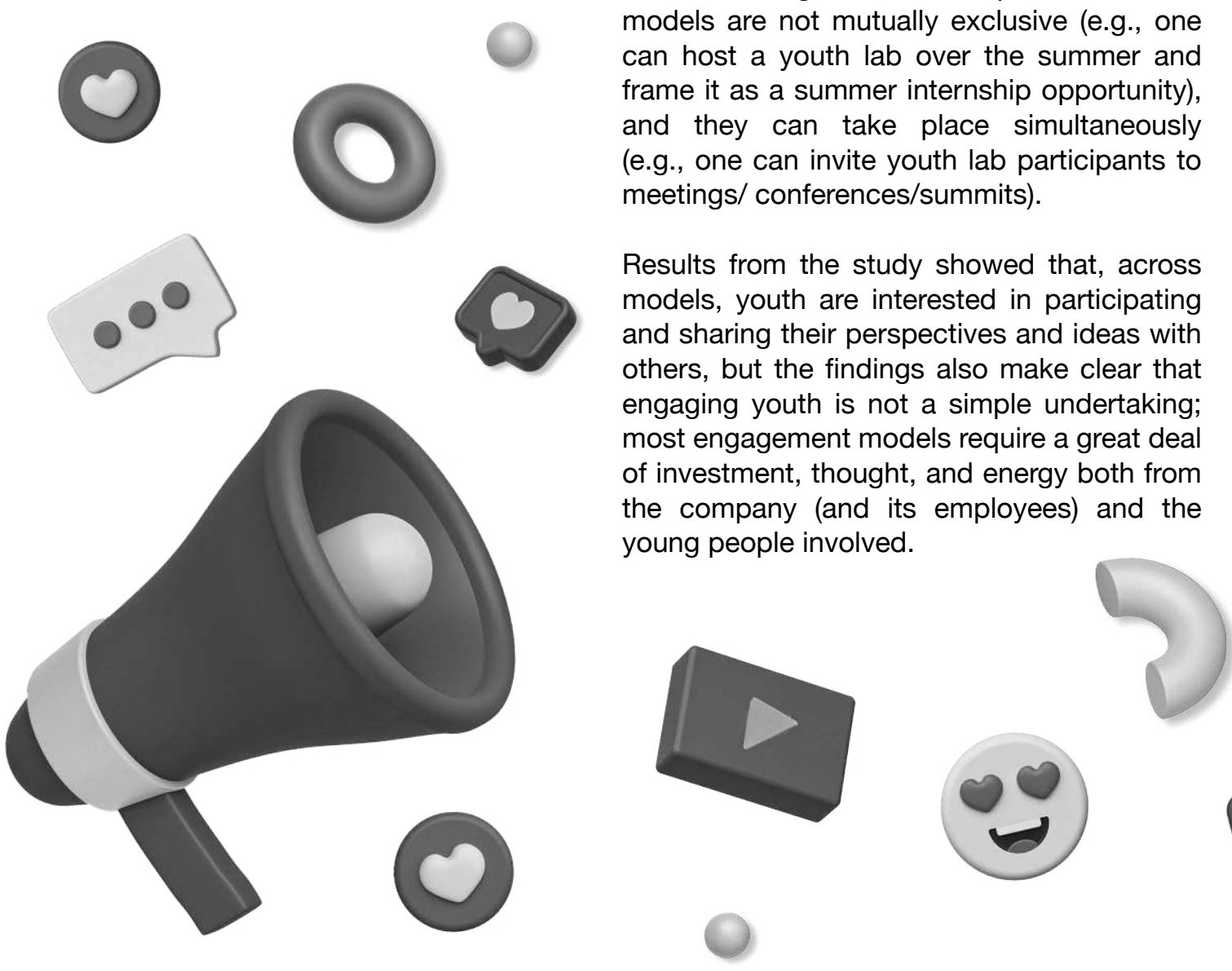
1. Cortesi, S., Hasse, A., & Gasser, U. (2021). Youth participation in a digital world: Designing and implementing spaces, programs, and methodologies. Youth and Media, Berkman Klein Center for Internet & Society. https://cyber.harvard.edu/publication/2021/youth-participation-in-a-digital-world

Open creative local spaces ("Youth Labs") where young people can share their perspectives, learn new skills, and find mentors and support

Offer youth a free school/ community program to learn digital skills where youth get a certificate at the end

Create a leaders program for young people to advise the organization on youth-related matters

Support youth in being entrepreneurial and build their own start-ups/companies

Invite youth to meetings/ conferences/summits

Support and participate in youth community development or civic engagement projects

Offer paid jobs for young people ages 16-18

Invite youth to suggest research topics, questions, or challenges others should study

Invite youth to have their work featured on the organization's platforms

Invite youth to participate in surveys and interviews

Offer a summer internship for young people

Offer a gap year program to explore academic and professional interests

Send their staff to events organized by young people

Engage with the young people already working in their organization

Connect youth with people in their community who have worked with those organizations

To learn more about each model (i.e., purpose, youth participation, adult participation, challenges, and first steps) please read:https://cyber.harvard.edu/publication/2021/youth-participation-in-a-digital-world#:~:text=Youth%20Participation%2[…]els%20that%20enable%20meaningful

CENTERING YOUTH

Centering youth's rights, needs, and expectations when designing engagement models leads to more valuable and meaningful overall experiences for participating youth. To that extent, it can be helpful for company leaders to articulate why or how the engagement (or parts of it) is valuable for participating youth. Monetary incentives or the like (e.g., gifts, raffles, gadgets, and products) are an important start, but companies should go beyond that. Youth also want to learn skills that are not being taught in traditional educational settings and receive feedback on their input, creating pathways for mutual exchange and collaboration. Many youth seek long-term inclusion and ask that the engagement models are aligned with their career goals. Youth also value company-facilitated connections with adult mentors who can offer consistent career counseling and exposure to job pathways that blend their skills and interests. Beyond these more specific considerations, a number of high-level challenges are worth highlighting[1]:

(1) Equity and inclusion: Not all youth are able to participate under the same terms. Significant disparities in participation persist for youth across multiple dimensions, such as geographic location, skill and education level, social class, race, age, and gender. It's crucial to create programs that are responsive to the cultural, political, economic, and social contexts that shape young people's everyday lives. It is also essential to consider ways to make participation efforts even more inclusive and accessible to youth from different socioeconomic statuses (e.g., by providing financial support), geographic regions, and communities.

(2) Expectations: Many models require youth to spend significant time and other resources in addition to having relatively packed schedules/lives. As such, participation needs to be seen as a dynamic (rather than gradual or linear) process and include varying degrees and modes of participation. We recommend not viewing specific forms of participation as more valuable or desirable than others, as even seemingly mundane activities can lead to powerful outcomes or serve as entry points for further types of engagement.

(3) Power differentials: A common challenge in youth participation models entails shifting the power structure inherent in adult-youth relationships. It may then be useful for adults involved in such models to consider the power resources people have or lack, the position that different people involved take in this power structure, and how these power dynamics allow or prevent youth's participation in actions and decisions.

(4) Oversight: Since implementing participation models can be quite complex, it may be helpful to consider the involvement of an oversight entity that keeps track of all elements and helps ensure the young people's rights and best interests remain as guiding principles throughout the process. In academia, such an entity could be an ethics review board. In contexts where such review boards are not available, consulting with experts is advised.


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1. Cortesi, S., Hasse, A., & Gasser, U. (2021). Youth participation in a digital world: Designing and implementing spaces, programs, and methodologies. Youth and Media, Berkman Klein Center for Internet & Society. https://cyber.harvard.edu/publication/2021/youth-participation-in-a-digital-world

WHO IN A COMPANY CAN ENGAGE YOUTH AND HOW

Centering youth's rights, needs, and expectations should always come first and be an unquestionable requirement when designing and implementing youth engagement models within a company. That being said, based on evidence from research and practical experience, we have identified three other questions that require attention when designing and implementing a youth engagement model within a company, namely:

1. What is the value of youth engagement for the company?
2. What makes the engagement (or parts of it) valuable for participating employees?
3. To what extent does youth engagement benefit a product (e.g., a consumer product, campaign, business strategy) or multiple products?
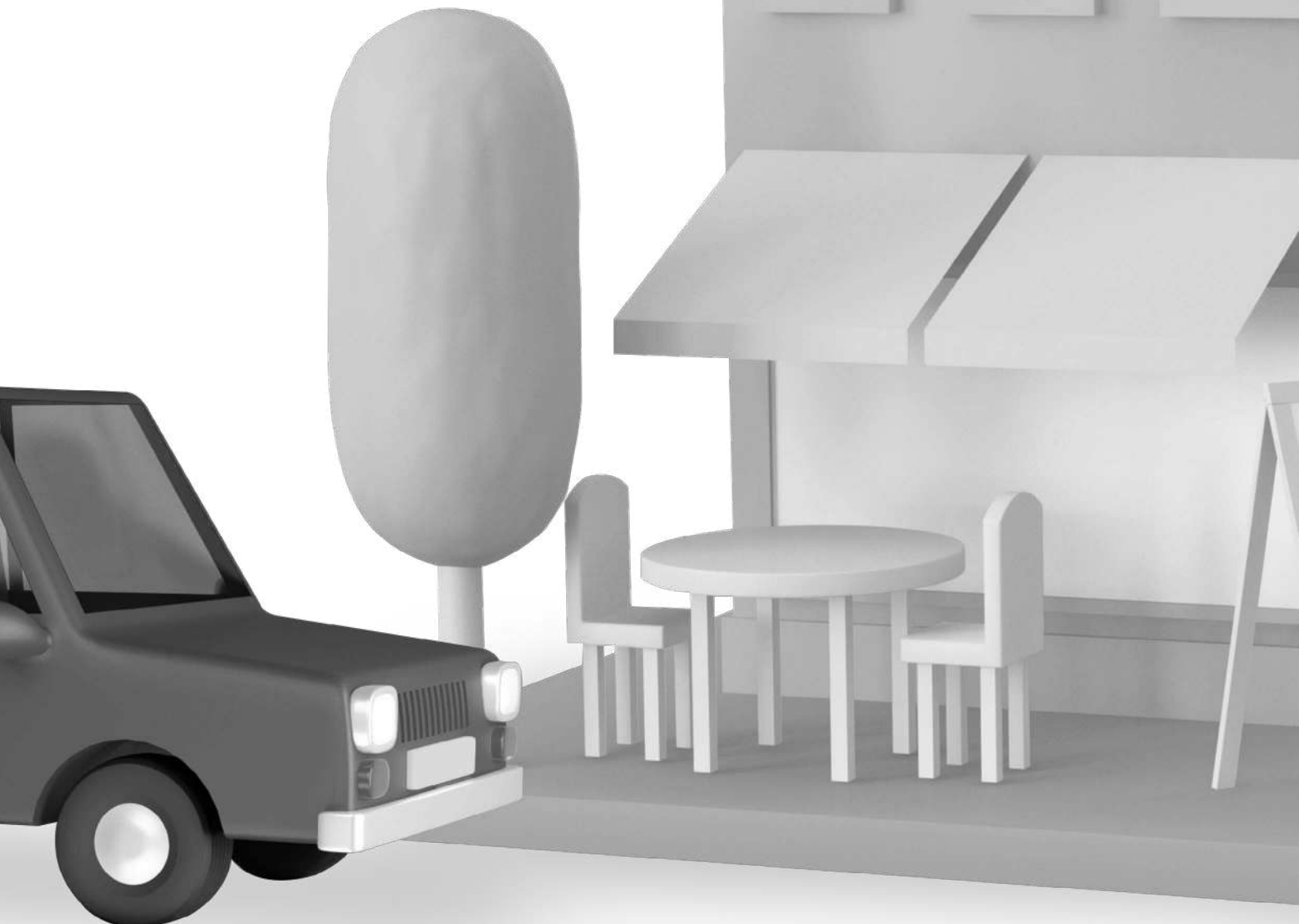
The following section highlights some of Youth and Media's observations and take-aways, gained by accompanying the design and implementation of the Tages-Anzeiger Youth Lab and why we believe addressing the "added value" for these other three enablers (i.e., company, employees, product) is crucial.

The Tages-Anzeiger Youth Lab. Tages-Anzeiger is a German-language national daily newspaper published in Switzerland. The Tages-Anzeiger Youth Lab consisted of a physical space within the company that brought together youth (ages 17-19) with journalists and other employees within the company. The youth lab's program entailed 13 sessions that took place over the course of three months. There were 32 youth participants and over 35 employees that participated. Most sessions were attended by 16 youth and co-led by three employees (in addition to the core youth lab team). One key goal of the youth lab was to learn from youth, the future target audience as well as future talents, and their digital behaviours, attitudes, and preferences with regard to the future requirements for products, services, and processes.

The company. There are companies that engage youth without making it known to the broader public or even well-known within the company walls. Less visible youth engagement can be of high value to the company but, in our experience, raises even more strongly the question of benefits for a specific product or the employees (more to that below). A publicly visible youth engagement can also be of value to a company. The Tages-Anzeiger Youth Lab was well-visible within the company as well as the broader public. Providing youth with a space where they are heard, empowered to contribute to something relevant, and given

the means to learn and help co-create the world they will eventually inherit was perceived as positive. Particularly, the youth lab signalled to its employees that the company was willing to engage in a creative and forward-looking project that pre-emptively addresses questions about the future of the newspaper and the media ecosystem more broadly.

Helpful design choices: Much effort went into documenting and sharing the vision, design, and implementation as well as takeaways and outcomes gained through the different sessions. The Youth Lab had a company-wide Slack channel, which was highlighted multiple times in the company's newsletter, and was featured at several internal events and meetings. The Youth Lab also received significant attention in the media (e.g., other newspapers, radio, TV).

Employees. The benefit of youth engagement to adults, whether board members or junior employees, is a commonly forgotten variable. Why is this important? To some extent, especially within a company, engaging with youth tends to be someone's "job." However, in our experience, the adults are not only key during the engagement, but also afterwards. A mission of the Tages-Anzeiger Youth Lab was to make the employees' engagement a true learning opportunity, a possibility to share knowledge and expertise, become a mentor to participating youth, collaborate with others outside of one's typical team, and escape from their daily routines to partake in a novel opportunity. This created many adult allies and champions that helped advocate for some continuation of the project, shared knowledge proactively, or served as ambassadors of the project to the outside world.

Helpful design choices: The sessions were structured in a way so that employees had an

opportunity to share their expertise (through "job talks" and specific skill sharing sessions) and could learn new knowledge that directly impacted their work (to ensure all sessions were co-designed with participating employees). Employees were also asked to document their learnings and capture them in diverse ways (e.g., surveys, a quote, video interviews). While this required more effort, the documentation did help employees reflect on their experiences and articulate valuable elements.

The product (e.g., a consumer product, campaign, business strategy). The Tages-Anzeiger Youth Lab was structured around ten key questions. While each session was designed in a way such that insights would either inform existing products or help imagine new ones, some conversations were broader/ less structured (e.g., discussing the future of news and young people's information ecosystem, reimagining payment options). As such, it was not always straightforward to figure out how an exchange may directly benefit a current or future product.

Helpful design choices: The Youth Lab had a team that documented all activities and conversations. Employees that were part of the Youth Lab were asked to note their main take-aways and how what they had learned in the lab would inform their work moving forward. A clear goal for employees was to come up with 2-4 products that were either new and based on learnings from the youth lab or a modification of

an existing product, where the company could clearly measure how the project improved due the the knowledge gained during the Youth Lab. Having these product success stories is key – particularly when talking to employees or people in the business sector.

OUTLOOK

The observations shared here demonstrate how meaningful youth engagement might look in practice. Considering how all stakeholders – youth, the company, the employees, and the product – work in concert might be particularly helpful when thinking about longer term strategy and sustainability in this area. Overall, company leaders who seek to explore this field further are encouraged to take a pragmatic approach in terms of "thoughtful experimentation." Start somewhere concrete and learn over time. "Build, iterate, and expand" is the credo in the emerging theory and practice of youth engagement.
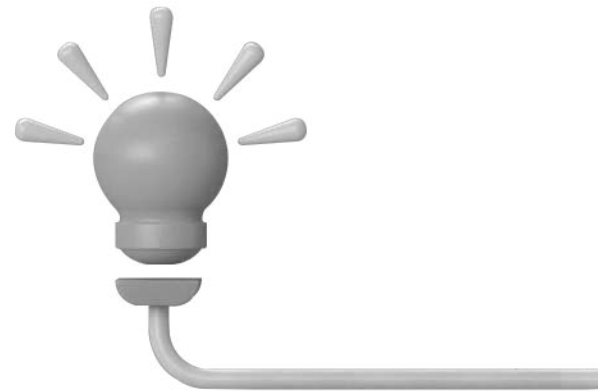
EMPOWER: PRIVACY FOR YOUNG PEOPLE

AIMEE DURAN

At Microsoft, we are deeply aware of our responsibility to protect the privacy and safety of young people online. As reported by UNICEF, it has been estimated that one in three users of the internet globally is under 18. Good digital skills, including privacy knowledge and awareness, can help children and teens safely learn and have fun online. We want young people to understand how to protect their data and information. A good privacy skillset includes knowing where to find privacy settings and knowing how to manage personal information shared online. Young people should be able to access age-appropriate privacy resources, so they can make choices about what information they share and who they share it with.

As part of our ongoing commitment to empower our customers to exercise their privacy rights, we published a new online resource, Privacy for young people. To create this page, we consulted with a group of 13 teens who serve on the 2021 Microsoft Council for Digital Good. In a four-hour virtual workshop, we spoke with them about why privacy matters and how they can protect their privacy while interacting with others online. In break-out groups, they reviewed the draft content for our new privacy page, asked questions, and shared their perspectives and feedback. Their participation helped us clarify our privacy practices in age-appropriate language so that young people have information in language they can better understand to help manage their personal data.

In this case study, we will share techniques and strategies we found successful in working with members of our Council for Digital Good to participate in drafting the language of Privacy for young people. Additionally, we will share a few challenges and our vision for future participation opportunities by young people. Our case study shows that, by designing an intentional learning experience and collaborating closely with young people, organisations can receive meaningful feedback to improve the outcome of resources, tools, and experiences designed for youth. We hope other organisations will find our techniques relevant and useful in their own engagement and collaboration with young people.

In the words of one participant at the end of our workshop: "I have more control than I thought." We encourage others in our industry to take inspiration from these words and create spaces for young people to express that same confidence and empowerment.
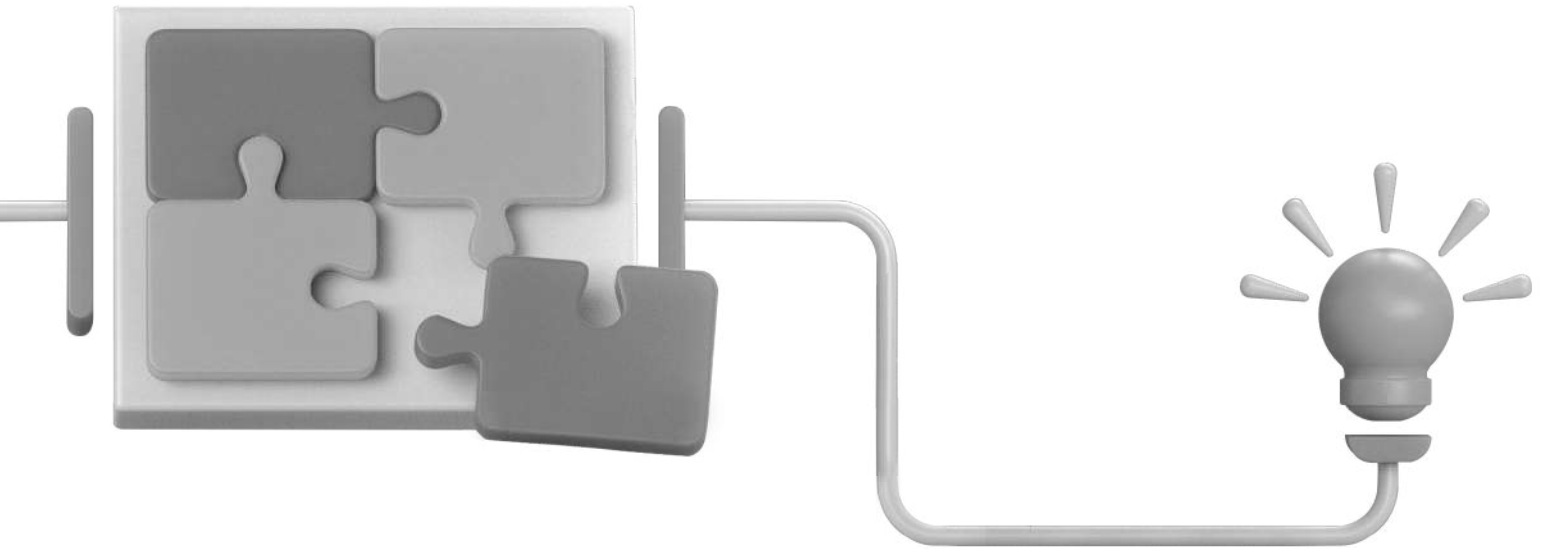
Preparing for Success

Our virtual workshop was part of a four-day summit with the Microsoft Council for Digital Good, a program focused on digital safety, for U.S. teens between 13 and 17 years old. We wanted to take the opportunity to engage with these young people and highlight another area where they can be empowered to take charge of their online experiences.

In planning the privacy workshop, we carefully crafted our agenda to tailor the information to the participants. We followed a 'just enough' principle to provide enough information to stimulate an interesting conversation but not overload the young people with dense learning material. We started with a general discussion about privacy, what we mean by privacy, and why we believe their privacy matters. Providing a few real-life examples encouraged the participants to share their concerns about what others might know or find out about them through their use of online services. The teens' personal stories showed they were keenly aware of the implications of sharing too much about themselves online because they had seen repercussions in their friendships, families, and schools.

Questions for Dialogue

To encourage participation throughout the workshop, we made a conscious choice not to use a PowerPoint presentation. A presentation can invite passivity from the 'audience', especially in a virtual environment. To avoid that dynamic, we let the participants know we would start by sharing some information with them, but the workshop would be conversational.

It was also important to us to set the tone that the Microsoft employees present were not the 'experts.' Instead, we wanted to acknowledge that young people are experts in their own lives. We let the participants know we were looking to draw on their expertise to provide honest and sincere feedback. To encourage creativity and candour, we actively sought participation through open-ended questions and regular pauses for the participants to ask their own questions and share their thoughts and stories.

Invitation to Co-Create

Following our group discussion, we transitioned to the 'working' portion of the workshop. We communicated that the work in the breakout sessions was an opportunity to have a direct impact on how we communicate about privacy to young people. We showed the Microsoft Privacy Statement and the draft of the Privacy for young people page on the screen. We explained that Privacy for young people contained some of the important information within the privacy statement in language written at a 7th-grade reading level.

For the breakout sessions, we provided sections of the page to small groups of three to four participants. Each group had access to a shared document with the language for review and a few discussion prompts. The participants read their section and discussed the questions. Most insightful were their own questions. For example, in reading about what data Microsoft might share with their school, they were curious: "What does their school know about them?" and "What exactly does 'education purposes' mean?" In response, we changed the language from "Your school can access the contents of communications and files" to more direct language: "Your school can access email, chat, files or other content." To clarify "education or school purposes," we added a clause: "such as products you can use for online learning."

We asked the participants to take notes on their discussion within the shared document. We let them know we would share their notes (with no names attached) with the group of Microsoft employees working on drafting the document.

Step Up, Step Back

During the breakout sessions, we asked the adults not to participate. We wanted to encourage an environment where the participants could step up and take leadership. Taking the initiative to start the activity, following through on the discussion, assigning someone to take notes, and managing the time within the breakout session are all leadership skills.

Empowering young people is not just asking for what they know; it's also demonstrating a respect for their competence. Stepping back created an inclusive space for the workshop participants to demonstrate their leadership and to step up.

Learning Along the Way

At the end of the workshop, each participant shared one key learning or takeaway. All of them spoke to the importance of transparency and choice. In their words:

- "I have more control than I thought."

- "Privacy policies need work to make them accessible."

- "How important privacy policies are in telling us how data is extracted and used."

- "I learned that I can adjust my privacy settings and keep my data to myself."

Keeping our Promise

After the workshop, we shared the participants' feedback with our internal team. We included the notes the participants captured from their discussions directly into our draft document, so all members of the team could see and reference the feedback. They suggested we provide simple definitions if words were confusing. For example, they asked what we meant by "parental consent," so we added that consent in this context meant "permission."

In some cases, they gave us positive feedback, which was encouraging to know we were on the right track. As an example, after reading the line "We don't sell your personal data," they wrote in their comments: "Since Microsoft doesn't sell your data to other companies, it makes us feel a lot better about this."

CHALLENGES

Limited Representation

The 13 teens who participated in the Council for Digital Good were a small group of 13–17-year-olds from a single country. Their engagement was a great start, and we recognise that opportunities to work with young people from other countries and from more diverse digital backgrounds can potentially lead to different conversations around protecting personal information online and how to design privacy experiences that are meaningful in other use cases and jurisdictions.

Virtual Learning

Due to the COVID-19 pandemic, the 2021 Council for Digital Good summit was virtual, whereas in previous years, the summit was held in person. The challenge of working in a virtual setting was that the youth experienced disruptive connection issues that impacted the quality and ease of participation. Additionally, not all participants turned on their camera or felt comfortable speaking in the large group. In an in-person environment, it is easier to include icebreakers and games to create community and a sense of connection within the group.
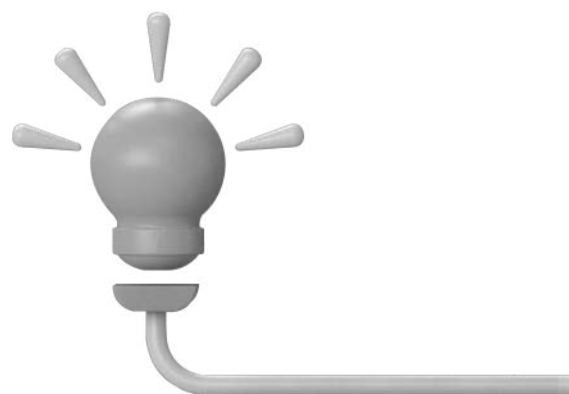
ENVISIONING WHAT'S POSSIBLE

For Privacy for young people, the next step is to redesign the look and feel of the page. In a future opportunity to work with a group of young people, the invitation to co-design will be to imagine an age-appropriate design for the page. We'll look for participants to engage creatively with prompts such as: "When you join a service or create a new account, what do you want to know about your privacy in that moment?" and "What imagery and UX design could help you access that information in a way that is quick, easy to understand, and useful as you make choices about your privacy settings?" We aim for future versions of the page to incorporate their contributions and design recommendations.

Microsoft has long demonstrated a commitment to inclusive design by engaging with our diverse users to develop innovative and empowering products and services. We recognise we are always on a journey to meet our customers' needs, and greater participation from young people within our privacy experiences is one way we are actively engaging to do so. Listening to young people tell their stories gives us insight on what digital skills they have and what skills they are developing. We believe designing resources meant for young people WITH young people is an opportunity to create better engagement on the choice and controls available to our young customers and greater privacy transparency for a safer internet for all.

CRAFTING AI SYSTEMS WITH CHILDREN: EXPERIMENTING WITH A DISTRIBUTED ECOSYSTEM OF ACTORS

VICKY CHARISI

As indicated in the Policy Guidance on Artificial Intelligence (AI) for Children published by the UNICEF Office of Global Insight and Policy, a responsible approach towards the emerging opportunities and challenges associated with AI for children requires the creation of an ecosystem of actors able to ensure AI technology is developed and used for the best interest of each child and every child's fundamental rights are always respected[1].

This note is the author's personal reflection on a project that involved interactions among actors from academia, policy, industry, civil society, and children and the ways we, collectively, experimented to pilot and implement the requirements of the Policy Guidance on AI for Children published by the UNICEF Office of Global Insight and Policy. Throughout this project, we identified a need to build bridges among the stakeholders and to create a space that would support the interconnection of the involved, yet distributed, actors. Most importantly, we aimed at developing an integrated methodology for children's inclusion and participation that would guide the design, development, implementation, and monitoring of AI technology for children in a responsible way.
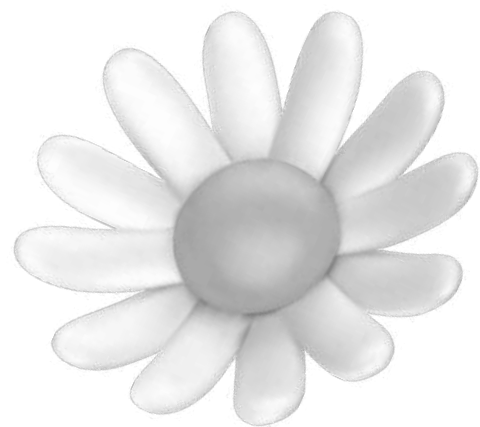
As such, we **illustrate our practical experimentation for the formation of such a space**, a schema for the development of a robotic prototype for children as a form of embodied AI system. We propose there are two **fundamental preconditions** for the design and development of AI for children:

(i) the interconnection of all involved actors within a distributed and multidisciplinary space, and

(ii) the meaningful participation of children and their consideration as a catalytic stakeholder, equal to others.

By supporting the interconnections of the involved actors as well as children's meaningful involvement, we, as society, can be more powerful and effective in advancing the practice of infusing ethics, responsibility and, consequently, trustworthiness through the entire lifecycle of AI development for children.

1. UNICEF, 2021a. Policy Guidance on AI for Children https://www.unicef.org/globalinsight/media/2356/file/UNICEF-Global-Insight-policy-guidance-AI-children-2.0-2021.pdf.pdf
2. Charisi, V., Gomez, E., Mier, G., Merino, L., & Gomez, R. (2020). Child-robot collaborative problem-solving and the importance of child's voluntary interaction: a developmental perspective. Frontiers in Robotics and AI, 7, 15.
3. Davison, D. P., Wijnen, F. M., Charisi, V., van der Meij, J., Evers, V., & Reidsma, D. (2020). Working with a social robot in school: a long-term real-world unsupervised deployment. In 2020 15th ACM/IEEE International Conference on Human-Robot Interaction (HRI), 63-72.

1. THE STARTING BITS

Our scientific motivation behind this experimentation lies in our curiosity about the impact of AI systems on children's cognitive and socio-emotional development. We formulate questions such as: what happens when children interact with Artificial Intelligence-based systems? What is the impact of AI on their well-being? How do children see their involvement in the design process of AI systems? These are some of the questions the scientific community is currently exploring, and they are in line with the questions currently being explored at the Joint Research Centre (JRC) of the European Commission.

The JRC is the research service of the European Commission that provides scientific evidence for the support of EU policy-making. In the context of AI systems designed especially for children, we investigate the interaction of children with various kinds of intelligent technologies. By conducting a series of behavioural studies about the impact of AI on children's behaviour and development[2,3,4], our research is connected to the European approach to AI to ensure AI improvements respect people´s safety and fundamental rights.

a. The AI ACT and the EU Strategy on the Rights of the Child

Our project was held in a changing policy context regarding AI in the European Union (EU). The European approach to AI envisions to ensure that, on one hand, people and businesses can enjoy the benefits of AI, establishing an ecosystem of excellence in AI in Europe. On the other hand, the EU approach for AI envisions that AI should safeguard people's safety and fundamental rights, ensuring an ecosystem of trustworthy AI. In this second aspect, the European Commission published in 2021 the AI Act, a proposal for a regulation on AI . The AI Act[5] aims to address fundamental rights and safety risks specific to AI systems and to ensure AI systems fulfil certain sets of requirements according to the risks they bring, i.e., following a risk-based approach. The proposed text of the AI Act refers to children as a vulnerable population and states that specific considerations shall be given to whether the AI system is likely to be accessed by or have an impact on children.

In addition to AI policies, this work relates to children's rights. In this area, the European Strategy on the Rights of the Child[6] proposes a series of targeted actions across six thematic areas to protect, promote, and fulfil children's rights in today's context. The thematic area called "Digital and information society: an EU where children can safely navigate the digital environment and harness its opportunities" mentions the expected impact of AI on children and their rights and points to the mentioned AI Act for the protection of fundamental rights, including children.

4.   Charisi, V., Merino, L., Escobar, M., Caballero, F., Gomez, R., & Gómez, E. (2021). The Effects of Robot Cognitive Reliability and Social Positioning on Child-Robot Team Dynamics. In 2021 IEEE International Conference on Robotics and Automation (ICRA), 9439-9445. doi: 10.1109/ICRA48506.2021.9560760.

5.   European Commission (2021). Proposal for a Regulation Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0206&from=EN

6.   European Commission (2021). EU strategy on the Rights of the Child (COM/2021/142 final). Available online: https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021DC0142

b. UNICEF's Policy Guidance on AI and Child's Rights and the invitation for its Piloting

In parallel to the European AI developments, in 2020, the UNICEF Office of Global Insight and Policy published the first draft of the Policy Guidance on AI and Child's Rights with a proposal for a set of policy requirements for governments and businesses to consider when developing or supporting the development of AI for children[7]. UNICEF invited a number of representative organisations, including the team behind this work, to pilot the guidelines by developing specific case-studies. The case-studies would demonstrate the implementation of the guidelines in concrete AI applications and provide further feedback for the final version of the Policy Guidance.

c. Establishing a Distributed Multi-Cultural and Multi-Disciplinary Team

The team involved in the development of our case study was coordinated by researchers from two institutions: the JRC and the HONDA Research Institute, Japan (HRI) (an overview of the corresponding case study was published by UNICEF[8]). Through this collaboration, the project was able to combine JRC know-how on child-robot interaction and science for policy with the HRI advanced, cutting-edge technical knowledge, forming a complementary multi-disciplinary and multi-cultural core collaborative scheme.

HRI is a pioneer institution in the field of AI and Robotics that considers the relationship between intelligent cyber-physical systems, human and nature, should be mutually beneficial. The Japanese values of a mutually beneficial development of humans and nature can be seen as a means for addressing the need for sustainability. This is in line with the European values for sustainable development, human dignity, and the human-centric approach for AI that inspires JRC research.

This coordination team involved additional researchers from diverse disciplines (e.g. computer science, education) and cultures (Europe, Asia and Africa), listed in the acknowledgement section, to represent different views and expertise domains. **For the team involved in this work,** the prioritisation of children as **the catalytic stakeholder** for the design of AI technology that directly or indirectly impacts children, was set as a prerequisite. However, **the methods to include children in such a space that would prioritise their fundamental rights in the area of embodied AI are yet to be explored.**
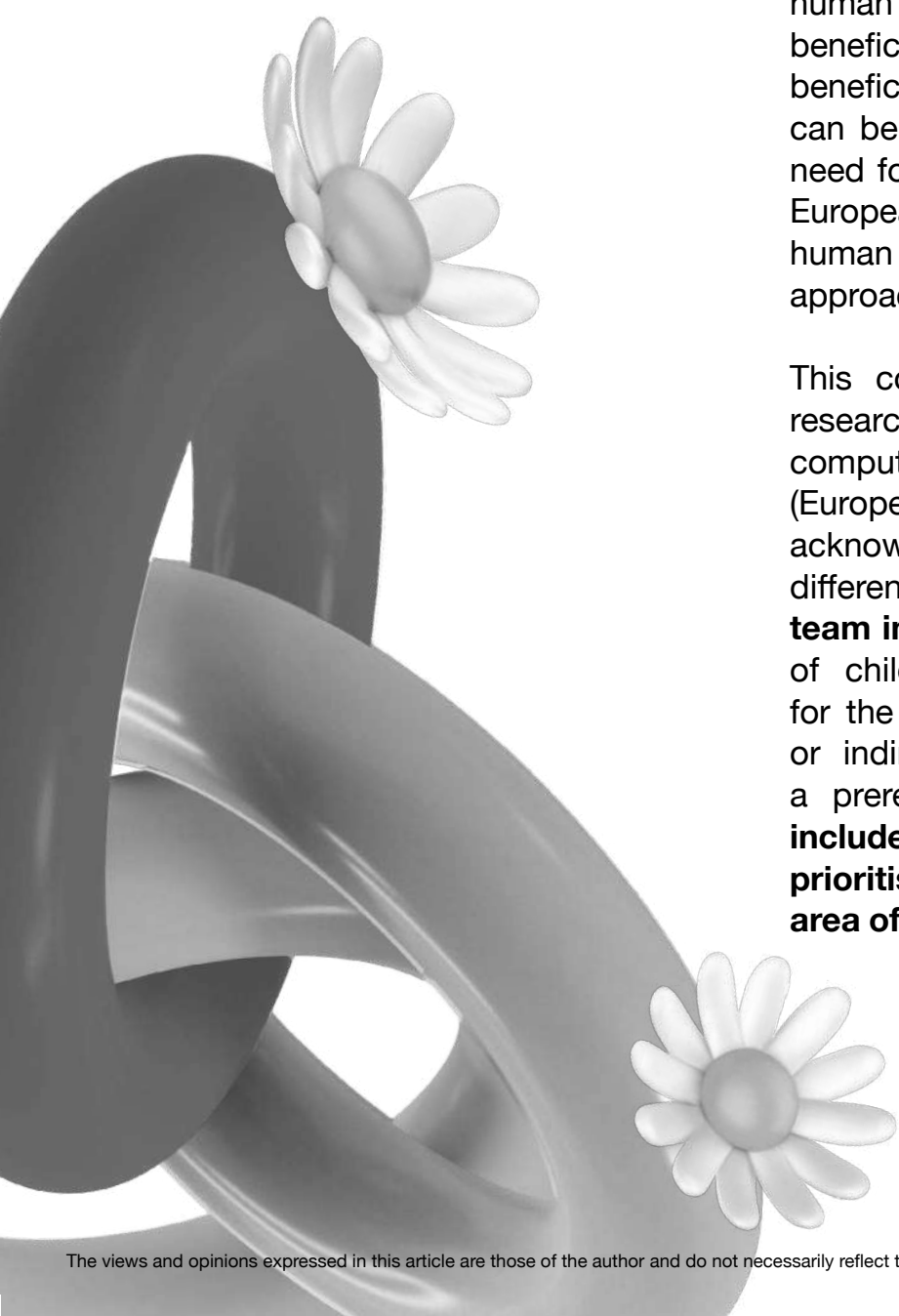
2. THE CULTIVATION OF A NEW MINDSET THROUGH EXPERIMENTATION

In addition to policy recommendations and regulatory frameworks, we believe the **cultivation of a culture that prioritises the best interest of the child** requires the interaction of various stakeholders, including children, throughout the whole process of an AI system design, development, and use even for those applications that are categorised as low risk.

A manifestation of such an approach is illustrated by the activities of our experimentation in the context of embodied AI with the use of Haru, the robot prototype developed by the HRI, JP (Fig.1). For this project, we focused on the following requirements: (i) Prioritise fairness and non-discrimination for children and (ii) Provide transparency, explain ability, and accountability for children.
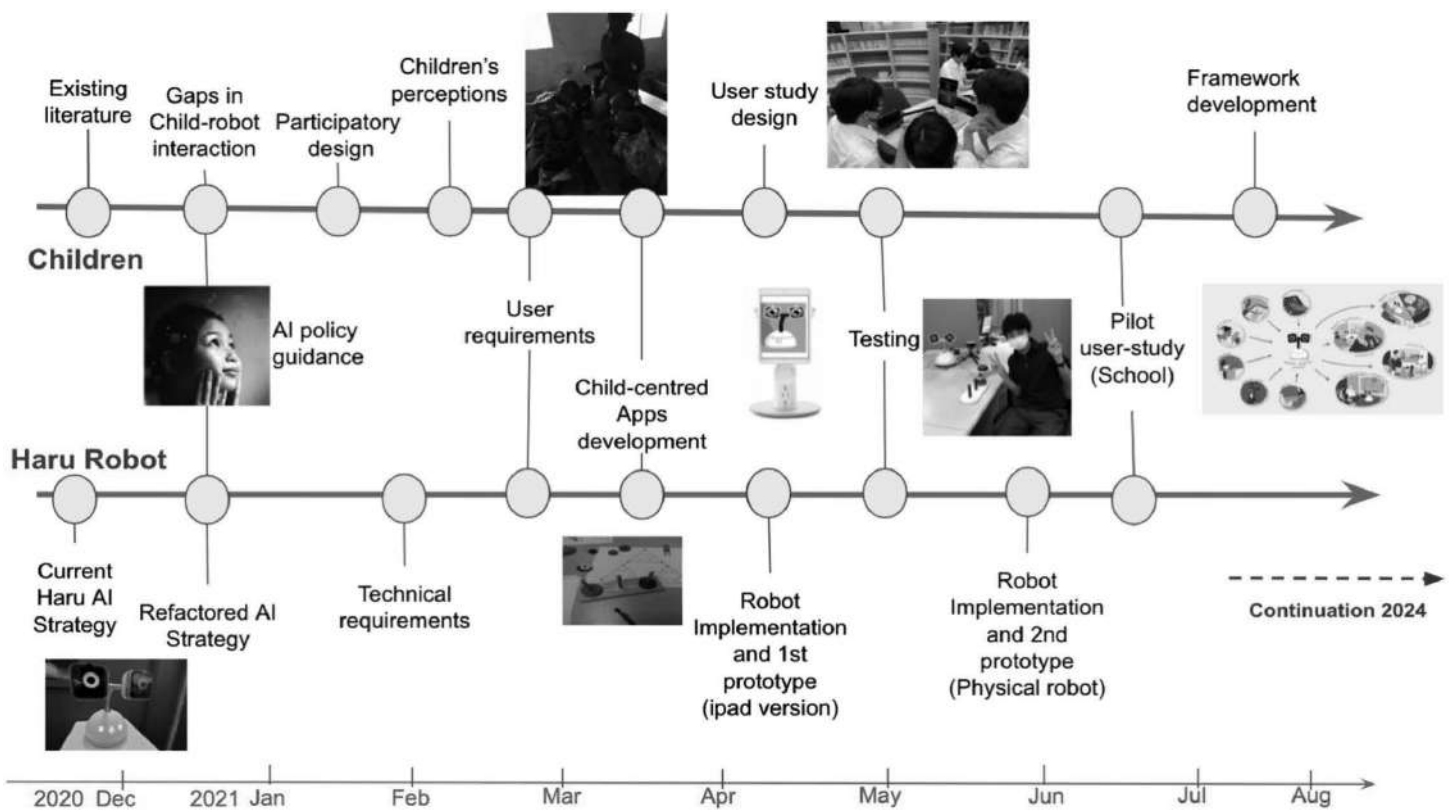

Fig. 1: Instances of activities during our experimentationI to illustrate the complexity of the project.

Typically, whenever children are taken into consideration, their participation is scattered and appears partial during some of the phases of the design process (e.g., in the evaluation of the impact of robots on children's behaviour or in the identification of their perceptions). This contradicts one of the fundamental principles of the design process, one of constant iteration and understanding of the users. Most importantly, children's rapid and diverse development requires a design process that is flexible, based on multiple smaller iterations with repeated evaluations.

7.   UNICEF, 2021. Policy Guidance on AI for Children https://www.unicef.org/globalinsight/media/2356/file/UNICEF-Global-Insight-policy-guid-ance-AI-children-2.0-2021.pdf.pdf
8.   UNICEF, 2021. Pilot study on Policy Guidance for AI and Child's Rights, The Haru robot https://www.unicef.org/globalinsight/media/2206/file
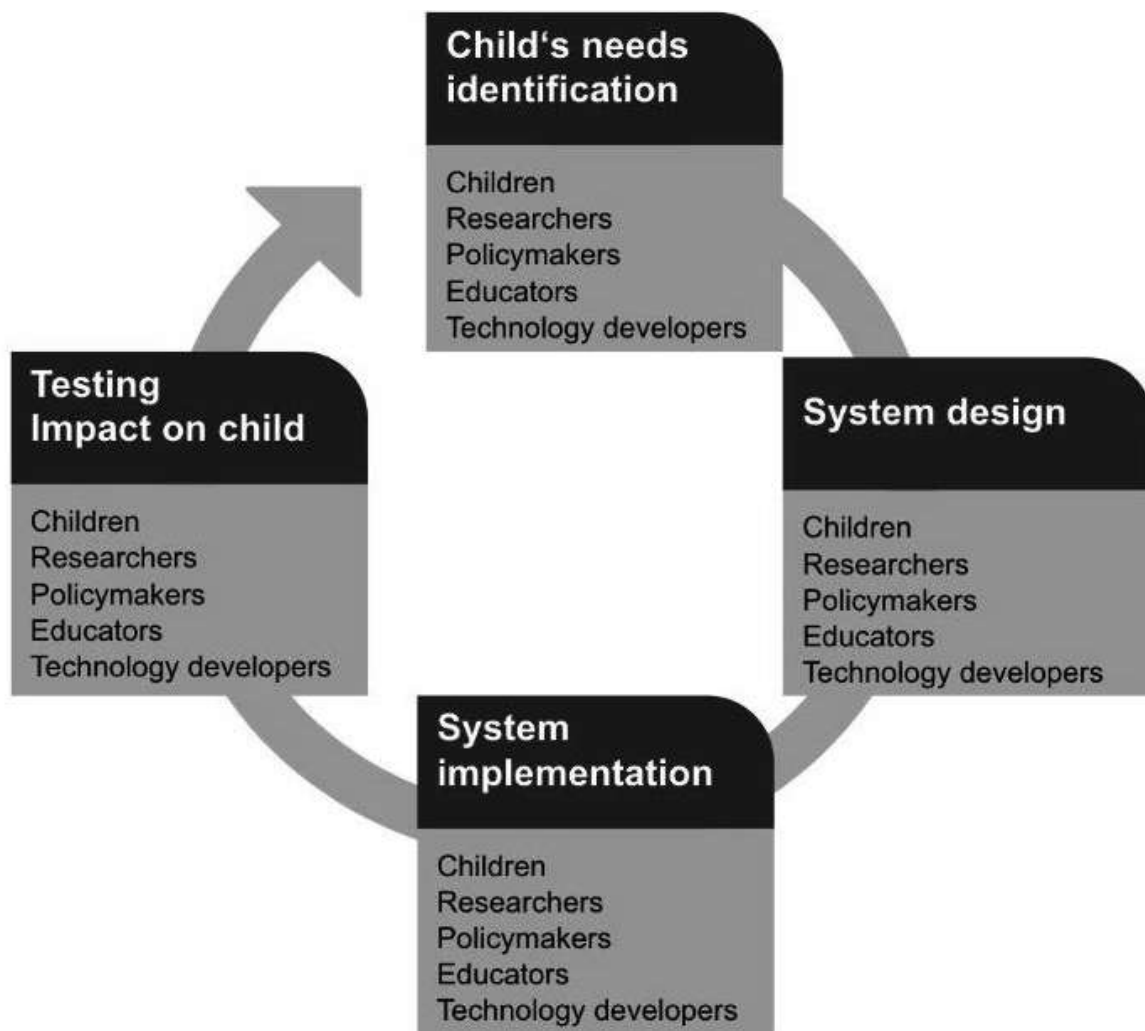
Fig. 2: Child-centred design-thinking process for AI development for children and an indication for involved stakeholders.

Figure 2 illustrates the process we followed for a child-centred four-step design process, indicating the involved stakeholders for each step. For the purposes of this note, we mainly focus on children's participation; however, it should be noted that this is part of the wider interaction of all involved stakeholders, such as **researchers, policymakers and technology developers from academia, international institutions, educators and industry, on a local, regional, and global level.**

A. Child's needs identification

For the identification of children's needs, children's meaningful participation is a fundamentally required procedure. We first prioritised the requirements as identified by UNICEF's Policy Guidance, then we included children with a diverse ethnic and cultural background (i.e., Japan, Uganda and Greece) in order for us to explore the diversity of their needs with a focus on the concepts of fairness and explainability. Finally, we considered the existing literature on developmental psychology and existing theories of child development to align the identification of children's needs in the context of our project. For a detailed description, please see the corresponding publication[9].

9.   Charisi, V., Imai, T., Rinta, T., Nakhayenze, J., Gomez, R. (2021). Exploring the Concept of Fairness in Everyday, Imaginary and Robot Scenarios: A Cross-Cultural Study With Children in Japan and Uganda. In Interaction Design and Children (IDC '21). Association for Computing Machinery, New York, NY, USA, 532–536. DOI: https://doi.org/10.1145/3459990.3465184

B. System design

While in our work, we followed a similar to common approach to participatory design methods with children. The fact that natural interaction with social robots is not embedded in children's everyday activities made us base our co-design activities in story-telling and prototyping in imaginary scenarios. However, our cross-cultural approach required us to go one step further by combining two angles: zooming in to discern, identify, contrast, and adapt to cultural characteristics of the participant children in an individual and local community level while zooming out to consider the systemic implications of our AI application by taking a global perspective and elaborating on the global sustainable development goals.

C. System implementation

For the prototyping sessions, the HONDA Research Institute prepared a low-cost screen-based system with the robot-avatar to let the children contribute to the design of the robot behaviour in practice. The robot developers collaborated with the teachers and through them with the children, while aspects of the policy guidance were introduced as a project-based activity to children. The children were invited to reflect on the system as embedded in their everyday activities. This resulted in the development of a mindset that sees the robot as an embedded socio-technical artefact. The researchers, in collaboration with the educators, analysed and interpreted children's artefacts. The combination of those findings and of the policy requirements as identified by UNICEF formulated the implementation of the system with the following principles:

Principle 1: Centering around equity, accessibility, and non-discrimination

Principle 2: Enacting the best interests of the child and community
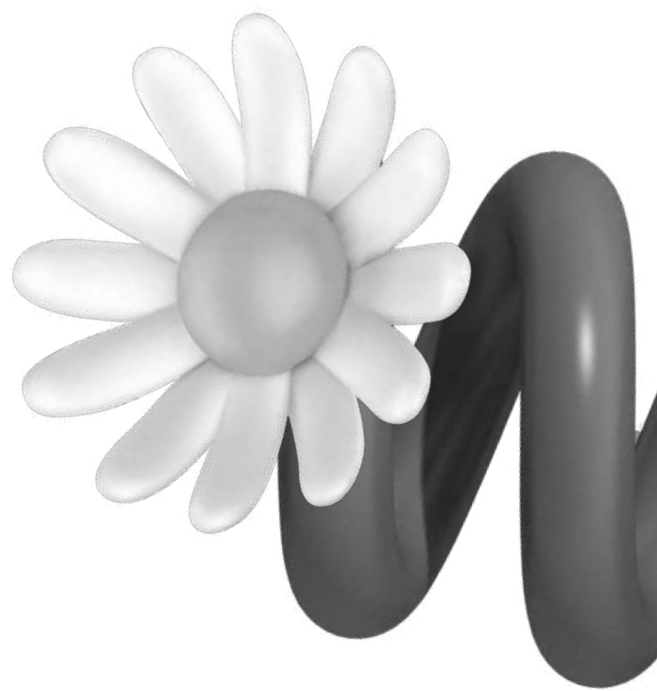
Principle 3: Educating and developing through implementing age and developmentally-appropriate application

Principle 4: Limiting data collection and default settings

This work has contributed to the IEEE Standards Association working-group on Children's Data Governance.

D. Testing / Impact on the child

To evaluate the impact of our system on children's behaviour, we focused on the requirement of the system's explainability in the context of a problem-solving activity. We used as a baseline our previous research in the same context but without robot explanations, and we tested different kinds of explanations with students in Japan to understand the impact on children's problem-solving process. Post-intervention interviews provided insights for children's perceptions about their experience with the robot that were combined with the behavioural data for the evaluation of the system.

3. WHAT IF WE, AS SOCIETY, COULD REDESIGN MULTI-ACTOR INTERACTIONS?

This project lasted 8 months; it was conducted during the challenging period of COVID-19, and often, we had to make decisions on the spot according to the current situation of the pandemic while trying to keep a balanced collaboration among all the involved stakeholders. This was possible only because, through this collaboration, we felt the emergence of a shared space for distributed interactions that prioritised children's participation and was based on the common value of the best interest of each child. For our interaction with children, we used participatory action research where the teachers became part of the research team, and we conducted online sessions with the children.

Our experience showed that a **habit of best practice** can be developed through a project-based approach and an inclusive process of interaction, with a distributed scheme. With a distributed scheme of multi-actor interaction, we considered local values, contexts in which AI technology will be implemented, and needs we combined with global goals. With such an approach, we understood that, in the area of the development of AI for children, a habit of best practice can alleviate dichotomous thinking that appears as conflicting. Instead, different concepts emerged as prerequisites for the development of AI technology for the best interest of children, which I describe below.

First, we acknowledge the complexity of multi-actor interaction especially among different sectors, such as policy institutions, industry, academia, and civil society. For our project, while the initiation was based on a top-down approach by adopting UNICEF's guidance, we were interested in functioning on multiple levels and experimenting with peer-to-peer interactions. In this context, **we observed that social transparency and shared responsibility can be transformative for a practical implementation of such a collaboration.**

Second, if we include children in the design process of AI as a core stakeholder equal to others, **they might become our role models and inspire us** in terms of **transparency, curiosity, and imagination with a focus on sustainability and continuity towards the future.** During our project, we had to address the complexities of children's individual differences that had to be combined with the complexity of our AI system. Including children from a rural area in Uganda required an ethnography-inspired approach and practices that gave space, respect, and value to local habits, needs, and culture. Since there is limited previous scientific work on the inclusion of children from eastern Africa in robot design, this was possible only by **allowing the time and ensuring the necessary openness** ffor multiple iterations of discussions. This was similar to the school in the urban area of Tokyo and in Greece. As such, we tried to **bridge ethnographic and design future research methods and look into children's perspectives empathetically** by o-creating with the educators and the students, applying participatory action research and child-friendly methods, such as story-telling activities acknowledging that involving people of practice requires us to allocate extra time.

WHAT DO THE CHILDREN GAIN?

At the same time, including children in all the steps of the design circle allowed all the participant children to **contribute practically to the design** of the technology they might use in the future, **make connections** to their local community, develop **awareness of the challenges** on a global level, have a **critical stance** towards AI technology while **acquiring ownership** of the platform and using their **imagination** for the development of **a sustainable AI for their future**. Observing the transformation in their knowledge throughout the duration of the project **made us even more confident about the value and the importance of enabling and empowering children to be active and equal actors** in a safe space along with researchers, policymakers, and technology developers.

EPILOGUE

We referred to the lessons learnt from a pilot multi-actor multidisciplinary and multi-cultural collaboration with a culture of inclusive dialogue and social transparency among organisations that cover a wide geographical distribution. The team includes the Joint Rrsearch Centre, the Honda Research Institute, Japan, the UNICEF's Office of Global Insight and Policy, and a number of academic institutions with scientists, roboticists and designers, and schools with educators and children for the piloting of the policy guidance proposed by UNICEF on AI for children. Despite the fact that the different actors involved in this process might have different agendas that sometimes were conflicting, the diverse, distributed, and dynamic nature of our collective practice as well as children's participation as an equal stakeholder of the process were catalytic. Our practical experimentation indicates a diverse ecosystem of actors can be the drive towards **two mutually reinforcing goals, the advancements for AI for good and the benefits for the best interest of all children.**
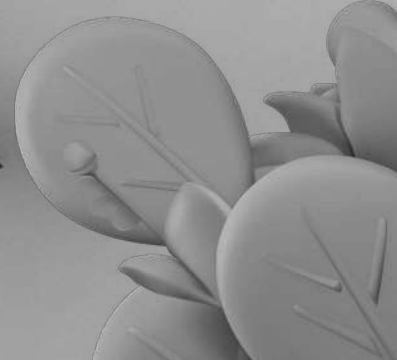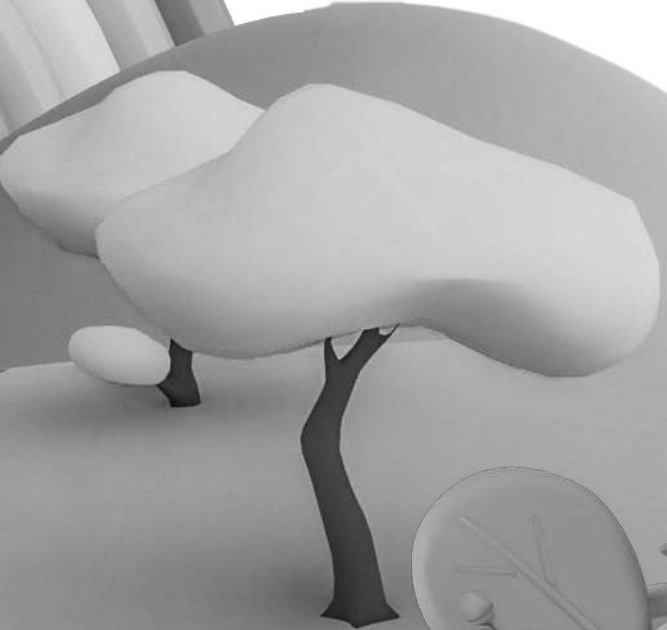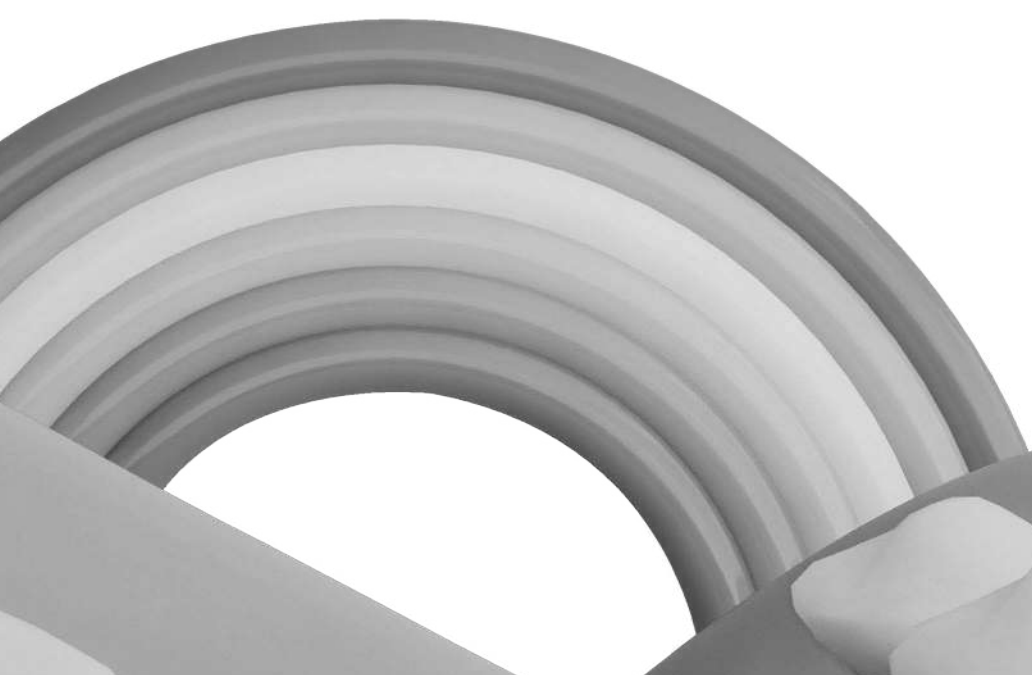
ACKNOWLEDGEMENTS

CRAFTING AI SYSTEMS WITH CHILDREN: DESIGN OF THE EMPATHETIC ROBOT HARU

Honda Research Institute Japan (HRI-JP) envisions a society in which systems with cooperative intelligence play a proactive role in nurturing good relationships among diverse members of society. One particularly important field of research the Honda Research Institute is engaged in is intelligent communication and social interaction, where machines act as mediators for humans, helping bridge the gap of cross-cultural and intergenerational differences. HRI-JP is conducting multi-disciplinary research at the crossroads of artificial intelligence, social and behavioural sciences, and robotics to develop a new kind of embodied intelligence, with deep social awareness of societal norms and needs rooted in its continuous emotional interaction with people. These socially intelligent machines will develop and learn transformative perception and interaction capabilities that allow them to connect people for the benefit of cultivating a better understanding of their differences and foster good relationships. They will nurture an atmosphere of trust and well-being that paves the way for people to reach out to each other and attain their full potential. Our vision is challenging and requires great effort to make a reality. By forging an alliance through partnerships with key players in the different scientific fields and sectors in society, we are able to bring diversity and multi-disciplinary expertise to our approach.
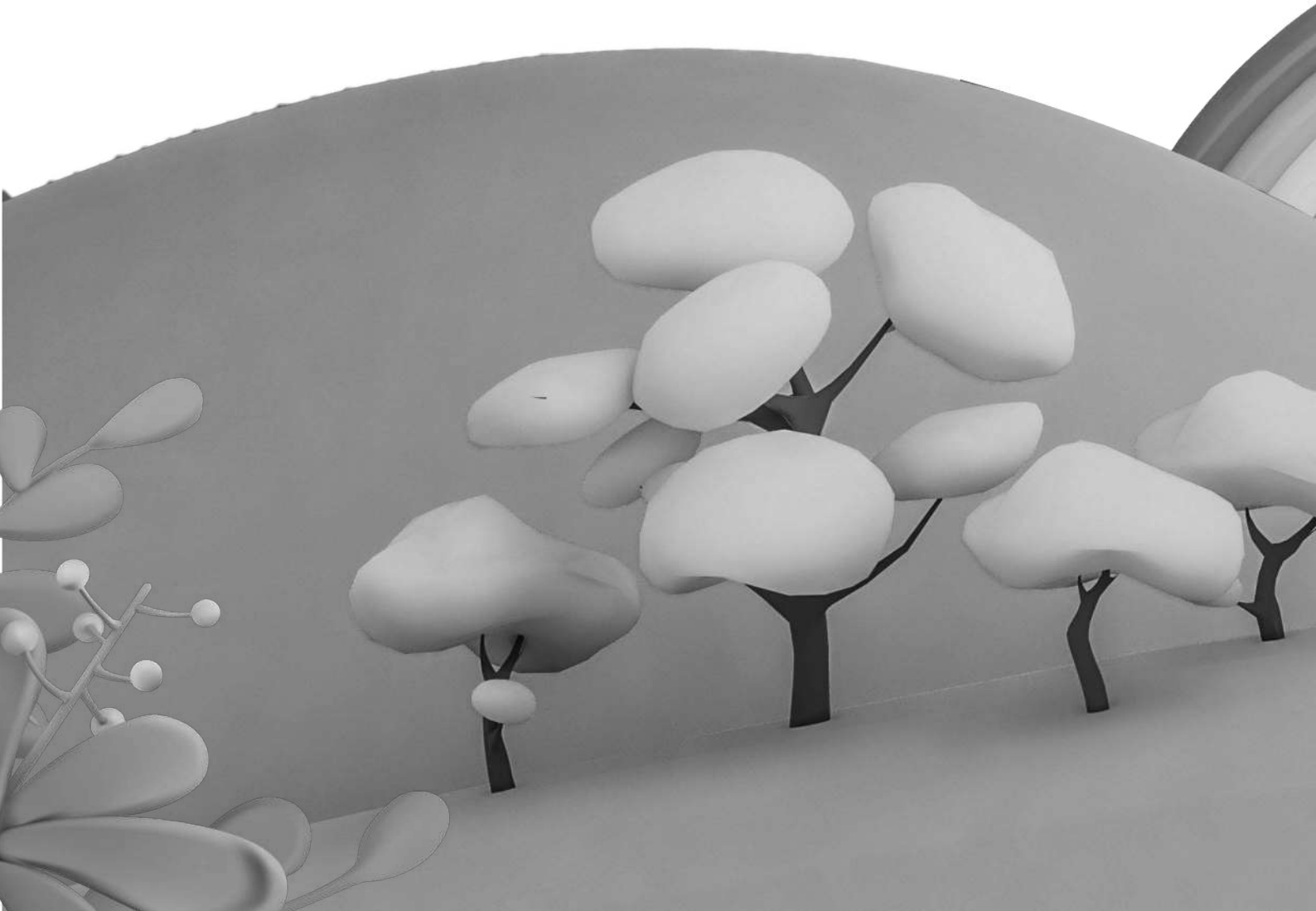
The Office of Global Insight and Policy develops policy guidance for UNICEF as part of their AI for Children project to understand better the interplay of AI and its effects on children. They promote research into questions such as how to protect and empower children through the use of AI systems. UNICEF, with its partners, drafted the first iteration of their AI policy guidance that offers recommendations on how to promote children's welfare when deploying AI systems. In evaluating said policy guidance, UNICEF invited select governments and companies around the world to put it to the test in real situations.

As a company that fosters responsible AI, HRI-JP took the invitation as an opportunity to contribute to society. This invitation inspired us to focus our research on developing an even more ethical, child-centred system design. HRI-JP has committed to the development of trustworthy artificial intelligence with particular emphasis on our children. When focusing on ethics and trust, an essential tool is empathy. Therefore, it is part of our mission to make embodied artificial intelligence more empathetic. Nowhere is this more important than in the interaction between robots and children, where empathetic communication plays a crucial role.

The past two years have been difficult for children given the increased social isolation due to the COVID-19 pandemic. During lockdowns, children were especially hard hit by social isolation, being unable to visit their friends and loved ones. The inability to be physically present profoundly affected their social and emotional well-being.

This pandemic imposed social isolation of children, one of the most vulnerable groups in our society, further strengthening HRI's commitment to children's well-being and our focus towards developing research projects for children.

Children have a wonderful way of bringing the inanimate to life with their own unrestricted imagination. With this in mind, we have built the Haru robot, an embodied platform inspired by animated films. Haru is equipped with rich communicative modalities specifically designed to maximise empathetic engagement with children. With Haru, we embody personality into the physicality of the AI system.

Haru is a prototype robotic platform, exploring empathic interaction for long-term cohabitation with children. It is equipped with unique perception and action capabilities and a repertoire of behaviours that allow researchers to develop human understanding and behaviour generation modules for continuous integration. This enables the robot to understand and navigate its interaction with children. Haru's long-term goal is to develop into (1) a companion robot that addresses social and emotional needs of children and (2) an embodied mediator that connects children from around the world by bridging social and cultural differences by fostering each other's understanding. Since the technology revolves around children, we ensure children are involved from the beginning, from the design of user requirements to the development of the myriad of applications through participatory and pilot studies. We also implemented safeguards in the usage and handling of data when employing the perception modules of Haru.
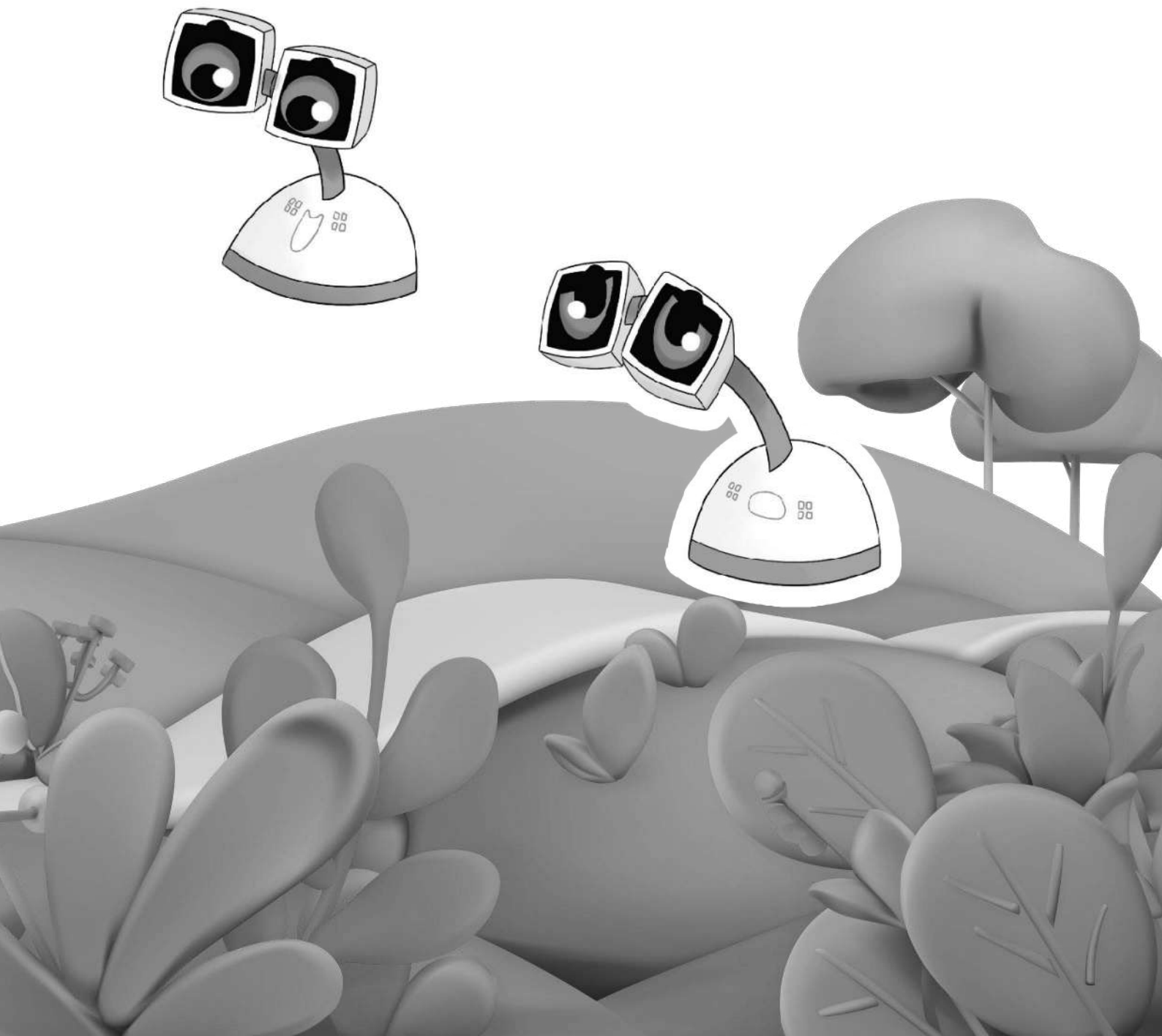
As a company, HRI-JP made a strategic decision to affirm UNICEF's vision of a world built with children in mind. We adopted the key elements of the policy guidance, namely fairness and non-discrimination, transparency, explain ability, and accountability for children. We put our commitment into action by embedding these key elements into the Haru system.

Our final goal is to create a self-developing and learning robotic system that is fully compliant with UNICEF policy guidance. We started this work through our case study by deploying interactive story telling in which Haru acts and narrates the story and through collaborative gaming in which Haru plays the tower of Hanoi with the kids. Haru's platform is centred on supporting children's emotional and cognitive wellbeing; hence, we actively involved children to listen to their needs and worked with them through participatory studies. For example, in the storytelling application, children's desire to share personal stories with the robot emerged as one of the most important elements during the study. We then supported their desire by expanding Haru's platform, enabling children to create and share their own stories and give them direct control of Haru's interactivity. This process not only allows them to share what is personal to them but empowers them to choose and design the kind of content they consume.

Throughout UNICEF's Policy Guidance on AI and Child's Rights, children's participation is highlighted as a fundamental approach for the successful integration of the proposed requirements. For this reason, HRI-JP decided to collaborate with an institution that works on the intersection of research and policy, such as the Joint Research Centre of the European Commission (JRC). The JRC combines expertise in child-robot interaction, child development, and children's participation with experience in the integration of policy requirements into AI applications. We worked with the JRC when conducting participatory studies with the schools around the world, such as extraction of children-centred user requirements. With external collaborators we also work with the JRC in designing applications and interactive content that ensures the deployment of trustworthy robots for children.

Image courtesy of HRI-JP; artwork by Deborah Szapiro
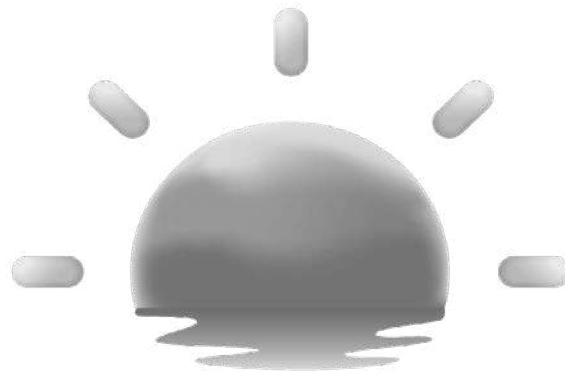
Honda Research Institute has committed to innovation through science, and our research targets a brighter future for the children of today. Children can create a future with equal opportunities. We must equip them with tools that reflect equality rather than the biases of the past. The children of today and the intelligent robots of tomorrow share one thing in common: they hold our future in their hands. We dream of a future where humans have bridged the cultural divides and stand united with the aid of our empathic robots in a hybrid society. Our partnership with the key players has brought in diverse insights that aided us to develop technologies that are reflective of UNICEF's policy guidance. The Honda Research Institutes with our expert collaborators and partners, are dedicated to turning this dream into reality.
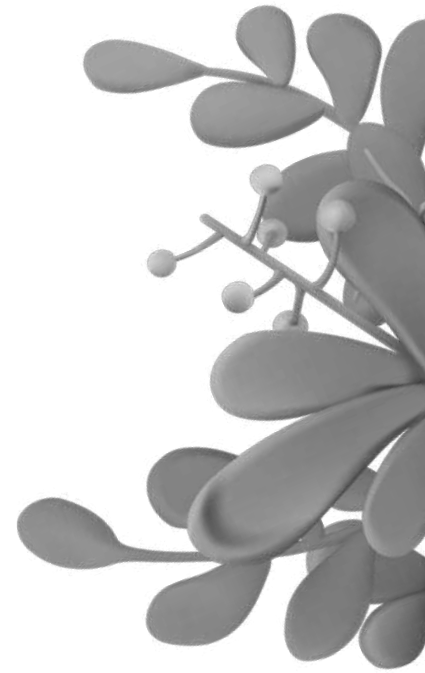
*Image courtesy of HRI-JP; artwork by Deborah Szapiro*

TELIA CHILDREN'S ADVISORY PANEL: GIVING CHILDREN A VOICE ABOUT THEIR ONLINE LIVES

As part of Telia Company's business strategy, one of our sustainability key impact areas is Digital Inclusion where Telia is committed to providing access to reliable connectivity and increasing its users' digital skills to achieve digital equality and inclusion.

Telia Company is a telecommunications service provider, with children and young people being active users of our services. Our commitment and responsibility are to respect and support children's and young people's rights to participation, protection, and well-being. We work on our own and with experienced partners to protect and empower children and young people online. As practical guidance, we have committed to implement the Children's Rights and Business Principles.

As a result of our materiality analysis in 2015, we realised keeping children safe online, empowering children through digitalisation, and fighting the negative impacts online are very important for our stakeholders, and we need to step up our work and create changes at a higher level. In order to integrate children's rights into our business and provide guidance to families, we needed to understand children's experiences through their own voices. Children and young people have the right to be listened to, and adults do not necessarily know much about children's experiences or lives online. This is why we decided to let them explain to us, in their own way, the role the internet plays in their lives, and their views on specific online aspects. Regularly, we hold a Children's Advisory Panel (CAP) where, with World Childhood Foundation, local children's rights organisations, and in collaboration with schools, we ask young internet users about their lives online.
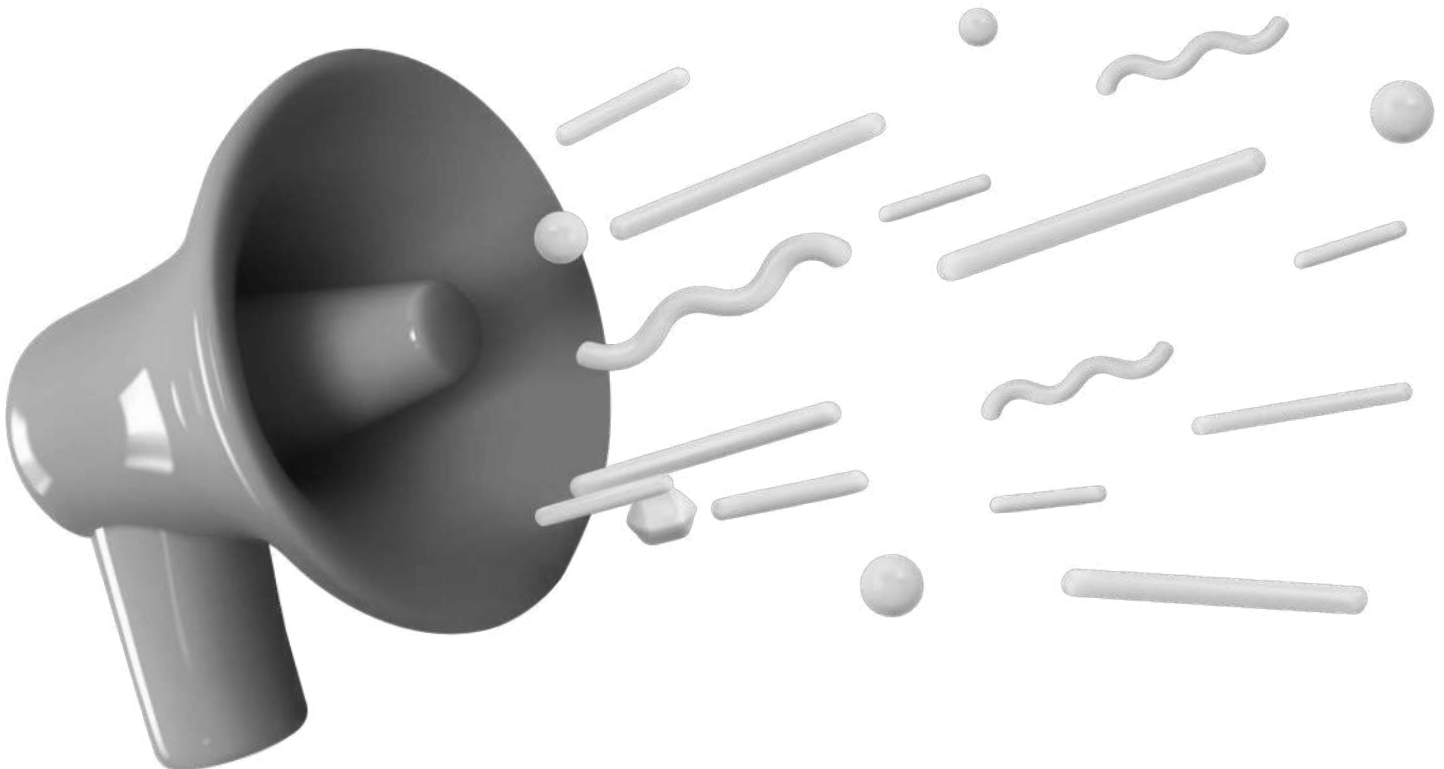
The main challenge initially was convincing everyone in the business that it was a good idea. The child rights focus prior to CAP had been protection, and some concerns were raised related to the risks involved in engaging with children, ensuring children's safety, and the benefits for participating children. To overcome this challenge, there were discussions with the management to consider the risks involved in engaging with children in the business. It was important to come from a perspective that views children's participation as an opportunity to listen to children and hear what they think. Providing a clear outline of the process for engaging with children and highlighting the benefits of including children has ensured a strong management commitment to children's participation.

Benefits of Children's Participation

In Telia Company, we believe the benefits of children's participation to the business include:
• Improved understanding of children as users of our services.

• Better services and online experiences for children.

• Inspiration and content for new resources for family customers and schools.

• Improved motivation and commitment to children's rights for our employees and opportunities to share our research with peers and be seen as experts in this field.

How Do We Engage with Children about Their Online Lives?

We are keen to ensure children's participation is meaningful and useful for the participating children. We wanted to create a transparent process to collect children's views and ensure

these views have an influence across the business. CAP is a combination of qualitative and quantitative study we carry out once a year. In total, about 4,000 children have participated in the co-creative workshops, and more than 12,000 children and young people have participated via digital surveys since 2016. We have engaged with children and young people about their experiences with privacy, healthy life online, online gaming, digital learning and misinformation online, among other topics.

To share their online experiences, children participate in co-creative workshops carried out by Telia volunteers (Telia employees, trained by World Childhood Foundation and the research company). We also have a Telia child safeguarding routine in place they need to follow. During the workshops, the children use digital tools (such as an animation software or digital whiteboarding platform) in small groups to share stories about their experiences on specific online topics. It is important that the workshops are fun, creative, and useful for children and that they learn through participation.

In addition, we carry out a digital survey among children on the same topic. Parental consent is asked before the child responds to a survey. In Baltic countries, the survey is also available in Russian language for minority children, and the survey always ends with contacts of the local child helpline.

The inputs from children both from the workshops and the survey are carefully collected, translated, and analysed by a professional research company and combined into a full report and a presentation of the results that we publish and share internally and externally.

Insights from Children's Participation

We communicate the results across our markets. Depending on the topic, we discuss the insights from children with different teams within the company to utilise the results in our work in Telia. We use the insights to prepare educational materials for our digital skills programs, and we share the insights from children with our business and family customers, industry associations, and other stakeholders.

Telia Company

For example the results of Children's Advisory Panel focusing on children's online gaming experiences were applied in various ways:

• We reached approximately 220 000 people in related communication efforts.

• In collaboration with Save the Children Finland, we developed advice materials for family customers.

• Responsible online gaming guidelines for Telia Company. As Telia Company continues to increase its involvement in e-sports and gaming, it will be doing so with the benefit of guidelines for responsible digital gaming developed in collaboration with Save the Children Finland. The guidelines ensure Telia Company approaches these services responsibly and takes children's experiences into account.

• In Sweden, we carried out a successful marketing campaign using insights from CAP that children want parents/adults to be involved and understand their online lives. It was accompanied by messages about the importance of spending time with children playing online , showing responsibility.

• Engagement of employees- during Safer Internet Day, we carried out responsible online gaming events for employees and their children to play together, listened to discussions with pro esports players, and reflected on the online gaming guidelines in all our markets. Employees who have volunteered to carry out CAP workshops have become more aware and more engaged in children's rights issues related to their work.

Challenges and Development Over Time

We have faced various challenges over time, such as the need for recruiting employees to volunteer leading the workshops in school classes, making sure the child safeguarding processes are in place to ensure the safety of the participating children, and finding ways to include children who belong to minority groups. Over time, we have made progress on the strategic priorities to improve children's participation, for example, better engagement and training of our employees in carrying out the workshops, development, and implementation of child safeguarding procedures, making sure minority children are included and collaborating with local children's rights organisations.

COVID19 has presented another set of challenges. For example, during 2020, the schools in most markets were closed, and children studied from home during the time we had initially planned to carry out the school workshops. We had to react quickly, change the concept, and carry out the study digitally. We decided to focus on children's experiences with digital learning to understand the changing environment and the impacts on children. To be aligned with the changing times, for 2021 CAP, we prepared to carry out the co-creative workshops in school classes as well as digitally using MS Teams in case some countries opted for digital schooling due to the pandemic during the period we had planned for the workshops. We continue to develop the concept further to stay relevant and find the best ways to give children a voice about their online experiences.

How to Start with Children's Participation in Business?

For businesses that consider starting with children's participation, based on our child participation journey, we would recommend starting with building commitment throughout the business, especially at senior management level, through internal communication and children's rights training. Think about your business and what you hope to achieve from involving children. It is useful to engage with child rights experts through partnerships with children's rights organisations that have the expertise to support you. Be curious and open to learning from children. Don't just do it as a formality, but really listen to children and young people and try to understand their perspectives. It will be valuable, and you can use it in many ways to improve the business and the lives of children.

FUTURE STATEMENTS

JOSIANNE GALEA BARON
FABIO FRISCIA

Consulting children as part of child rights due diligence in relation to the digital environment is not only increasingly expected of companies to demonstrate responsible conduct, but also promises to be a valuable tool in identifying and managing child rights risks arising from digital technologies, while creating value for business. As children's engagement with digital technologies, for everything from education to entertainment, promises to continue growing over the coming years, action on these issues could not be more urgent or timely.

SESAME WORKSHOP

The value of child-centred research lies in the changes, accommodations, and improvements that can be implemented after testing content directly with pre-schoolers and, sometimes, the adults in their lives. Through collaborative research and design relationships with children — even very young children, and sometimes in partnership with their caretakers — organisations can develop meaningful, positive digital play and learning experiences that are optimized to children's needs.

WOUTER SLUIS-THIESCHEFFER

To design something truly creative and, at the same time, inclusive of children's needs, let's include children's creativity and their rights in the design process.

TOCA BOCA

Providing kids free rein and letting them figure things out their way works and even better; it makes kids and their creativity thrive.

HANS MARTENS

Voice is not enough. In our view, one promising way forward is to require companies and governments to make youth participation part of so-called child rights impact assessments when a new digital product, service, or policy that may directly or indirectly impact children's rights is designed, deployed, or evaluated.

THE LEGO GROUP

Digital technology creates an opportunity to empower children and to foster their well-being on a whole new level, but unless we collectively put children front and centre, we risk missing out on this opportunity.

CHILDREN AND
YOUNG PEOPLE PANEL

Take our ideas seriously and keep us in the conversation. Children know children best!

PROF. AMANDA THIRD

Sustained cross-cultural child participation can deliver deep and enduring value for children, businesses, and communities. Ultimately, for all parties to benefit, private enterprise needs to redouble their efforts to work ethically with children to realise their rights, to connect with diverse communities, and to invest more consistently in child participation.

DR RONAH HARRIS

Companies should learn that neurological variations are a common aspect of the brain and seek to include and affirm the needs of people with variations rather than treating them as having conditions that need to be cured.

SUPER AWESOME

Opportunities to engage with kids in their native digital space are boundless, and the scope for digital ethnography, observing how kids and young people behave and interact, is particularly exciting. Engaging with them at the actual point of consumption in their natural environment, with new innovative interaction formats, will bypass some of the artificiality of current research practices. Metaverse platform research will also enable global research at a scale not seen before.

KIDS KNOW BEST

Research methods shouldn't ask a child, or anyone, to step out of their world into the research world. Additionally, it is imperative to make sure children are part of the process in an explicit way. That's going to be the next big step in the world of research data, people understanding the information, the data they are providing, and the research and brand world understanding the value and paying for it as well.

SANDRA CORTESI

Company leaders who seek to explore this field further are encouraged to take a pragmatic approach in terms of "thoughtful experimentation." Start somewhere concrete and learn over time. "Build, iterate, and expand" is the credo in the emerging theory and practice of youth engagement.

AIMEE DURAN

Listening to young people tell their stories gives us insight on what digital skills they have and what skills they are developing. We believe designing resources meant for young people WITH young people is an opportunity to create better engagement on the choice and controls available to our young customers and greater privacy transparency for a safer internet for all.

VICKY CHARISI

A diverse ecosystem of actors can be the drive towards two mutually reinforcing goals, the advancements for AI for good and the benefits for the best interest of all children.

RANDY GOMEZ

Children can create a future with equal opportunities. We must equip them with tools that reflect equality, rather than the biases of the past. We dream of a future where humans have bridged the cultural divides and stand united with the aid of our empathic robots in a hybrid society.

TELIA COMPANY

Be curious and open to learning from children. Don't do it as a formality, but really listen to children and young people and try to understand their perspectives. It will be valuable, and you can use it in many ways to improve the business and the lives of children.

HELPFUL RESOURCES
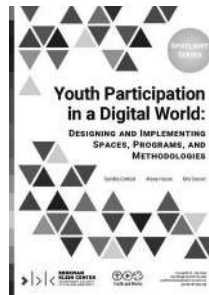
Youth Participation In a Digital World

Author: Sandra Cortesi, Alexa Hasse, Urs Gasser
Date: 2021

Summary: The paper highlights four specific models of youth participation: youth labs, learning and co-design spaces, youth boards, and participatory research.

Designing for Children's Rights Guide

Author: Designing for Children's Rights
Date: 2021

Summary: An evolving guide that aims to refine a new standard for both design and business to direct the development towards products and services that have ethics and children's best interests at their core.

FREEDOM SECURITY PRIVACY
The Future of Childhood in the Digital World

Author: 5 Rights Foundation
Date: 2020

Summary: In this collection of essays, global experts from a range of fields set out their vision for a digital world that includes nearly a billion children and young people.

Artificial Intelligence and the Rights of the Child

Author: Vicky Charisi, Stephane Chaudron, Rosanna Di Gioia, Vuorikari, Riina, Marina Escobar-Planas, Ignacio Sanchez, Emilia Gomez
Date: 2022

Summary: This report proposes an integrated agenda for research and policy on Artificial Intelligence and Children's Rights, with a focus on key requirements, methods for implementation and knowledge gaps for future steps.

Best-practice guideline: Age-appropriate design with youth

Author: Better Internet for Kids
Date: 2021

Summary: The best-practice guideline on age-appropriate design with youth explores ways to engage meaningfully with and involve young people in co-design processes for online services and the rationale for adopting this approach.

Child Safeguarding Toolkit for Business

Author: Unicef
Date: 2018

Summary: This toolkit is a practical tool that allows companies to identify, assess, and address risks to children they interact with, guiding companies through six steps in the process of assessing their safeguarding risks and developing a child safeguarding program.

Engaging Stakeholders on Children's Rights

Author: Unicef
Date: 2014

Summary: This tool offers guidance to companies on engaging stakeholders on children's rights as part of enhancing their standards and practices at both the corporate and site levels.

Children's Participation Guide

Author: Global Child Forum
Date: 2020

Summary: Practical guidance from a corporate perspective with the aim of developing a better understanding of current business practices of children's participation.

Play Test With Kids

Author: Cathy Tran, Maya Sussman, and Megan Huang, Joan Ganz Cooney Center
Date: 2022

Summary: Playtest with Kids is a toolkit designed to enable teams to create great products by conducting meaningful research with kids.

How To Write a Child-Friendly Document

Author: Save the children
Date: 2022

Summary: In this guidance, we are focusing on written child-friendly versions of documents. These are usually short, visually appealing to children, summaries of another document, written in simple language that children understand. This guide describes a process for producing these documents with children acting as advisors.
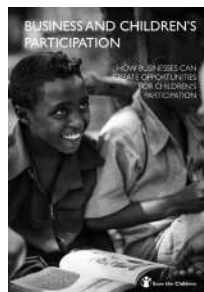
Business and Children's Participation

Author: Save the Children
Date: 2015

Summary: This guide serves to inspire businesses and civil society organisations (CSOs) interested in respecting and supporting children's rights and, specifically, the child's right to be heard as it relates to the ten Children's Rights and Business Principles that were prepared by UNICEF, the UN Global Compact, and Save the Children.