AUSTRALIAN RESEARCH COUNCIL
Centre of Excellence for the Digital Child.

Australian Government
Australian Research Council

Digital Child Working Paper Series 2024-01

Digital Child Ethics Toolkit

Ethical Considerations for Digital Childhoods Research

Back to contents Back to previous

Coordinating lead authors

Kate Mannell
Faculty of Arts and Education
Deakin University
kate.mannell@deakin.edu.au

Andy Zhao
Faculty of Arts and Education
Deakin University
xinyu.zhao@deakin.edu.au

Co-authors

Phillipa Amery, Queensland University of Technology
Tiffany Apps, University of Wollongong
Filip Bircanin, Queensland University of Technology
Anna Bunn, Curtin University
Dinusha Bandara, Deakin University
Karley Beckman, University of Wollongong
Michelle de Kok, Curtin University
Michael Dezuanni, Queensland University of Technology
Madeleine Dobson, Curtin University
Gavin Duffy, Deakin University
Naomi Fillmore, University of Queensland
Nicole Hayes, Queensland University of Technology
Danica Hendry, Curtin University
Lisa Kervin, University of Wollongong
Katrin Langton, Queensland University of Technology
Amanda Levido, Queensland University of Technology
Janelle MacKenzie, Queensland University of Technology
Jessica Mantei, University of Wollongong
Jane Mavoa, Paper Giant
Maria Nicholas, Deakin University
Rebecca Ng, University of Wollongong
Louise Paatsch, Deakin University
Aleesha Rodriguez, Queensland University of Technology
Irina Silva, Queensland University of Technology
Maryanne Theobald, Queensland University of Technology
Sonia White, Queensland University of Technology
Annette Woods, Queensland University of Technology

Contributors

Sue Bennett, University of Wollongong
Amity Campbell, Curtin University
Susan Danby, Queensland University of Technology
Courtenay Harris, Curtin University
Sharon Horwood, Deakin University
Sonia Livingstone, London School of Economics and Political Science
Luci Pangrazio, Deakin University
Julian Sefton-Green, Deakin University
Marnee Shay, University of Queensland
Juliana Zabatiero, Curtin University
Chris Zomer, Deakin University

Suggested Citation

ARC Centre of Excellence for the Digital Child. (2024). Digital child ethics toolkit: Ethical considerations for Digital Childhoods Research. (Digital Child Working Paper 2024-01). **https://www.digitalchild.org.au/workingpapers/ethics-toolkit/**

ISSN/DOI

ISSN: 2653-5270 DOI**: https://doi.org/10.26187/k90v-9a20**

Version History

Version 1.1. Some minor errors have been corrected. References to the updated National Statement on Ethical Conduct in Human Research have been included.

Keywords

Research ethics, research methodologies, ethical research, children, childhood, digital childhood, digital technology

Acknowledgement

This Working Paper was supported by the Australian Research Council Centre of Excellence for the Digital Child (grant #CE200100022). The Australian Research Council Centre of Excellence for the Digital Child acknowledges the First Australian owners of the lands on where we gather and pay our respects to the Elders, lores, customs and creation spirits of this country.

Copyright

Back to contents

Back to previous

Executive Summary

There is a growing body of scholarship that examines how very young children and their families relate to, adopt, and engage with digital technologies. This research typically involves a range of ethical considerations. Yet, as an emerging field, it can be difficult for researchers and ethics committees to find standards of practice or evaluate risks and benefits.

To support researchers working in this area, this toolkit outlines ethical considerations across three main dimensions of research: contexts (such as researching in the home, health settings, or early learning centres); methods (such as ethnographic approaches, web-scraping, or using wearable devices); and cohorts (such as infants and toddlers, children with disabilities, or educators).

The first half of the toolkit is a discussion paper that addresses each of these contexts in turn, as well as discussing some foundational principles and issues, such as informed consent and positioning children as co-researchers. The second half is an appendix containing references and resources for each of the contexts, methods, and cohorts that have been addressed. It also lists international guidelines and frameworks, Australian guidelines and frameworks, and general resources on ethical research with young children.

This iteration of the toolkit is being published as a working paper through the Centre's working papers series. It is part of the 'methods and methodologies' subseries and has been checked by the sub-series editorial team to ensure it meets basic standards around clarity of expression and acceptable and inclusive language and content. More information on the working paper series can be found here: **https://www.digitalchild.org.au/working-papers/**

This toolkit is also available as an interactive webpage on the Centre's website: **https://digitalchild.org.au/research/publications/working-paper/digital-child-ethics-toolkit-interactive/**

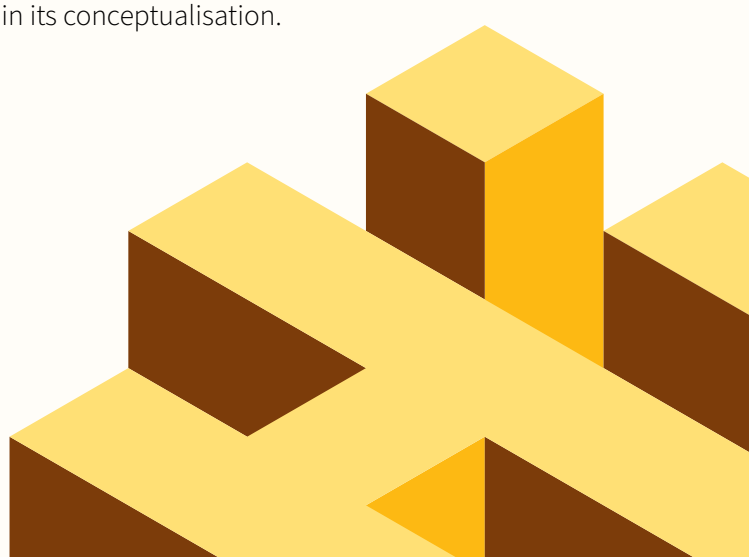
How this toolkit was developed

The Digital Child Ethics Toolkit was developed within the **Australian Research Council Centre of Excellence for the Digital Child**.

Based in Australia, the Centre's vision is to ensure young children grow up healthy, connected, and educated in a rapidly changing digital world. Focusing on very young children (from birth to age 8), its program of research spans the fields of health, education, and technology to offer a holistic view of young children and their digital experiences. The Centre brings together six Australian universities, as well as international partner investigators and a range of public bodies and civil society stakeholders.

The toolkit has been co-authored by researchers from across the Centre.

Two centre researchers, Kate Mannell and Andy Zhao, led this process. They used iterative rounds of consultation and solicited input from a diverse range of scholars in order to capture the breadth of expertise within the Centre. People named as coauthors have contributed directly to writing the toolkit; people named as contributors have given feedback on the toolkit, contributed references, or participated in its conceptualisation.



Back to contents

Back to previous

Contents

Back to contents Back to previous

Introduction

Why write another ethics toolkit?

This toolkit arose as a response to the challenges of developing ethics applications for research into children's relationships with digital technology. For brevity, we refer to this as "digital childhoods" research. This research can involve many ethical dimensions, particularly as it often involves working with children and their families in complex settings. It is also an emerging field, which can make it more difficult for researchers and ethics committees to find standards of practice or evaluate risks and benefits.

Therefore, we saw the need for a resource that would provide researchers with practical guidance about the details of research conduct and could be used when designing research protocols and writing them up for ethics committees. There are many existing ethics guidelines that are relevant to digital childhoods research, however, these generally focus on conceptual principles while more practical advice is distributed across a large number of research papers and toolkits, and is shared informally through conversations.

To build on these existing resources, this toolkit is structured in two parts:

- a discussion paper covering ethical issues specific to digital childhoods research
- an appendix of existing resources relevant to the ethics of digital childhoods research.

Aims and scope

This toolkit aims to support researchers in two ways.

Firstly, by articulating the value of digital childhoods research and the value of approaches and methods common within the field. This may help researchers when evaluating the relationship between risks and benefits and articulating this for ethics committees.

Secondly, by discussing ethical issues and challenges that can be involved in digital childhoods research and providing suggestions for how to mitigate them. This may help researchers pre-empt or avoid issues and plan for best-practice approaches to mitigating risks.

This toolkit does not aim to provide a comprehensive guide to all research methods or elements of research design that might be involved in researching young children and technology. There are excellent resources on many of these aspects, such as how to conduct research interviews or how to develop consent processes for young children. To avoid reiterating advice that can be found elsewhere, this document focuses on:

- emerging research methods specific to research on children and technology
- issues that are common in research about children and technology and are not well covered in existing resources.

This toolkit also specifically focuses on research with younger children (approximately 0-8 years). While any research with children and young people should be approached with care, research involving infants and young children gives rise to unique ethical concerns regarding understanding and consent, as well as the possibility of coercion and of a conflict between the values and interests of parents, children and others (**National Statement on Ethical Conduct in Human Research**, 2023, p. 67). As such, the complexity of researching with this age group presents particular challenges for researchers and ethics committees. That said, much of the content will also be relevant to research with older children.

The toolkit has also been written by researchers in Australia and thus references Australian policies and regulations at times. Most of the content, however, will be relevant regardless of national context.

Back to contents Back to previous

Values and principles

The **Digital Child Centre** supports and promotes the principles articulated within national and international statements on responsible and ethical research. They include, but are not limited to:

- Research merit and integrity, including likely benefit, respect for participants, appropriateness of research, with suitable oversight.
- Justice, which recognises the right of affected groups to be included in the research endeavor, seeks fairness in recruitment and equity in benefits and burdens, and that access to benefits is fair and reasonable.
- Beneficence, which requires that risks of harm or discomfort are minimised, and that researchers are clear to participants about risks, ensuring likely benefits outweigh risks of harm or discomfort.
- Respect, which involves due regard for the welfare, beliefs, perceptions, customs and cultural heritage of the individuals and collectives involved in the research, ensuring privacy, confidentiality, and cultural sensitivity, and ensuring participants' capacity and right to make their own decisions.
- Recognition and respect for Indigenous self-determination and leadership, and research impact, value, sustainability and accountability when conducting research with Aboriginal and Torres Strait Islander peoples. In pursuit of this, the Centre has developed a **policy** specifically around conducting research with and for Indigenous children and families.

In addition to these principles, we also seek to conduct research that centres children's voices by engaging them as research participants where relevant and using methods that capture their perspectives and experiences. Involving children as participants is now a well-established methodological approach, following shifts towards conducting research *with* rather than on children.

Involving children directly is also critical to the value of justice listed above and is in keeping with the **United Nations Convention on the Rights of the Child**, which states that children have the right to express their views about matters that affect them. Ultimately, a child rights approach sits at the very centre of our work. Among other things, this means that the best interests of the child should be a primary consideration in all that we do, and should guide all of our work, including our research. When considering what we research and how we go about it, therefore, we need to think beyond mere compliance with laws and requirements set by ethics committees. We should constantly ask ourselves: are we acting ethically and have we factored in the child's best interests as a primary consideration when determining our research topics and processes?

Using the toolkit

As this toolkit covers a wide range of research contexts, methods, and cohorts, it is not designed to be read beginning to end. Rather, we encourage readers to use the interactive table of contents and the internal links provided throughout to skip to relevant sections.

The toolkit is divided into two parts: a discussion paper and an appendix.

The discussion paper begins by covering a range of foundational principles and issues. The rest of the paper is divided into three main sections: research contexts, research methods, and research cohorts.

The appendix contains lists of resources, beginning with general resources and then resources relating to each subsection of the discussion paper.

This document is an interactive PDF. Links to external webpages are highlighted in **bold**; links that will take you between sections of the document are in ***bold and italics***. There are buttons to return you to the contents page, your previous page, and to skip from a discussion section to its corresponding resources.

An interactive web version will be published on the **Digital Child** website.

Back to contents

Back to previous

Ethical Considerations in Research on Digital Childhoods

The importance of researching digital childhoods

Digital technologies are now a common feature of childhood. They are present across a broad range of contexts including family life, education and care contexts, community settings, and the provision of government services. Their integration into childhood is so significant that for children who lack access, this lack itself is a meaningful feature of their childhood. In this sense, we can say that childhood is now thoroughly digital, as digital technologies are reshaping what it means to be a child, a parent, and an educator and are informing new understandings and practices around experiences like play, learning, and socialisation.

As a consequence, the role of digital technologies in children's lives has emerged as an important area of research across a range of disciplines, including health sciences, media and communication, sociology, education, law, and design. The significance of this research is underscored by the **United Nations Convention on the Rights of the Child General comment No. 25,** which addresses children's rights in the digital environment. It notes that "[r]egularly updated data and research" are "crucial to understanding the implications of the digital environment for children's lives, evaluating its impact on their rights and assessing the effectiveness of State interventions". This area of research is also important because of public interest in understanding the risks and benefits of children's technology use, and because commercial interests heavily shape the role of technologies in children's lives, making it critical that we understand, and advocate for, the needs and rights of children, families, and educators.

Children as co-researchers

Within fields that involve researching children, there has been a shift toward approaches that recognise children as active contributors and seek to explicitly facilitate their participation (Coyne et al., 2016). Right-based participatory approaches can involve children as valuable informants for research, practice and policy-making (Horgan & Kennan, 2021). Finding ways to capture children's perspectives recognises children as capable members of society who can make valuable contributions from their experiences.

Bringing children's perspectives into research acknowledges the rights of a child to participate in decisions that affect their lives. This is not new. Article 12 of the **United Nations Convention on the Rights of the Child** argues children have the right to express their opinions and Article 13 promotes the child's right to choose their medium of expression. Taken together, and in the context of children as co-researchers, these mean it is important to incorporate methods that enable children to share and capture their experiences and perspectives.

Children are co-researchers in three main ways.

- **Children are consulted to provide their perspectives**.
  Children's perspectives shift as they move through different stages of development. Lundy (2007) describes that children can provide their perspective through space, voice, audience and influence. Space provides opportunities for children to express their views. In these spaces their voices are facilitated through their choice of medium to capture verbal and non-verbal insights (for example, talking, drawing, taking a photo). When others listen or view these ideas, they have an audience committed to hearing and understanding the viewpoint. This then leads to influence whereby action/s occur.

Back to contents

Back to previous

- **Children are involved in the design and implementation of research.**
  There is a growing interest in approaches that involve children as genuine co-researchers whereby their perspectives are incorporated into the design of the research process. To be involved in all components of research, children need to understand the purpose of the research, the techniques of data collection and their role. Finding ways for children to be active co-researchers alongside adult researchers is important. Establishing a Children's Research Advisory Group (CRAG) is one way to assist children to develop, express and implement their views. As co-researchers, children freely express their ideas (Dockett, Einarsdottir & Perry, 2009) with regular opportunities for decision making to guide the research.
- **Children are empowered to act on research findings.**
  Children are "strong, knowledgeable and contributing members of society" (Harcourt & Einarsdottir, 2011, p. 303). However, the act of listening to children alone is insufficient. A child is neither vulnerable and dependent nor autonomous and competent (Kjorholt, Moss & Clark, 2005) and finding ways to enable children to not only participate in research but do and see outcomes from their involvement is important.
  Children as co-researchers is not unique to digital childhoods research, however it is becoming increasingly common in the field.

For references and further sources, see ***Resources: Children as co-researchers***

Mandatory reporting obligations

Where researchers suspect cases of child abuse and neglect, they must report it to a relevant authority. Many jurisdictions have mandatory reporting laws which require people to report suspected abuse or neglect to child protection services. These can vary in scope: some require mandatory reporting by all adults while others only require it from people in specific professions. In **Australia**, mandatory reporting varies by state.

Some organisations, including universities, will also have mandatory reporting policies that researchers should be aware of prior to starting fieldwork.

Back to contents Back to previous

Informed consent

Many of the issues and challenges involved in seeking informed consent are specific to particular research methods and contexts, and will be addressed later in this document. This section provides a brief overview of key issues and resources relating to children and consent in general.

When adults participate in research, we seek informed consent whereby they agree that they understand and consent to the terms of their participation. When conducting research with young children, parents or caregivers are asked to provide informed consent on their behalf. It is best practice, however, to also ask children for their permission or agreement to participate in the research when this is within their abilities. This agreement is often termed "assent" and is critical to ensuring ethical research conduct (see Alderson & Morrow, 2020 for an overview of consent vs assent). If a child assents but their parent or caregiver has not provided informed consent for their participation, the child should not participate.

Children's assent

It is well recognised that seeking young children's assent needs to be approached thoughtfully using processes that are suitable for the children involved. Because this topic is already well served by existing resources and is not unique to research on digital childhood, it is not discussed in detail here. However, many of the excellent existing resources on this topic can be found in ***Resources: Informed consent***. These cover issues like determining when a child's assent is necessary and include advice around how researchers can engage with children to seek consent/assent. Important key principles discussed across these resources include:

- **Seeking child assent**. While some regulatory guidelines may only require parental consent for the participation of children below a certain age, ongoing assent from all participating children should be sought. Assent must be voluntary and ongoing.
- **Caregiver consent**. Some research standards require caregiver consent for any child under a specific age. If a child consents but their caregiver does not (or vice versa), the child should not participate.
- **Developmentally-appropriate assent processes**. Children should only be asked to consent to the elements of the research that they can understand. For example, while a very young child can assent to talking with an interviewer, they can not assent to their data being used in research. This means that caregivers might be asked to provide consent for different, or additional, aspects of the research, compared to children. When children's assent is sought, they should be informed about the research in ways that are accessible to them. Common approaches include using images or videos and developmentally-appropriate language. Expressions of assent should likewise be sought in developmentally appropriate ways, such as through verbal agreement.
- **Assent must be ongoing and researchers should actively monitor for both verbal and non-verbal indicators that assent is being withdrawn**. These may include subtle changes in attention and interest, such as fidgeting, asking "are we nearly finished?", or stating "I'm hungry". Children may also hide or climb to avoid engaging in research activities. Actions such as these should all be accepted as withdrawal of assent.

For references and further sources see *Resources: Informed consent.*

Additional discussion of issues relating to consent and assent that are specific to particular research contexts, methods, or cohorts are covered in the relevant sections.

Back to contents Back to previous

Data protection, storage, and dissemination

Having clear and robust protocols for data storage and dissemination is important for any research with human participants but it is even more vital in research that involves data about young children. Clear, detailed and explicit processes for data capture, data sharing and dissemination are essential.

The following questions should be considered and processes developed to handle data in safe, privacy-protecting ways.

Data storage and retention

- How will raw data be handled? (e.g. How will data get from the point of collection to the storage location or the researcher's computer for analysis?)
- Who will have access to the raw data; at point of collection, in storage, during data analysis, post data analysis?
- Where will the raw data be stored?
- Will copies of the data be made? For what purpose? Where will copies be stored?
- How long will the data need to be stored? (For example, in the Australian state of Queensland, any audio-visual data containing a minor must be permanently retained and stored securely.)
- Will participants receive a copy of their data?

Data sharing and dissemination

- Who will view the raw data and for what purpose?
- How will the data be shared and disseminated (e.g. conferences, presentations, publishing)?
- What data is shared? For what purpose? Who benefits from the data being shared? How does this benefit the child? What is safe to publish?
- When considering dissemination ask:

What is safe to publish?

Who benefits from the data being published?

What data needs to be shared?

Researchers should take extra care in considering what data needs to be shared or published, especially when dealing with data about sensitive issues or attributes or identifiable data pertaining to young children (e.g. images, video, audio, written transcripts). Even if permission is granted from the parent/guardian to share identifiable data, anonymisation techniques should be considered out of respect for children's right to privacy and protection. These may include:

- Assigning pseudonyms to participants
- De-identifying images and video by:
  - Blurring faces, landmarks, uniforms and other identifiable features
  - Using sketch mode or other image filters to reduce the level of detail in videos and images
  - Augmenting spoken audio to make voices unrecognisable e.g. changing the pitch and tone of voices.

Should this data be anonymised?

While the potential harms of children's data being published are difficult to predict, there may equally be potential for harm in the anonymisation of some data, especially when conducting research with members of marginalised communities, whose knowledges, identities and stories are frequently erased or remain unrecognised. Consult appropriate institutional or community guidelines, such as the Digital Child's **Aboriginal and Torres Strait Islander Research Ethics Policy**, to ensure research participants are able to exercise cultural autonomy, which may include the deliberate inclusion of identifying information as part of informed consent. (See ***Aboriginal and Torres Strait Islander children and communities*** for further considerations.)

Back to contents Back to previous

Context-specific considerations

Home settings

The value of the home as a site for digital childhoods research

The home has long been recognised as a critical research site for observing family life in-situ, making it a key location for research across a number of disciplines. It can also be a convenient location for participants and provide a familiar environment where they may be more comfortable.

The home is a site of particular value for research on digital childhoods given that much of children's technology use occurs in the home. Conducting research within home settings enables the observation of naturalistic practices and interactions and can highlight how the spaces of a home impact a family's technology use. Methods like "technology tours" and "toy audits" have emerged as key approaches for understanding technology use within the home (e.g. Kennedy et al., 2020; Plowman et al., 2012).

Risks and mitigation

Households can be busy spaces with complex interpersonal dynamics and many uncontrollable or unexpected factors. This makes the home a dynamic and sometimes challenging research environment, particularly when multiple household members are present. There are a number of complicating factors and potential risks that need to be considered:

- **Researcher safety.** Homes can lack the safety of more public spaces, making researcher wellbeing an important consideration. Where possible, have two researchers present or, at a minimum, have a protocol for informing others about when a researcher is entering a home and for checking in and debriefing after household visits. Book visits for daylight hours.
- **Unpredictability.** It is likely that there will be situations where continuing with the research as planned is no longer feasible. This may be because of interruptions such as a visitor arriving, or situations where it becomes important to prioritise the wellbeing of participants or researchers above continuing with data collection. Where junior researchers are involved in the research, it is important to discuss this possibility and emphasise that they can alter or abandon data collection when needed.
- **Interpersonal dynamics.** The dynamic between household members is a valuable and rich feature of research conducted in the home however it can also become an ethical consideration. For example, older household members may give younger household members instructions about their participation that contradict the researchers' intentions, such as that they must answer all questions, or should engage in research activities in a certain way. While providing clear instructions to participants can go some way to mitigating this, it is impossible to avoid entirely. Discussing these kinds of possibilities in advance will help to prepare researchers to intervene where it is both necessary and safe to do so.
- **Recording in home settings.** Working in home settings generally involves making recordings, including audio, video, and/or photographs. Recording in home settings is a well-established approach that can capture rich data about family life (e.g. Scott, 2021), but must also be approached with considerable caution to ensure that privacy is ensured. As a general principle, only material that is necessary for the research should be recorded and participants should have control over what recordings are made or shared with the researchers (see ***Resources: Audio, visual, and audiovisual recordings*).**

Challenges around informed consent

Home settings can involve the presence of non-participants, such as visitors who drop by or household members who are present but haven't consented to participate in the research. To minimise the chance of this occurring, researchers should ask who is likely to be home when booking visits and try to schedule times when only participants will be home. Taking additional information sheets and consent forms to house visits can be useful if other people are unexpectedly present and are happy to participate.

When non-participants are present and unable or unwilling to be recruited into the research, data collection may need to be altered or adjusted to avoid capturing their information. When participants are being recorded, such as in an audio-recorded interview, it can be challenging to avoid recording non-participants. This should be considered beforehand and processes developed for avoiding or deleting information from non participants. (see also ***Informed consent)***

For references and further sources, see *Resources: Home settings*

Back to contents Back to previous

Education settings

The value of education settings as sites for digital childhoods research

Children spend a significant portion of their childhoods attending formal education and they and their families engage with digital technologies within and across these settings. Digital technologies are integrated across a range of everyday education practices including teaching and learning, school administration, and communications.

A digital childhoods research focus in and across education settings can contribute to understandings of the ways that children engage with digital technologies, as well as develop and leverage digital skills and knowledge, paying attention to teaching and learning across curriculum areas. This focus has been long evidenced in education technology research since the mainstream introduction of computers in classrooms, through to research on interactive learning, multimedia and software and then the internet and digital technologies in schools (Bond et al., 2019). This type of research aims to understand digital innovations in education and how to best support the development of children's digital practice with a focus on teaching learning and curriculum.

Significantly, contemporary education settings have experienced a prolific growth in the integration of digital technologies spurred by the Covid-19 pandemic and the large-scale investment in the Educational Technology (EdTech) industry (Williamson, Macgilchrist & Potter, 2021). Education settings have become marketplaces for education solutions including platforms for teaching, assessment, personalised learning, behaviour management, school administration, learning support and home/school communication and promotions. In this way, digital childhood research focused in and across education settings can contribute to understandings of the impacts of EdTech on digital childhoods and education including the datafication of children and advocacy for children's digital rights.

When designing digital childhoods research in education settings, the educational benefit, feasibility and potential impact(s) of the research on children and educators should be a central consideration. Research should be designed to cause minimal interruptions to children, educators and their regular activities. Developing partnerships with schools and/or preschools in the early stages of the research design can support researchers to understand and address contextual needs and feasibility as well as ensuring the research design facilitates genuine education benefit.

Institutional approval

In addition to university human research ethics committee approval, research in education settings generally requires institutional approval. These requirements vary between and across preschool and school settings, with each sector/jurisdiction having their own research approval guidelines.

In Australian public and Catholic schools, institutional approval is required from the state education department or diocese in which the research will be conducted. In the independent school sector, organisational consent can be obtained from the school principal and/or board. Institutional approval for research in schools across more than one jurisdiction (sector, state or territory) may be sought using the Australian Association Researchers in Education (AARE) **national form**.

Obtaining institutional approval within Australian prior-to-school settings may also vary depending on whether the centre is a private company, not-for-profit organisation, or state-run setting. Research in state-run preschools will require institutional approval from the state education department, but whether institutional approval is required for research in private settings depends on the specific jurisidiction. It is the responsibility of the researchers to meet the specific requirements of any setting before any data can be collected.

Back to contents

Back to previous

Risks and mitigation

- **The need for flexibility within education settings.** The primary role of education settings is to provide equitable education to students. This must take priority over research activities and hence conducting research in education settings requires researchers to be flexible. Changes to data collection procedures may occur at short notice due to changes in school timetable, educator availability and classroom/student circumstances. Establishing productive relationships and regular communication across data collection is important to effectively manage the project while accommodating the dynamic needs of the education setting.
- **Duty of care.** In an educational setting, educators within the setting have a duty of care of the children. Therefore, considerations around the design of the research and conducting the research within the setting must not impact this duty of care. Considerations will need to be made about the location and space where the research is conducted. This is best negotiated with educators based on the setting and student needs. For example, observations of activities or engaging with children should be done in the presence of a teacher or in an open space adjacent to a teacher. Researchers should also consider engaging in research with groups of children rather than individuals where possible. Any member of a research team dealing directly with children requires a current clearance to work with children that is valid within the state and educational setting where the research takes place.
- **Non-participants in education settings.** It is important that, in the case of researchers implementing an educational intervention, all children are offered the opportunity to participate in the activity/experience regardless of their participation in the research. Researchers must develop protocols for ensuring non-consenting students can engage in the educational activity or intervention freely and without negative consequences while ensuring no data about them is collected during periods of data collection.
- **Clearly communicate with all stakeholders in the education setting.** Apart from the active participants in the study, it is also important to clearly inform all stakeholders about the research. This should be done using formal information sheets and communications that clearly outline the purpose and scope of the research design along with the educator's/school's role in facilitating the research. Stakeholders in education research include participants as well as educators and school staff who may be involved in or impacted by the facilitation of the research project; for example: teachers, educators, learning support officers, leadership teams and parents/caregivers.

For references and further sources, see *Resources: Education settings.*

See also *Resources: Educators.*

Back to contents Back to previous

Cultural institutions

The value of cultural institutions as sites for digital childhoods research

Galleries, libraries, archives and museums (GLAMs) are valuable sources of informal learning and often enable hands-on or immersive experiences. They allow research to be conducted in naturalistic settings, which provides more authentic data about how children engage in activities like play and interaction, including with digital technologies. The aim of conducting research in these spaces is also to embrace the opportunities they offer for enhancing children's educational experiences and learning. As we move through a more digitalised world, these learning experiences are becoming more valued by educators and parents.

Conducting research within GLAM settings allows researchers to observe interactions between the child and the exhibit or experience, the child and their peers, and the child and their parent or caregiver (Flewitt et al., 2023). These interactions play important roles in children's development of collaboration, communication, skills and knowledge, and engagement.

Risks and mitigation

GLAMs are big, busy, public places which can make for complex research environments. Below are some points to consider when choosing this setting to conduct research.

- **Sourcing participants can be difficult in a GLAM setting, due to ethical requirements and the openness of the space.** One way of approaching this issue is by developing an industry partnership. This can provide researchers with connections to an institution's communication team, who may be able to promote research projects through their communication channels to their members. This allows members to express their interest in participating in current and future research projects and to connect directly with the research team, making it easier to ensure participants have a good understanding of the project they are participating in.
- **Capturing non-participants.** To avoid the accidental capture of the general public (children and adults) who have not consented to participate in the research, a closed session could be arranged by the institution.
- **Children's assent.** Because work in this setting often involves observing and engaging with children as they complete a play experience, it is important to consider that children may withdraw their consent and/or assent before, during, or after the play experience. Likewise, parents/caregivers may withdraw consent for their child and/or themselves during the experience. As noted in ***Informed consent,*** this needs to be considered beforehand, and appropriate protocols developed, including protocols for monitoring children carefully for changes in assent. These actions may need to be included as limitations when publishing the research.

For references and further sources, see *Resources: Cultural institutions*

Back to contents Back to previous

Online platforms including social media

The value of online platforms settings as sites for digital childhoods research

For the purposes of this section, online platforms are digital architectures or interfaces that facilitate and organise interactions between users (van Dijck, Poell, & Waal, 2018). Online platforms have varied purposes including, but not limited to, social media, knowledge sharing, service, gaming and education. Importantly, research has demonstrated new kinds of economic, social and civic structures created by online platforms (Sefton-Green & Pangrazio, 2021). Thus, as a setting for research with children, they are important for understanding new contextual considerations that are pertinent to advocating for children's digital rights.

The proliferation of online platforms throughout society is self-evident and a growing body of research demonstrates the value of engaging in research in these settings. Researching on online platforms can provide important insights into public discourses, creative labour and content creation, and online community formation and practices, among other things. In the context of children, online platforms research often involves engaging in research with parents, caregivers or other proxies (such as schools or community groups), who may digitise aspects of children's lives via their social media engagement.

The potential benefits of engaging in research of extant social media data include: time efficient data collection (in comparison to collecting primary data); access to a broad range of participants; and the ability to observe practices that are unique to sociality online. Yet, these benefits must be considered alongside the need to ensure that research is conducted in accordance with the highest ethical standards. The following are some key general considerations when conducting research in online settings. Following that, we outline some ethical risks and mitigations in the context of children in online settings.

Key considerations

- **Terms of Service.** Most websites and apps have either a Terms of Service, Terms of Use, or Terms and Conditions which are all legal agreements that define how a person or entity is allowed to use the service. For example, many social media platforms stipulate age restrictions where children under the age of 13 cannot create an account. These may impact how research can be conducted, particularly when using methods such as web scraping. (See ***Web scraping***)
- **Public, semi-public, semi-private, and private data.** When conducting research in online settings, researchers should consider how "private" the site of data collection would be when considered from the participants' or data subjects' perspectives. Online settings and the data produced in the spaces can be considered either:
- Public (e.g., front-page of Reddit, public Facebook Group),
  - Semi-public (e.g., user engagement with Like button on Instagram, invited public WhatsApp Groups),
  - Semi-private (e.g., Messenger Kids chat where parents can see conversations, closed Facebook Groups), or
  - Private (e.g., Telegram chat between two people, online health data).

It is crucial to consider where on this scale participants or data subjects see their data as belonging. This is because even if the data is generated in a public online space (e.g., a TikTok video shared across platforms), it does not inherently mean the owner of the data has implicitly consented to its collection for research purposes as this is a different context to the circumstances for which it was posted online.

- **The researcher's 'membership'.** When conducting research in online settings, researchers ought to be mindful of their own online presence. For example, a researcher should consider the various roles, power imbalances, and their own privacy while conducting this research online. These considerations can manifest and be mitigated by conducting the research via either a personal profile or professional/organisational one that clearly identifies the account is used for research purposes.

Back to contents Back to previous

Risks and mitigation

Regardless of the research focus, a key consideration for any research relating to children in online settings is the ways in which children and children's data may be present within research data. The widespread use of online platforms, including social media, generates expansive database accounts of users' daily life, an individual's perspectives, preferences, interests, social networks, communications, education and more (van Dijck, Poell, & Waal, 2018). While children under the age of 13 are often not permitted to create accounts on many online platforms (as stipulated by their Terms of Service), they are undoubtedly engaged and/or implicated in others' uses of social media and thus their data may be present within datasets collected from online spaces. For example, when employing digital methods such as ***Web scraping,*** the large indeterminate nature of the data collected may create *data subjects* of children, where they potentially become identifiable through the correlation of various data, even if this was not the researchers' intention. Alternatively, researchers might be explicitly interested in children's active engagement in online settings, even in spaces where their presence breaks the Terms of Service and, as such, researchers need to develop protocols to obtain informed consent and protect privacy. Additional issues are outlined below.

- **Datafication of children in online platforms.** Apart from providing online spaces in which users can interact and engage, the data generated through user interactions in online platforms creates a new form of value, and thus online platforms operate on economic values and corporate interests (van Dijck, Poell, & Waal, 2018). Thus, research that aims to consider the risks and benefits of children's presence in online platforms must also strive to explore the everyday data practices of the platform that impact children's digital rights to protection and privacy in this setting. This may include consideration of the online platform as an active agent within the setting, which can be understood by examination of the broader ecology of use (terms of service, privacy policy, business operating model, governance, etc).
- **Legal Rights**: Importantly, just because data is publicly available does not automatically mean that, legally, it can be collected and used by anyone for any purpose. Consideration needs to be given to relevant laws, such as those regulating personal information (e.g. the **Privacy Act 1988**) and intellectual property. Some publicly available data may also have been made available in violation of a child's legal rights, including their right to privacy (protection of their personal information): for example, it might have been shared without appropriate consent (of the child or caregiver). Therefore, researchers should consider the legality of the collection, use and dissemination of data from a publicly available source and, in some cases, this may involve considering laws of other countries (for example, the GDPR).
- **Other rights and interests:** Aside from the legal position, researchers should be aware that there may be other ethical issues around publicly available data. A particular child, for example, may have had no choice about the information that is publicly available about them and, in some cases, may not be happy that it has been made public. Researchers should be particularly mindful about collecting data such as images that identify an individual child or which reveals or touches on sensitive issues or attributes.
- **Collection, management and publication of children's data**. Children's data should be collected and stored in ways that aim to minimise risks to children's privacy. For example, avoid collecting and storing images of children and their work where it is not necessary to do so; consider storing de-identified data sets; ensure that stored data is secure and not kept for extended periods; and avoid making datasets including children's data publicly available unless absolutely necessary. Finally, researchers should also aim to protect children's privacy in the publication of children's data. Specifically, research should aim to minimise publishing data that is identifiable in research publications and presentations (such as images of children or their work).

Back to contents

Back to previous

Challenges around informed consent

Approaches to informed consent may vary in online platforms depending on the feasibility of obtaining informed consent and the level of privacy settings of the data being collected. Further, research in online platforms may not directly involve individuals as participants but rather as data subjects. Ethically both should be treated with the same ethics of care, but processes for informed consent may differ.

- **Informed consent.** Where possible research should aim for informed consent from children where they are the subject or participant in the research. For example, if collecting data about children's engagement in an online learning platform, it is likely feasible to identify and inform individual children and seek their consent (along with their caregivers) to participate in the research. However, in instances such as web scraping of social media sites it may not be feasible to identify individual children to seek informed consent.
- **Waiver of consent.** When dealing with big data sets, such as data collected via ***Web scraping***, it is likely not feasible to identify and seek informed consent from individuals. In this case, careful consideration should be given to the benefits of working with the data set. Where these benefits outweigh any potential risks, researchers should develop clear protocols for the storage and management of children's data (see above). Further, children's extant public online data should not be republished in its online form (e.g. sharing images or direct quotations). (See also, discussion of consent waivers in ***Web scraping***)

For references and further sources, see ***Resources: Online platforms including social media.***

Note in particular the **Association of Internet Researchers (AoIR) ethical guidelines**.

See also ***Web scraping.***

Back to contents

Back to previous

Health settings

The value of health settings as sites for digital childhoods research

Health-focused research includes numerous disciplinary domains (e.g. cognitive, physical, social, emotional), each involving different health professionals and associated clinical protocols. It is conducted in a range of contexts, such as in person in a clinical setting (e.g. health clinics, hospitals, research laboratory), in person in a community setting (e.g. school, home or community venue), using digital communication formats for online consultations, and through the use of wearable technologies and digital applications. The use of different research contexts will depend on the research population, geographic location, research aims/methods and clinical guidelines.

Health settings are valuable sites for research on digital childhoods. They provide opportunities to recruit participants from special interest/clinical populations, to examine interactions between digital technologies and health outcomes, and evaluate how digital technologies can be used in health promotion, prevention, and intervention.

Risks and mitigation

Health settings are complex environments that need to prioritise the care of individuals. Many health settings have organisation-specific research governance policies and procedures that researchers need to be aware of when planning and conducting their research. Briefly, some important considerations include:

- **Role of the research and researcher**. In health research it is possible for the researcher to also be a qualified clinician, and it may be assumed by participants and their families that involvement in the research project will also include formal diagnosis, treatment, and/or full health service provision. This is an important consideration when planning research. Researchers should consider what can be feasibly included within the research project and clearly communicate this to participants.
- **Dealing with clinically relevant findings**. When the research involves clinical and health-related assessments and outcomes, it is important to have protocols in place in case these produce clinically significant information about participants that they are not already aware of, such as being at high risk of, or displaying symptoms for, a particular medical condition. Protocols might include providing a summary of the participants' outcomes and making appropriate recommendations for further assessment by local health providers.
- **Potential discomfort/burden of research methods.** Some of the methods used in clinical health settings may need to be carefully considered for use in research projects – that is, the appropriateness of methods used for a patient versus research participant. It may be that clinical protocols increase in discomfort/burden as investigations become more in-depth. For a patient, this risk-benefit may be warranted, but for a research participant the increased discomfort/burden may not be warranted. Consider the time burden, and complexity/invasiveness of methods and whether shorter, less invasive screening tools might achieve equivalent research goals. If more complex/invasive methods are warranted, researchers should ensure they are only collecting the required groups and sample sizes absolutely necessary for meeting the research aims. Researchers could also consider the use of a multi-phase design where a subsample of participants are invited to participate in phases involving more advanced methods.

Back to contents

Back to previous

Considerations around informed consent

Health research can be complex and it is important that children and their carers have a clear understanding of the research processes and any potential benefits and risks of the research before consenting to participate. Specific issues are outlined below; a more general discussion can be found in ***Informed consent.***

- **Participant decision-making**. When seeking informed consent, it is important that the benefits and limitations of the research have been clearly communicated and delineated from clinical service provision. Researchers also need to be mindful that, depending on the participant population, a participant's medical condition and associated emotional distress may affect their decision about whether to participate in the research. Researchers may recommend potential participants and their carers discuss the research and their participation with their health care provider, family and friends before deciding to participate.
- **Familiarity with research equipment, environment and assessments.** It is plausible that much clinical research equipment and many clinical research assessments may be unfamiliar to both young children and their adult carers. This poses a challenge for research with children and the assumed support of adult carers in enabling informed consent. There are several strategies that might be used to appropriately support informed consent of both young children and their adult carers. Picture-based recruitment materials or online videos that include images of the research team, equipment, environment, and examples of research tasks in an accessible format could be used to facilitate the informed consent process. Then, when first visiting the research setting, child participants and their adult carers could be walked through the research environment and allowed time to interact and ask questions prior to final child and carer assent.
- **Avoiding coercion**. It is important to ensure that potential participants understand that their choice about whether or not to participate will not impact on their usual clinical care. This could otherwise lead to concerns around coercion if a participant believed that their care would be negatively impacted if they elected not to participate or withdrew during the research.

For references and further sources, see *Resources: Health settings*

Back to contents Back to previous

Laboratory settings

The value of laboratories as sites for digital childhoods research

The laboratory settings discussed here are environments that research participants are brought into in order to test or investigate specific phenomena. Laboratory settings are valuable because they can allow researchers to set up purposefully-designed conditions that allow them to best study a given phenomenon. For digital childhoods research, laboratories can be used to investigate how children, and their families or friends, interact with and around digital technologies. Biomechanics laboratories, which are used to analyse how people move, will be used as a specific example in this section. These laboratories can be used in cross sectional and longitudinal studies to explore the impacts of digital technology use on young children's physical health and development (Straker et al., 2015). Biomechanics laboratories give researchers access to a diverse array of equipment allowing for "gold standard" measurement of a range of different biomechanical outcomes, in a controlled "artificial" setting. These forms of equipment include:

- Three dimensional motion analysis systems enabling measurement of movement kinetics and kinematics.
- Ground reaction force platforms enabling the measurement of balance and forces acting upon a child's body.
- Electromyography systems enabling the measurement of muscle activity during movement.

Risks and mitigation

- **Laboratories are unfamiliar environments with a range of different equipment, which may be overwhelming for young children.** To limit this, researchers should consider providing participants with details of the equipment they will encounter (described in an age appropriate manner) within participant information sheets. On arrival at the laboratory, children and their caregiver should be familiarised with the environment using age appropriate descriptions. Where feasible, researchers can consider collecting data from two children simultaneously (e.g. siblings or friends) as allowing children to interact with one another throughout the data collection process can help them to feel more comfortable and confident in the laboratory environment. This has the additional benefit of increasing the ecological validity of the data collected.
- **Some dedicated laboratory settings, such as biomechanical laboratories, are frequently used for a range of different research purposes in the same time period (e.g. sporting research, research on adults with disabilities etc.) meaning the environment may not be child friendly.** Researchers need to make efforts to facilitate child friendly environments. Examples of this include having music or a child's favourite TV show playing when they arrive. Where possible, soft and child friendly furnishings should be used (e.g. rubber floor mats, child sized chairs and tables, etc) to make the environment more approachable and suitable for children.
- **Research conducted in laboratory based environments typically requires application of equipment to children, requiring researchers to touch children and potentially requiring disrobing or exposing skin on the limbs or trunk (e.g. to apply reflective markers for three dimensional motion capture systems).** Prior to data collection, children and their caregivers should be provided adequate instruction on appropriate clothing to wear in the laboratory to allow for fixation of equipment with minimal disruption to clothing. The laboratory should also be equipped with a private space for children to get changed if required. Further details can be found in ***Wearable devices***.
- **Laboratory-based research typically requires participants to complete specific tasks. To ensure that adequate data is collected without undue demands on children, research methodologies should be streamlined, well-planned, flexible and extensively piloted.** The ability to adapt the data collection protocol based on the response of the child at the time of data collection is important to ensure that researchers capture the data needed, while the child continues to enjoy the session. In addition, ensuring that at least one member of the data collection team has experience working with young children and, if relevant, can motivate and encourage engagement through play, will support a positive experience for child participants.

Back to contents

Back to previous

Considerations around informed consent

Caregiver consent and child assent prior to commencement of sessions is essential, and ongoing consent/ assent throughout the session is required to ensure that the child is happy to continue. For example, prior to each activity performed in the laboratory, the activity should be explained and the child should consent/ assent prior to engaging in the activity. The child should be able to withdraw at any time and it should be anticipated that some children will withdraw assent during the sessions.

For references and further sources, see ***Resources: Laboratory settings.***

See also ***Wearable devices.***

Back to contents Back to previous

Data-collection methods

This section focuses on ethical challenges and considerations when applying established and emerging methods in digital childhoods scholarship. While some of the ethical implications of these methods are not unique to digital childhoods research, this research may involve particular issues that require special attention.

There have been extensive conversations about the ethical dimension of more traditional research methods, including their use in research about children. For these methods, we note a few key resources about their use in research with children and link to additional resources in the ***Appendix of Resources and Guidelines***.

We provide a more substantial discussion of methods that are less common and have received less ethical consideration, yet are important components of digital childhoods research. Our discussion of these methods explains their importance, identifies potential associated risks, and proposes accessible ways to mitigate those risks.

Interviews and focus groups

Interviews and focus groups involve collecting and analysing first-person narratives. Researchers develop a series of questions to elicit information from research participants about the research topic(s). In digital childhoods research, interviews and focus groups are well-established qualitative methods to capture children and young people's own perspectives (Danby, Ewing & Thorpe, 2011).

Values of the methods

Interviews and focus groups allow researchers to:

- create conversation-rich environments which enable children to share their thoughts and experiences on the research topic. While the sample size is usually smaller compared to quantitative methods, interviews and focus groups enable the collection of in-depth accounts in an interactive manner.
- design unstructured, semistructured, or structured interviews as appropriate to the topic. Unstructured and semistructured interviews offer researchers and participants opportunities to pursue topics of interest, generating similar yet different results from each interview. Structured interviews offer a more streamlined delivery and similarities in responses but lack the capacity to capture insights unique to each participant.
- work with children, instead of working on children (Bodén, 2021), to acknowledge their subjectivity and agency as experts on their own lives (Mason & Danby, 2011) and capable research informants.

Back to contents

Back to previous

Risks and mitigation

- **Children's assent.** While gaining informed consent from parents or caregivers is crucial before interviewing children, it is also important to consider children's ongoing assent before and during interviews. Researchers should make sure that children feel comfortable with the format, setting and content of the interviews and voluntarily agree to participate, in addition to gaining parental consent to participate. The researcher should maintain vigilance in monitoring for a child's withdrawal of consent – verbal and non verbal, direct and implied – and be prepared to cease the interview without delay. (See also ***Informed consent***.)
- **Collecting sensitive information.** Interviewing children individually and in group settings is likely to elicit information beyond the scope of the research project and that is potentially sensitive. Researchers should consider ways to mitigate the risk of accidentally collecting sensitive information about the children and/or their families and, when such data are captured, have protocols in place for removing them or excluding them from data analysis and reporting.
- **Unequal power relations.** When children are involved in formal research settings, they might feel the obligation to share what the adult researchers want to hear, particularly when the interviews are fully designed and controlled by the researchers (Lahman, 2008, p. 294). To mitigate this risk, researchers could empower the children participants to make decisions about how, where and when they want the interviews to take place. Interviewing children in groups or with friends were also found to be useful ways to empower children (Lahman, 2008, p. 294). Adults can also make provisions for reducing the power divide. For example, inviting children to use the researcher's first name, "dressing down" to reduce the perception of difference, positioning themselves in ways that prioritises the child's power (same sized chairs, sitting on the floor etc), and making appropriate language choices that allow the child to easily understand what's being said.

For references and further sources, see *Resources: Interviews and focus groups*

Back to contents Back to previous

Ethnographic research

In ethnographic research with children and young people, researchers carry out in-depth fieldwork which involves spending extensive periods of time in close contact with participants. Ethnographic researchers collect detailed research data through conversations with the young participants, long-term observations of their everyday life and activities, and collection of artefacts offering insights into the nature of the setting. Ethnographic researchers work systematically to understand the emic *(insider)* and etic *(outsider)* experience of different phenomena. They seek to understand and interpret the multiple realities of lived experiences by seeking out and interpreting patterns observed in participants' language, behaviour, and interactions. The interpretive and sensitive nature of ethnographic research requires a commitment to reciprocity and empathic interactions that build trust and relationships (Mills & Morton, 2013).

Values of the method

Ethnographic methods allow the researchers to:

- recognise and acknowledge children's social agency as "fellow human beings" (Christensen, 2004) by working with them in fieldwork
- gain valuable insights into how children think, experience, and act in relation to the research topics under investigation
- gather breadth and depth of perspectives into the lived experiences of participants through extended time in the field
- draw implications and recommendations from data analysis that can directly improve the immediate and ongoing experiences of participants within that setting, and that can be used to reflect on or improve the experiences of participants in similar settings
- understand participants' perspectives across a range of settings including their home, community settings, prior-to-school educational contexts, and the early years of formal school.

Risks and mitigation

- **Children's assent.** In particular, due to the long-term nature of ethnographic research, children's assent to participate should be treated as an evolving agreement (García & Fine, 2018). Researchers should pay ongoing attention to subtle signs – verbal and non verbal, direct and implied – that indicate children's withdrawal of assent during fieldwork. (See also ***Informed consent***)
- **Context-specific risks.** The risks associated with ethnographic work vary across the settings in which the fieldwork takes place. In the home, for example, researchers may accidentally capture information about family members who have not given informed consent/assent to participate in the study. Mechanisms must be in place to respond to context-specific challenges when doing ethnographic work. (See also ***Context-specific considerations***)
- **Witnessing harmful or dangerous behaviours.** Due to the close social interactions required by ethnographic studies, researchers could potentially witness or get involved in harmful behaviours and/or situations which may jeopardize the wellbeing of children/adults and/or the researchers themselves. Researchers must consider and evaluate the risks of such situations and develop procedures to mitigate these.
- **Misrepresentation of data.** Given the usually massively detailed character of ethnographic data, researchers must pay considerable attention to not privilege some voices over others (Ritchie, 2019).

For references and further sources, see *Resources: Ethnographic research.*

See also *Resources: Home settings and Audio, visual, and audiovisual recordings.*

Back to contents

Back to previous

Surveys

Survey methodology is a complex systematic approach that can employ multimodal data collection techniques to collect data from a sample of individuals. Adherence to ethical principles is necessary through the entire life cycle of a survey and there are several key factors that must be considered within survey methodology to ensure accurate, reliable and ethical data collection via any type of survey (Dillman & Brenner, 2020). These factors include sampling frame, sampling techniques, questionnaire design, instrument design, survey methodology techniques, evaluation of the survey, robust data collection, ethical data management following national standards, and analysis of survey data (Ask Dr. Cath, n.d.).

Value of these methods

Surveys have the potential to be a powerful tool for promoting a more inclusive and responsive society that values and prioritises the perspectives of families and children (Greig, Taylor & MacKay, 2012; Livingstone & Bober, 2004).

- **Empowering families with young children.** Through surveying families with young children, we can provide them with a platform to share their experiences and perspectives, empowering them to have a greater voice in decision-making processes that affect their lives.
- **Fostering a child-centric perspective.** Surveying children can help us to understand how children perceive and experience the world, promoting a child-centric perspective that takes into account their unique views and preferences. This approach can help to ensure that adult decision-making is informed by children's perspectives, and that policies and programs are designed with their needs in mind.

Risks and mitigation

When employing surveys, and more importantly handling survey data, considerations should be given to mitigating risks imposed on survey respondents and their data.

- **Pilot test the survey.** Pilot testing the survey with a small sample of the population can help identify any issues with the survey design, such as confusing questions or technical problems.
- **Data management.** Qualified data managers (for large scale surveys) or researchers with appropriate data management skills (for smaller surveys) should be employed to handle survey data to the highest ethical standards.
- **Protect privacy and confidentiality.** Ensure that survey response data are kept confidential, stored as anonymised datasets separate from participant contact details, and that access to data is secure and used on a need-only basis.

For references and further sources, see *Resources: Surveys*

Back to contents Back to previous

Audio, visual, and audiovisual recordings

With the increasing use of media tools and technologies in research practices, the collection of audiovisual data has become common in research related to children in the digital age. These methods involve collecting data via audio and video recordings, photographs, drawings, etc. This data may be produced by researchers, such as taking photos during child-led "toy tours" (Plowman & Stevenson, 2013) or making video recordings of play. It can also be produced by participants who could be asked to take photos of items significant to them or to video-record naturally occurring events in the home (Plowman & Stevenson, 2013).

Value of these methods

These are well-established methods across a range of disciplines and are of particular importance for doing digital childhoods research in various social settings. They support researchers in:

- capturing children's perspectives and self-representations through audiovisual content they make
- mitigating limitations of self-reporting by capturing naturally occurring events
- capturing spatial data about a location where digital technologies are used, such as the home, learning space, community centre, or virtual space
- collecting rich visual data about the role of technologies in children's lives
- aggregating and interpreting digital data of children's online activities
- providing material that can be watched back with participants to elicit detailed descriptions and reflections.

Risks and mitigation

Ethical challenges may arise during and after research that involves audiovisual methods due to the rich data that such methods collect. A number of issues must be considered when applying such methods:

- **Capturing sensitive or identifiable data**. When recordings are being made in sensitive settings like the home, and especially when they are being made with very young children or other sensitive cohorts, there are greater possibilities of capturing sensitive or identifying data. One possibility is that recordings capture illegal or dangerous activities (witnessing or disclosure of harm to children such as abuse, neglect, domestic violence). If there is a reasonable suspicion that any participants are at risk of harm, then researchers should report to the necessary authorities (see ***Mandatory reporting obligations*)**. In other cases, data may simply be sensitive (such as images or video footage of children that may capture nudity during nappy changes, getting dressed, nappy-free time etc) or may include identifying information (such as video or image stills that contain recognisable faces, spoken or written names, health or personal information i.e. birth dates, Medicare number). Researchers may also capture data that is outside the research focus and ethical protocols approved. In managing these situations, it's important to remember that consent is an ongoing process. In addition to informed consent processes with parents/guardians on what data will and will not be captured, researchers can also make ethical decisions in the moment to stop data capture (see Sandberg & Gillen, 2021, p. 342 for an excellent case study example of this in action). Researchers may also give participants the right to withdraw or not capture or share any data that they are not comfortable with. Any data that captures sensitive information but isn't analytically relevant could be deleted or excluded from the analysis. Any data that captures sensitive or identifying information but is analytically relevant should be discussed by the research team. Researchers may decide, for example, to retain the data for the purposes of analysis but not to use it for publishing or presentation purposes. Researchers may also alter the data to remove or reduce sensitive or identifying information (see ***Data sharing and dissemination)***.

Back to contents

Back to previous

- **Ongoing consent.** Given that audiovisual methods are often aimed at capturing natural events, actively monitoring for ongoing assent becomes critical. For example, participants may initially be comfortable with being recorded but may become uncomfortable with the recording of specific locations or interactions. Researchers should anticipate this and be prepared to stop recording.
- **Participants' ability to redact data.** Participants must be given opportunities throughout the research process to redact the data they provided for the purpose of protecting their privacy. This is a general principle of informed consent but requires particular attention in the context of audio, visual, or audiovisual recordings, particularly when those recordings are made in sensitive settings like the home.
- **Unnecessary data.** Given the convenience of collecting audiovisual data, particularly when using digital recorders, there is a risk of over-collecting research data that are unnecessary or beyond the focus of the research. It is thus important for researchers to minimize or avoid content that isn't required (e.g. not including images of people's faces if this is not important to the research). One way to mitigate this risk is to leave recording equipment to the families so participants can select what footage they give to researchers, although this also means extra burden for participants and requires careful and ongoing communication between researchers and participants.

For references and further sources, see *Resources: Audio, visual, and audiovisual recordings*.

See also *Resources: Wearable devices, Resources: Arts-based methods,*

See also *Context-specific considerations if relevant.*

Back to contents Back to previous

Video stimulated accounts

Video stimulated accounts are elicited in small group or individual interviews. During the video stimulated interview, a fragment of video-recording from a previous interaction is played to the participants to prompt talk about the activities that took place (Theobald, 2012, 2017; Pomerantz, 2005). The aim of a video-stimulated interview is to promote conversation about, not solely recall of, past interactional events. The interview itself is considered to be a social situation because the talk and interaction produced is co-constructed by all participants involved. In this way, video-stimulated accounts are interactional events in their own right.

Value of this method

Video stimulated accounts enable children to be active participants within research, reflecting the growing emphasis on using participatory approaches in research with children (see ***Children as co-researchers***). Specifically, this method offers:

- an effective tool for gaining children's views on matters that affect them.
- a participatory approach that supports children to be active participants by inviting them to watch video-recordings of their own everyday learning activities and share their experiences of belonging and participating.
- an opportunity for children to be analysts of their own activities.

These dimensions are important as children's 0erspectives are often missing from research about their digital experiences.

Video stimulated accounts are also valuable as they can help to identify key moments in the interactions or events of the original video-recording that warrant further analysis by the researcher. This can be particularly important in digital childhood research that focuses on everyday practices.

Risks and mitigation

A child-friendly information letter describing the study and children's involvement should be provided for parents to read with their child. This should identify the following possible risks and note how these are being mitigated and counterbalanced by the benefits of the research.

- **Mild discomfort being video-recorded**. The presence of researchers with a video-recording device may lead to children feeling uncomfortable or self-conscious.
- **Privacy**. Children may feel their privacy is invaded by having their interactions video-recorded and being asked to provide their views about their activities. Children themselves will be asked to provide written consent and ongoing verbal assent (see Danby & Farrell, 2005).
- **Mild discomfort talking about their activities**. It is possible that some children may find discussion about their activities uncomfortable if they do not feel included or connected to their peers in the classroom. It is possible, although unlikely, that when talking about their activities in front of other children or the researcher they may feel under scrutiny or that they are in "trouble".
- **Understanding the context**. Video data is decontextualised from what has happened before and after. As such, it must be understood that what is captured is not an isolated or entire event but rather will have been impacted by the broader context. Asking children what happened before/after the event and gathering broader data about the context within which the event happens will support a richer analysis and more robust conclusions.

In managing these risks, researchers should monitor and verbally check with children that they are comfortable being recorded and that they are comfortable watching a video-recording of themselves and talking with the researcher about their activities. As in all research with children, researchers should monitor for signs that assent is being withdrawn (see ***Informed consent***).

For references and further sources, see *Resources: Video stimulated accounts*

Back to contents Back to previous

Wearable devices

Value of these methods

Small wearable devices provide value in research, as other measurement tools such as surveys or diaries are often inaccurate and prone to bias. Wearable devices have the potential to move research forward in ways that could not be otherwise done. While wearable devices can be used in laboratory-based settings, their strength lies in their use in naturalistic settings, allowing for objective, real world capture of children's 24-hour behaviours. Within digital childhoods research, wearable devices may include:

- Devices used to capture or measure the environment around a child, including digital technology use, such as wearable cameras and microphones, and spectrometers. These devices can provide insight into the content and context of digital technology use and light exposure from screens.
- Devices used to measure movement such as accelerometers and inertial measurement units. These can provide information on how much children are moving while engaging with digital technology, as well as insight into sleep.
- Devices used to capture physiological factors, such as heart rate and galvanic skin response. For example, chest strap heart rate monitors, and wireless sensors placed on the body.

Wearable devices are typically designed to be as unobtrusive as possible and similar to other things that children wear, such as smartwatches. Some considerations around wearable devices are discussed in ***Resources: Laboratory settings*** **.** However, ethical considerations for the use of wearable devices increase within naturalistic settings, therefore the risks discussed here will focus on their use within these settings.

Risks and mitigation

- **Unfamiliarity of the device and the purpose of wearing the device may cause children undue concern.** This risk can be mitigated by providing clear, age appropriate, explanations to the child and their parent/caregiver about how many devices are being attached to the child, what kind of data the device collects, and why it is being collected. This can be presented in the parent and child participant information sheets, accompanied by a visual diagram of placement, and reiterated verbally and with demonstration at the time of data collection. Providing the child with the opportunity for autonomy and sense of ownership over the device can help them feel more comfortable wearing the device, for example providing choice in the order that sensors are placed on their body or giving them the opportunity to personalise the device.
- **Wearable devices are typically attached using harnesses, straps, bands, or medical grade tape, all of which can have discomfort associated with attachment (e.g. friction injuries from harness or allergic reactions) and removal.** Ensuring that attachment methods are adjustable for the child, and that parents and children know how to fit the devices appropriately, can assist in mitigating the risk of friction injuries. Providing age-appropriate distractions, offering children the opportunity to remove the tape themselves, or using a medical grade adhesive remover can assist in removing tape with minimal discomfort.
- **Wearable devices are commonly worn for a number of days or weeks, potentially providing a substantial burden to the participant and their family throughout the duration of data collection.** Consultation with consumer and community engagement groups, including parents of young children, in establishing methodology can assist in determining the feasibility of proposed time periods.
- **Risks associated with wearable cameras include other people who have not explicitly consented to having their image recorded, images of private activities or images participants are not comfortable with being recorded, and images being accessed or used by unauthorised persons.** To mitigate the risks associated with wearable camera images, international guidelines for using wearable cameras in human research are available (see ***Resources: Wearable devices***, especially Kelly et al., 2013).

Back to contents

Back to previous

- **Wearable devices are easily lost or damaged, leading to potential data loss and financial burden to researchers, and stress for participants.** Providing informational resources for children and their parents/caregivers on care of devices, including storage, charging and maintenance of devices (or eliminating the need for charging) during data collection periods can mitigate the risk of loss and damage. Additionally, regular contact from the researcher with participants is essential to allow children and their parents to ask questions, to allow the researcher to ensure that the device is still running optimally, and to allow for data to be downloaded from devices securely.

Considerations around consent

Informed consent from parent and assent from the child prior to data collection and ongoing consent/assent throughout data collection is essential. Providing families with clear documentation about the wearable devices that they can refer back to can assist with ongoing consent. Children and their parents/caregivers should be provided with the opportunity to cease wearing wearable devices at any time without judgement.

For references and further sources, see *Resources: Wearable devices.*

See also *Audio, visual, and audiovisual recordings.*

Back to contents Back to previous

Screen recordings and screen grabs

Screen recording is an audiovisual method that can be used to observe on-screen actions, including virtual interactions (Ho, 2019). It can be conducted live (e.g. observing a live gameplay), supplemented with talk-aloud protocols or interviews, or can be done remotely at participants' own pace and dubbed with a voiceover recording. Screen recordings can be synchronised with footage of participants in physical space, resulting in a side-by-side view of on-screen and physical activity (Mavoa et al., 2022). Taking screen grabs or screenshots on the other hand is the capturing of still images of on-screen activity. These can serve as "visual records of digital culture" (Švelch, 2020, p. 554) by, for example, capturing a snapshot of online interactions (e.g. social media conversations) or online content (e.g. Instagram posts). A portfolio of snapshots taken over time can be used to observe changes in these interactions or cultures.

Value of these methods

One of the greatest values of these methods is their ability to capture and document virtual interactions and interfaces. They can also be conducted alongside other more established methods to produce rich audiovisual data about children's online interactions or how digital and online contexts are presented to children and families. Other values of the methods include:

- **Live, retrospective and versatile**. One of the advantages of such methods is their versatility. They can be conducted live, retrospectively, or at specific times and can be used in virtual ethnography or in more directed interactions with participants (e.g. interviews). They can also be packaged as activities and/or cultural probes to help investigate participants' perspectives of their digital experiences.
- **Mobile-device friendly**. This method is also easy to navigate on mobile devices which can be useful for both participants and researchers, particularly when capturing content "on the go". Some older devices may not have in-built screen record functionality however, and alternative solutions, such as installing a screen-record app, may be required.
- **Remotely available.** As mentioned above, screen recordings and taking screen grabs do not need to happen in person and can be accessed remotely. This is especially useful when working with communities that are more difficult to access in person, although there may be other issues such as device and internet availability.

Risks and mitigation

- **Privacy and secondary use of data.** It is important to remember that even if participants or people who posted online may have given consent to making their data publicly or selectively available, this does not mean that they have consented to the use of their data for the purpose of your research (see ***Online platforms including social media***). You may also incidentally capture data about non-participants using these methods (e.g. other children in the same photo as your participant). It is hence important to discuss and provide guidelines on how your researchers or participants should record their screens. If working in an Australian context, please refer to the discussion on secondary use of data or information in the **National Statement on Ethical Conduct in Human Research** (2023, p. 36) for more information.
- **Capturing non-participant data.** When recording online activity, non-participants may include other users who cannot be approached for consent to participate in research. For example, if a child is playing an online game and the screen is recorded, other player avatars, usernames, and text chat messages may be visible/recorded. These other players may or may not be children and the play may or may not be in a publicly accessible setting. Information about other players/users may or may not be identifying information. Regardless, care must be taken in ensuring adequate protocols are in place regarding the ethical use of non-participant data in these situations.
- **Using proprietary or cloud-based software/hardware.** You may be using proprietary software or hardware when capturing screen recordings or screengrabs. Understanding the relevant privacy policies and terms of use may be important especially when capturing information about children or sensitive data. For example, when you take a screen grab on your phone, does it automatically get uploaded to iCloud or Google Drive?

For references and further sources, see ***Resources: Screen recordings and screen grabs.***

See also ***Audio, visual, and audiovisual recordings*** **See also** ***Online platforms including social media.***

Back to contents

Back to previous

Log files

Log files are computer generated files that record activity within a particular system, such as an app or device. This method provides large amounts of quantifiable and observable data about users and can be a good means of quickly visualising how users interact or behave on a platform. The method is valuable as it can capture comparable data over time with large cohorts of participants which may otherwise be more difficult to obtain from other methods that look at user interactions or behaviour online or within a platform (e.g. screen recording).

Risks and mitigation

Ethical risks related to this method are often related to the features of the platform, app or software being used and the log files it generates. These can include:

- **Biases of algorithms and visualisations**. Each platform, app and software has its own set of algorithms and some log files are presented and visualized to users in ways that may be selective or biased. For example, educational platforms may have dashboards that display selective log file data, such as milestones or activities that children or students have not completed. They may show only a subset of data available from the log files which they think users want to see rather than providing the full dataset which may, on the flipside, be convoluted and difficult to understand.
- **Limitations of the data.** Aside from the biases of platforms, you may also want to consider the efficacy of the data since log files are often by-products rather than data that is directly obtained from users. This means that the data from log files may not reflect the intended use of the platform, app or software and should be analysed with caution or supplemented by another data source.
- **Privacy**. Do participants know what data is being collected about them? Participants are unlikely to be aware of the types of data that may be collected and shared about them through a log file, nor how the files are presented and shared with others. We need to consider participants' privacy when accessing log files and extracting data from them and ensure that the nature of the data is clearly and accurately communicated to participants in plain language.

For references and further sources, see *Resources: Log files*

Back to contents Back to previous

Web scraping

Value of these methods

Web scraping involves extracting data from online sources (Ignatow & Mihalcea, 2017; Nyhuis, 2020). It allows automated search, identification, and retrieval of relevant information in a format which facilitates data analysis (Bright, 2017).

Web scraping can be valuable to projects which require significant volumes of data drawn from online sources. While it is a potentially powerful tool for data collection (Ignatow & Mihalcea, 2017), it requires skillful use on part of the researcher from both a methodological and ethical standpoint. Methodologically, researchers need to consider whether web scraping is an effective tool to employ in the context of their project and how it might best function to ensure a useful and rigorous approach to data collection. Ethically, there are a range of complexities for researchers to consider. Here, the risks and potential mitigation strategies are explored, as well as provocations and questions which will position researchers to make informed decisions which reflect best practice.

Key considerations

Key considerations around web scraping largely pertain to questions of legality and consent. Important aspects to consider include:

- **Terms of Service (ToS).** As described in ***Online platforms including social media***, ToS are the agreements that specify how a platform or website is to be used. Some ToS may stipulate that web scraping is prohibited. Thus, when justifying the use of web scraping, researchers may need to consider the ToS and explain how the intended benefits of using this scraped data outweighs the risk of breaching the ToS.
- **Waiver of Consent.** According to the Australian **National Statement on Ethical Conduct in Human Research** (2023), any data generated by humans, including data produced on and through the use of mobile devices and the internet, generally requires researchers to obtain informed consent by the humans who produce said data. However, as web scraping can involve collecting thousands if not millions of data points, obtaining informed consent can be unfeasible. In these instances, researchers may seek approval for a Waiver of Consent. In the National Statement, Section 2.3.10, a waiver of consent can be approved by the appropriate reviewing body if: a) the research carries no to low risk, b) the benefits of the research outweigh the risks, c) it is impractical to obtain consent, d) there is no known or likely reason that participants would not have consented, e) privacy is sufficiently protected, f) there is a plan to uphold the confidentiality of data, g) there are plans to make the findings available to the participants where the results have significance for their welfare, h) any commercialisation derived from the data will not deprive the participants from any financial benefits they would be entitled to, and i) the waiver of consent is not prohibited by any state, federal, or international law. Because university Human Research Ethics Committees (HREC) must consider privacy protection for participants, and because different institutions are subject to different privacy law regimes, approaches to granting waivers may differ across institutions. Even where researchers do obtain a waiver of consent, they should still consider broader ethical questions relating to users' likely expectations of privacy and capturing of unintended data (see below), particularly where the data is likely to be captured from or about children.
- **Capturing unintended data**. While web scraping is an efficient technique to collect a large corpus of mobile and online data, it is a "blunt tool" that can capture and collect unintended data. For example, web scraping TikTok videos via a particular hashtag may capture videos created by children under the age of 13 who may be unaware of or have ignored the age restriction within the platform's ToS. To mitigate the risk of capturing unintended data, researchers are encouraged to understand the affordances and limits of their collection tools and processes, as well as uphold principles of privacy and confidentiality while "cleaning" the data to remove any unintended data that was captured.

Back to contents

Back to previous

Risks and mitigation

The **Australian Code for the Responsible Conduct of Research** (Code) makes it clear that institutions and researchers must identify and comply with laws and regulations relevant to the research being conducted. Therefore, a link exists between regulatory compliance and responsible research; and demonstrating that research is being conducted lawfully may be a requirement for human research ethics approval. This potentially presents dilemmas for researchers seeking to automate data collection by web scraping. For example, while web scraping itself is not illegal in Australia, it is contrary to the Terms of Service of some online platforms, such as Meta.

It is debatable whether web scraping of publicly available information for research purposes, contrary to terms and conditions, represents a failure on the part of researchers to comply with relevant laws and regulations within the meaning of the Code. However, university Human Research Ethics Committees may be reluctant to approve of a project that intends to use web scraping if this activity is prohibited by the ToS of the site itself. Researchers will also naturally want to protect themselves and may err on the side of caution. Ultimately, therefore, ToS that prohibit web scraping may have a chilling effect on research. This is but one example of the tension that exists between legal issues and ethics approval processes.

There are also issues around the potential capture of data about children. See ***Resources: Online platforms including social media*** for details.

For references and further sources, see *Resources: Web scraping.*

Note in particular the **Association of Internet Researchers (AoIR) ethical guidelines**.

Back to contents Back to previous

Arts-based methods

Arts-based methods are research approaches that use art-based practices to collect and/or analyse data. There are several arts-based methods that researchers use when working with children including drawings, photographs, media productions, dramatic play, dance, and crafts. These methods can be used alone or in combination with other more conventional methods.

Value of the methods

- Arts-based methods broaden the ways data may be collected, potentially offering children opportunities for sharing their perspectives in ways that draw on their existing knowledge and ways of interacting.
- They allow children to express themselves without requiring high level language skills, whether written or verbal (Parry, 2015). This means that very young children, who are still developing their language capabilities, are able to actively participate in research and give voice to their ideas and interpretations. Even for older children, arts-based methods may put them at ease and empower them to engage more substantively as it is a familiar and accessible form of interaction (Barton, 2015).
- Arts-based methods may also provide a more accessible and less intrusive means of engaging children from marginalized communities or with traumatic backgrounds, and may provide a way of capturing experiences or feelings that are difficult to verbalise (Green & Denov, 2019; Hickey-Moody et al., 2021).
- Within the context of digital childhoods research, these methods offer an important means of capturing the views of very young children, who are often excluded from this research, and a way of centering children's perspectives on their own digital experiences. Digital media technologies can also be included as tools within arts-based methods, which can provide a generative means of investigating children's digital experiences (Knight, 2019).

Risks and mitigation

- **Ownership, privacy, and copyright**. There are a range of issues around ownership, copyright, and privacy that should be considered. Researchers should be clear about how all data produced by children will be securely housed. In the context of methods that involve using digital media technologies, researchers also need to consider if the use of these technologies has further privacy implications, such as the collection of data by apps, platforms, and devices. (Knight, 2019). Ownership of any outputs produced by children (such as drawings or photographs) should be made clear to all participants and caregivers. Copyright can be an issue with remixed materials in artworks, but this can be mitigated by using creative commons or self-created materials.
- **Data produced may not adequately address research questions.** Arts-based methods are often open-ended and emphasise the agency of children in determining what activities they engage with and how. One challenge is that this approach can result in a lack of relevant research data that clearly speaks to children's perspectives on the topic of interest. Researchers should be aware that their data may not produce "answers" to research problems, but rather, may pose more questions (Barton, 2015). At the same time, researchers may endeavour to strike a balance between adult-directed and child-directed actions (Blaisdell, Arnott, & Robinson, 2019).
- **Interpreting creative outputs.** Researchers should avoid projecting their own interpretations onto any creative works produced by child participants. Wherever feasible, children should be asked to explain the meaning and significance of the works they have created and these interpretations should become part of the research data. All artworks and accompanying explanations need to be analysed within the cultural contexts in which they were created.
- **Working with specialist participant cohorts**. If working with children from specific backgrounds, such as minority groups or those who have experienced trauma, researchers should ensure that the proposed activities are culturally-appropriate or appropriate to the histories of the participating children. Where relevant, expertise should be sought from members of the relevant community and/or professionals who are trained in working with trauma. Clear plans must be in place prior to any data collection about steps to take should a child become upset during the process.

For references and further sources, see ***Resources: Arts-based methods.***

See also ***Audio, visual, and audiovisual recordings.***

Back to contents Back to previous

Participant cohorts

This section focuses on ethical challenges and considerations that arise from conducting research with specific kinds of participants. Within the category of "young children", for example, there are unique considerations depending on the age and characteristics of the children involved. There are also considerations around the types of adult participants who may be involved in digital childhoods research. Involving these different populations is important in order to produce research that speaks to a range of experiences but it also raises different kinds of considerations.

Infants and toddlers

Importance of researching with infants and toddlers

Childhood, from birth to 8 years, is known to be a time of rapid growth and development, yet large-scale research often omits younger cohorts (e.g. Ofcom, 2022; Yu & Baxter, 2016). This is perhaps not surprising given international guidelines that recommend children under the age of two years avoid screen time and that children aged 2-5 years limit screen time to an hour a day (Council on Communications and Media, 2016; ECA, 2018). As such, it may be that infants and toddlers (birth to 3 years) are omitted from research into children's technology use in an effort to protect young children from harm. Or it could be that there is doubt about children of this age having capacity to share information about their experiences. Either way, while these practices can be deemed benevolent, omitting infants and toddlers from such research ignores the reality that many infants and toddlers use screen-based technologies in the home (Rhodes, 2017; Trinh et al., 2020).

Many infants and toddlers are growing up in home contexts steeped in digital technologies. They may engage with these technologies themselves or be implicated in their use by family members and caregivers. It is therefore critical to gain a better understanding of how, when, where, why or with whom this particular cohort engages in everyday digital practices or technologies, and with what kinds of outcomes. Applying ethics principles to researching with this cohort is a complex process, and while risks and mitigations are discussed below, careful consideration should also be given to how ethics and methods are inextricably linked and how this paves way for "ethics in practice" when researching with infants and toddlers (Guillemin & Gillam, 2004).

While this section focuses on research with parents, similar considerations may apply in other infant and toddler care settings, such as early childcare and education settings.

Risks and mitigation

- **Consider what (if any) data about parents' digital practices, may include children's data.** Research explicitly centring on infants and toddlers as participants obviously necessitates consideration of children's privacy and their consent to participate. However, it can also be important in research that focuses on parents' uses of technologies, as it can be difficult to separate parents' digital identities from their children's (Leaver, 2017; Tiidenberg & Baym, 2017; Chalklen & Anderson, 2017). It is also well-established that the creation of children's digital traces frequently begins before birth, through technologies like fertility and pregnancy tracking applications, or via parents' social media activity (Barassi, 2020; Leaver, 2017). Hence, explorations of digital practices and technologies used in early parenthood, or even during pregnancy, frequently collect data that might include children's personal information, often without the ability to seek children's consent. Examples of data that may include children's personal information are digital images, video and audio recordings (e.g. of interviews), transcripts of interviews, screenshots showing children's data (e.g. infant feeding apps' user interface; social media posts, etc).

Back to contents

Back to previous

- **Consider utilising data gathering strategies that allow for young children's voice**. Infants and toddlers may not possess the verbal skills or cognitive capacity to understand their involvement in research. Yet, when we deprive children the opportunity to speak for themselves, we deprive them of agency – of their right to have a say in matters that affect them; rights supported by Articles 12 and 13 of the United Nations **Convention of the Rights of the Child.** Researchers should thus consider using methods that allow for young children's active participation. For example, researchers Holloway and Stevenson (Livingstone, 2018) developed two strategies for interviewing pre-verbal and early verbal children (birth to 3 years) for their research project titled "Toddlers and Tablets". These included using visual cues and involving the parent as an interpreter. These strategies can help to supplement or rephrase researcher questions in ways that will help the child to understand; and/or to relay or interpret the child's intended meaning for the benefit of the researcher. Since researching with very young children often involves dyadic or triadic partnerships (e.g. parent-child or parent-educator-child), careful consideration needs to be given to recruitment and consent processes that move beyond parent/guardian consent by proxy to recognise children's agency as participants in research.
- **Consider how infants and toddlers display assent.** As researchers we can take a stance on advocating for children's agency as agentic participants in research by viewing consent and assent as an ongoing, dynamic process. Consent is not a fixed agreement. Researcher discretion can be used, i.e. in addition to informed consent processes with parents/guardians on what data will and will not be captured, researchers can make ethical decisions in the moment to stop data capture (see Sandberg & Gillen, 2021, p. 342, for an excellent case study example of this in action).
- **Data capture, data sharing and dissemination.** The specific sensitivities involved in working with infants and toddlers mean that particular care must be taken to ensure the ethical treatment of research data. Standard considerations about data capture, storage, sharing and dissemination need to be especially rigorous and clearly communicated to everyone involved (see ***Data protection, storage, and dissemination***)

For references and further sources, see *Resources: Infants and toddlers*

Back to contents

Back to previous

Aboriginal and Torres Strait Islander children and communities

Importance of researching with Aboriginal and Torres Strait Islander children and communities

When partnering with and conducting research with Indigenous communities, the Australian National Health and Medical Research Council (NHMRC, 2018) highlights the importance of designing projects that embrace the following core values: spirit and integrity, cultural continuity, equity, reciprocity, respect and responsibility, ensuring that research is localised and contextualised. The ARC Centre of Excellence for the Digital Child has a **centre-wide policy** that provides a valuable overview of how our researchers in the centre have committed to conducting research in this space.

Indigenous digital sovereignty, which recognises the right to self-determination in the digital age, should inform research with Aboriginal and Torres Strait Islander children and communities (see Couture & Toupin, 2019). Digital sovereignty highlights the right to self-determination in the digital age and recognises that narratives about the role of technology in society and in community must be constructed in partnership with community. Therefore, when thinking about how government, education systems, industry and advocates frame Aboriginal and Torres Strait Islander uses of technologies and digital media, researchers should be mindful of how dominant narratives sit alongside and with community voice.

One area where this is particularly important relates to "closing the gap" objectives and the issue of digital inclusion. Digital inclusion is the ability to access and use digital and online technologies meaningfully and effectively (Thomas et al, 2023). The focus on digital inclusion for Aboriginal and Torres Strait Islander peoples comes from the determination that Indigenous Australians continue to experience low levels of digital inclusion when compared to the national average (Thomas et al., 2020). Digital inclusion is imperative in today's increasingly digitised world, with the right of access to services and information now extending to having the means of connecting with others online, the capacity, ability and the financial means to access information and services via digital means, and the means by which to safely and confidently engage in online environments (Good Things Foundation Australia & Save the Children Australia, 2021). For Indigenous children and communities, digital media has also introduced a means of creating and communicating in ways that mirror the ancestral multimodal communication practices of indigenous peoples around the world (de la Garza, 2016) – an avenue of inquiry and means of self-determinism that merits further investigation across Australia's diverse Indigenous communities, alongside consideration around the appropriateness of collecting long standing digital images. The ARC Centre of Excellence for Automated Decision-Making and Society is doing great work in this space (ADM+S Centre, n.d.).

According to the National Health and Medical Research Council (NHMRC, 2018), however, while "Aboriginal and Torres Strait Islander People are considered to be the most researched peoples in the world… they have received very little perceivable benefit". As such, it's imperative that research is conducted *with* Aboriginal and Torres Strait Islander communities to mitigate the potential that research outcomes will continue to be informed by non-Indigenous "cultural experiences, values, norms and learning" (NHMRC, 2018) that provide little benefit to Indigenous participants and/or their communities. This is "different to consultation", and instead aims to support Indigenous people's "rights to lead and determine research that will benefit individuals and communities" (ARC Centre of Excellence for the Digital Child Aboriginal and Torres Strait Islander Research Ethics Policy, personal communication, 2022). This requires a commitment from researchers to get to know the communities with whom they wish to partner, to avoid "generalisations or extrapolation of findings that masks diversity" (AIATSIS, 2020, p.13), and to focus on community led research foci.

Back to contents Back to previous

Risks and mitigation

- **The risk of conducting research that is informed by non-Indigenous cultures, ways of knowing, laws and protocols, and ways of engaging and communicating.** This risk can be mitigated by partnering with Indigenous peoples so that the research may be led or co-led by, or co-designed with Aboriginal and Torres Strait Islander people. It's strongly encouraged that researchers engage in projects that have Indigenous chief investigators, employ local Indigenous peoples, and involve co-authorship with Indigenous investigators and participants. This will help to ensure that research partners and participants are able to make genuine contributions to or lead decisions around: (1) the aims of the research (the "why"), (2) the processes taken to generate and collect data (the "how"), (3) the process of analysis and perspectives taken, and (4) that Aboriginal and Torres Strait Islander people have a voice when disseminating research outcomes (see AIATSIS, 2020, and Fitzpatrick et al., 2019 for more). In this context, it's important to emphasise the wealth of Indigenous research methodologies, and the need for Indigenous researchers to lead or co-lead projects so that these can be used where appropriate.
- **The risk that the research privileges non-Indigenous voices and/or interpretation.** This risk can be mitigated by actively planning for and engaging in reflexive practices that examine researchers' personal values, views, assumptions and privileges throughout the project – from design to publication (e.g., see Dew, McEntyre & Vaughan, 2019). These reflexive practices should include a continual mindfulness towards meaningfully engaging with and honouring Indigenous voices and perspectives. As above, this reflexive practice would be best supported by engaging with Indigenous colleagues or mentors, and local Indigenous peoples.
- **The risk that the research will not benefit the Indigenous community you have partnered with.** This risk can be mitigated by ensuring that representatives evaluate the project's design to ensure mutual benefit (with community-initiated research being the ideal), and/or approve a formal, co-constructed agreement that outlines the obligations, deliverables and decision-making processes the research community will adopt (e.g., see Laird et al, 2021). Benefits to the partner community should be considered, prioritised, and reflected upon throughout the research process to ensure that the community remains at the forefront of the researchers' considerations. The translation and dissemination of research should also be in forms that matter to and are determined by the community.
- **The risk of not acknowledging and respecting the diversity of Aboriginal and Torres Strait Islander identities and cultures.** As of 30 June 2021, there were 984,000 Aboriginal and Torres Strait Islander People in Australia (3.8% of the total population) – 92.4% of whom identified as Aboriginal, 4.2% of whom identified as Torres Strait Islander, 4.4% of whom identified as both Aboriginal and Torres Strait Islander, and 76,978 of whom reported speaking 167 Aboriginal and Torres Strait Islander languages at home (ABS, 2022). When conducting research with Aboriginal and Torres Strait Islander People, it's therefore important to acknowledge that "[t]hey are not one group, but rather comprise hundreds of groups that have their own distinct set of languages, histories and cultural traditions" (AIHW 2022), with "knowledge, practices, science, innovations and cultural expressions… [that] must be respected, protected and maintained" (AIATSIS, 2020, p.13).

For references and further sources, see *Resources: Aboriginal and Torres Strait Islander children and communities*

See in particular Gollan & Stacey's (2021) First Nations Cultural Safety Framework.

Back to contents Back to previous

Children with disabilities

Importance of including children with disabilities in research on digital childhoods

Estimates suggest there are nearly 240 million children affected by disabilities worldwide (United Nations Children's Fund, 2021). In Australia, 3.7% of children aged from birth to 4 years and 9.7% of children aged 5 to 14 years have a disability. Of these, 2.3% of birth to 4-year-old children and 5.6% of 5 to 14-year-old children are classed as having a profound or severe disability (ABS, 2023). Despite these results, there is a paucity of research into the experiences of technology use among young children with disabilities.

Families of children with disabilities often report very different challenges and experiences around technology use compared with families who do not have children with disabilities (Livingstone and Blum-Ross, 2020). This discrepancy may result from several factors including financial limitations that restrict their access to digital technologies, or the lack of technologies that cater to their needs and characteristics. Such a digital divide can have far-reaching implications for children's education and social integration. For example, children with disabilities may encounter more obstacles in engaging in online learning, accessing digital resources, or interacting with their peers online.

Such challenges highlight the importance of making digital technologies more accessible and inclusive. To maximise the potential of digital technologies in the lives of children with disabilities, their perspectives and challenges must be considered while studying, designing, and developing digital technologies (Whittaker et al., 2019).

Conducting research with children with disabilities and their families provides opportunities to better understand their worlds, including their perceptions of, and interactions with, digital technologies (Alper & Irons, 2020). Such research has the potential to shape policy and practice, ensuring the unique needs and perspectives of children with disabilities are central to decision-making processes. Yet, within such research, carefully considering methodological and ethical dimensions is essential to guarantee children's rights and wellbeing (Jenkin et al., 2020).

Risks and mitigation

- **Careful consideration of recruitment strategies, access to diverse groups, and inclusion/exclusion criteria.** It is important for researchers to consider how and where they recruit, and which groups will be included and excluded. For example, in the disability research field, "dedifferentiation" is a principle that discourages the categorization of participants according to their diagnosis or specific impairments, aiming instead for a more unified, inclusive approach (Bigby, 2020). For example, for people with intellectual disabilities, dedifferentiation enables membership of the generic group "people with disabilities" and removes stigmatising labels of "intellectual disability" (Bigby, 2020). This approach fosters a more integrated understanding of disability, challenging fixed categories that can otherwise constrain our perception of individuals and their lived experiences. However, this view can risk inadvertently overlooking the unique characteristics among certain groups, (Bibgy, 2020). For instance, children with intellectual disabilities may have particular strengths and challenges in relation to digital technology use that could be overshadowed by a more general approach. Similarly, for children with sensory impairments such as hearing loss, digital technologies including hearing aids and cochlear implants, may be essential to their development of spoken language. Striking a delicate balance between recognizing shared experiences and addressing individual characteristics is critical to conducting effective and considerate research.
- **Enacting the principle of reciprocity.** The principle of reciprocity is crucial in research involving children with disabilities. It emphasizes fair participation and the importance of ensuring that research benefits participants and their broader communities, for example, by improving access to services, informing better policies, or offering practical guidelines for families, carers and educators. Researchers should pay close attention to the needs, values, and priorities of the communities in which they conduct their research, engaging with them early on in their research in order to understand what meaningful reciprocity entails for them. Research findings should be shared with participants and their communities in helpful and understandable ways. Enacting the principle of reciprocity while conducting research with children with disabilities ensures that their direct experiences, insights, and perspectives are properly recognised in academic research and used to derive meaningful benefits.

Back to contents

Back to previous

- **Developing accessible participatory design tools and methods.** Researchers must ensure that their research design appropriately reflects and respects the rich lives, characteristics, perceptions, and experiences of children with disabilities. This may require researchers to provide information in accessible forms that enable children with disabilities to be included in (e.g., through visual aids, employing sign language interpreters, and ensuring physical access to rooms.). Researchers should also develop tools and methods that are responsive to participants' strengths and challenges and facilitate their meaningful participation in the research. This might include using more creative and participatory methods in place of, or alongside, more conventional methods like interviews or focus groups. Qualitative methods and prompts can be designed to engage participants in a playful, meaningful, and enjoyable way. For instance, storyboarding and role play can engage children in a more visual and creative mode (Porayska-Pomsta et al., 2012). Design documentaries (Ibrahim, Vasalou & Clarke, 2020) can also be used to convey rich and multifaceted accounts of children's communication experiences, while "inclusive sensory ethnography" is an approach that accounts for greater diversity in how children with disabilities process sensory input. Organisations representing or supporting children with disabilities could also be engaged to support children's participation and to offer guidance (Thompson, Cannon & Wickenden, 2020). With the provision of suitable support and assistance, we can empower children with disabilities to take an active role in the research process (Bircanin et al., 2021). (See *also* ***Arts-based methods***).

For references and further sources, see *Resources: Children with disabilities*

Back to contents Back to previous

Children and families from culturally and linguistically diverse backgrounds

Importance of researching with children and families from culturally and linguistically diverse backgrounds

The impact of digital technologies on young children and families is contingent on their cultures of understanding and using digital technologies in everyday life. In multicultural societies like Australia, families from culturally and linguistically diverse backgrounds (CALD) comprise a significant proportion of the total population. Their patterns of using digital technologies may be distinct from Anglo-Australian families due to the cultural norms and values associated with the digital. To research this cohort, therefore, is to attend to digital childhoods in the plural form and to acknowledge the intersections of the cultural and the digital. The diversity of the mainstream is an important consideration in the previous sections on data collection and analysis across design, ethics approval, data collection, analysis, reporting, and dissemination.

Risks and mitigation

While CALD communities are not de facto vulnerable, their migrant and refugee backgrounds often put them in a more disadvantaged position than their Standard Australian English(SAE) speaking counterparts. Members of CALD communities possess differing levels of SAE proficiency, cultural competence and digital literacy. This means that the researchers will need to take special considerations when planning to research this cohort ethically.

- **Respect.** Cultural differences between researchers and participants may be a source of conflict and friction. When devising interview questions, for example, researchers must acknowledge and be aware that their world view is just one of many, and that their research design, including interview questions, must take into account the ways to respect and welcome a diversity of perspectives and ways of understanding the research focus.
- **Make no assumptions.** Researchers must not make assumptions about how and why CALD families and young children use digital technologies in certain ways. Culture is diverse even within individual communities where a common language is spoken. Wherever there is a group of people, there is diversity. For example, the Chinese speaking community is composed of people from many parts of Asia, including mainland China, Hong Kong, Taiwan, Singapore, Malaysia, etc. The researcher should expect significant intra-ethnic distinctions in terms of using digital technologies in any community.
- **Avoid misrepresentation.** The intercultural dimension of a research project may amplify the possibility of misrepresentation when researchers operate from a single world view. An example is when research output and data are in different languages. Just as data can be misinterpreted when working with young children across different modes (e.g., drawing instead of writing), meanings across language systems may be lost in translation. As such, researchers must pay special attention and draw on appropriate support systems when it comes to representing the data in a clear and consistent manner. Researchers must ensure participants' genuine voices are heard through processes such as reporting quotes using original language translated and explained using English. As with all research, triangulation and member checking will allow researchers to confirm with participants their intended meaning.

For references and further sources, see ***Resources: Children and families from culturally and linguistically diverse backgrounds***

Back to contents Back to previous

Parents and caregivers

Importance of researching with parents and caregivers

Working with parents provides value in digital childhoods research as access to digital technologies for children under eight years of age is heavily determined by parents. Here, "parents" refers to adults who fulfil the role of caregiving to children (which includes, but is not limited to, biological parents, adoptive parents, those granted the role through marriage, such as step parents, or legal reasons, such as the child being placed with a family member), and who may reside with the child on a full-time or part-time basis (e.g., shared custody arrangements).

Parents have legal rights and responsibilities to make decisions on behalf of their child, and what they believe is in their child's best interest. They make these decisions in line with their own values and how they wish to live their lives. They decide what digital technology is present in children's homes and regulate and implement any restrictions within these environments. Parents may also promote use of digital technologies by introducing them into the house or modelling use behaviours. Parents also either provide permission for children to use technology in education settings, or are typically informed of the use of technology, such as photos and "stories" of use in these settings. Thus, parents are usually capable of providing accurate reports of children's engagement with digital technologies.

Risks and mitigation

- **Parents may provide consent for their child to participate, but the child does not want to participate.** Obtaining assent from the child is an important process as no person should be coerced into research participation, and it also demonstrates respect for the child. Research participation information (such as the Participant Information Sheet/s) should be provided not only to the parent but also to the child. Researchers may also ask that the parent talk to their child about participation prior to providing consent. Ensuring the child is keen to participate prior to obtaining consent and assent is also likely to result in the child's enthusiastic participation, lets the child know what to expect, and helps the child trust parents and researchers. Despite this, it is possible that some children may not offer ongoing assent even if their parents have consented to their participation. This should be anticipated and clear protocols should be in place for monitoring for ongoing assent and ending the child's participation if it is withdrawn, whether in direct or implied ways. For more, see ***Informed consent*** **.**
- **Children may wish to participate in research, however their parents are resistant to providing consent.** This situation is more likely to occur when children are recruited in a group setting with their friends or peers, such as at school, early education settings, or in extra-curricular activities. Parents have the right to decline to consent to their child's research participation, including when their child is keen to participate. Reasons parents may choose to decline to consent include lack of interest or investment in the research focus, or concerns about the data that will be collected from their child. They may have concerns about how the data are to be collected, the type of data, and future use of the data. If there is also a requirement for the parents to participate or facilitate their child's participation, they may also be concerned about the burden on their family. The risk of this situation occurring could be reduced through the design of the research ensuring low parent or family burden, and ensuring there is only collection of data necessary for the research and in the least invasive or unobtrusive manner. If work samples or images of the child are requested, it would be beneficial to allow for participation without these, with clear information provided in the Participant Information Sheet and Consent Form allowing for different participation options.

Back to contents

Back to previous

- **Parents may provide responses in line with what they think the researchers want to hear, or in line with societal expectations (also known as response bias).** When conducting research with parents in areas that are subject to strong public discourses and normative expectations, such as children's digital technology use, it is likely that parents have perceptions of what they believe researchers want to hear, or what behaviour is socially desirable, and may respond accordingly. This potential response bias may take the form of parents providing inaccurate information about their child's digital technology use, such as under-reporting time spent using digital technology, or their parenting of their child's digital technology use, such as indicating they always monitor their child's digital technology use when they often do not. To reduce the likelihood of this risk occurring, it is vital that all written and/or verbal information presented to the parents is prepared in a non judgemental and open way. It should emphasise that there are no right or wrong answers and that their experience is valuable and contributes to the overall understanding of digital childhoods, which is ever evolving.
- **Parents may feel that participating in the research is too burdensome or the potential risks of participating do not outweigh potential detrimental effects.** This may make recruitment difficult or lead to high dropout rates. Parents who have concerns about, or feel social judgement around, their child's digital technology use may also be concerned that participating in the research could exacerbate these negative feelings. Mitigation strategies include consulting with parents during study conceptualisation, ensuring time commitment is kept to a minimum and/or is flexible, and ensuring recruitment materials and research activities minimise any sense of judgement.

For references and further sources, see *Resources: Parents/caregivers*

Back to contents

Back to previous

Social and healthcare workers

Importance of researching with social and healthcare workers

There is value in both researching with social and healthcare workers as participants, as well as partnering with them to design research and recruit participants. In the context of digital childhoods research, healthcare workers may include: paediatricians, psychologists, speech pathologists, occupational therapists, physiotherapists, nurses, and general practitioners.

Social and healthcare workers interact with children who may usually be overlooked by research or are within families facing difficulties that may make research participation on top of normal life particularly challenging. As such, they may be able to provide insights regarding children's digital childhoods that are not currently being captured elsewhere. For example, the integration of digital technologies for therapeutic purposes within homes, workplaces and therapeutic settings is becoming more common. Researching with these professionals as participants will provide insights into what advice and recommendations are being given to children and their families about utilising digital technologies.

When researching with and via these professionals, care needs to be taken as social and healthcare workers are usually helping families when they are facing difficult circumstances. Thus, it is especially important that the health and the wellbeing of children and their families would not be negatively impacted by the research.

Risks and mitigation

- **Ensuring that the participants are fully informed and not coerced into participating.** This is particularly important for families recruited through a health service they are currently using. It needs to be clear that access to the health service is in no way dependent on their participation and that the level of care that they receive will not change based on their decision to participate or not. Participants also need to be made aware that if they choose to participate, any subsequent choice to withdraw their participation will not affect the healthcare they receive. This needs to be emphasised in Participant Information Sheets and Consent Forms.
- **The burden of research participation for families accessing these services should be kept minimal and ideally lower than "general population" research participation expectations.** As noted, families who are using a social worker or healthcare professional are often facing challenging circumstances. Research participation that requires time and effort above their normal lives may be an unrealistic expectation, with low levels of initial recruitment and/or high rates of participant withdrawal.
- **Management of participants' expectations of therapeutic outcomes from participation in the research is vital.** It is important that participants have realistic expectations of the outcomes of the research. Much research in this area is exploratory, particularly in its early stages, and expectations that issues and concerns will be completely resolved through participation is unrealistic.
- **Be aware of what social and healthcare workers can and cannot share as participants.** When working with this cohort as participants, their experiences will be informed by the professional background they are trained in, the patients they see or people and community they work with, and the design of the research needs to consider and account for this. The healthcare professionals or social workers may be able to discuss methods that they use with children that incorporate digital technology use, however sharing specific information about their patients would not be in line with ethical standards of their professional organisations.

For references and further sources, see ***Resources: Social and healthcare workers***

Back to contents Back to previous

Educators

Importance of researching with educators

Educators are often central to research that investigates contexts where children learn with digital texts, tools, and technologies. This is not to suggest that learning only occurs with teaching, nor that it only occurs in formal education settings, however, educators are involved in the learning that young children are engaged in and, as such, are regularly the focus of research in this field. Considered from an equity perspective, it is worth noting that for children who have limited access to digital experiences in their home lives, education contexts such as schools and prior-to-school contexts are critical in providing access to the texts, tools, resources and connectivity required to use, play and learn in digital ways.

Within digital childhoods research, "educator" may include: early childhood educators, school teachers, those who work in support roles such as teachers' aides, leaders who make decisions about children's learning such as principals and directors, and Elders and educators who act as brokers between education settings and families and communities (in Australia, these are employed under a number of titles including Community Liaison Officer, Indigenous Education Worker, and Student Support Officer). An educator is involved in the selection of texts, tools, and resources used as a part of the curriculum. Educators directly and indirectly influence the opportunities provided to young children in education contexts –– they make decisions within the contexts of government mandates, systemwide approaches, and school frameworks about who has access to what, and in what ways children will learn what content. As such, research that involves educators is a key dimension of learning about children's digital worlds

Risks and mitigation

There are a number of issues that require attention when researching with educators of young children. These include:

- **View educators as expert research partners.** Teaching and learning in young children's education contexts involves complex and nuanced interrelations between people, materials, spaces and places. However, the ubiquitous nature of early childhood education or going to school can make the performance of early childhood education look simple, thus backgrounding the minute-by-minute decisions made by educators and the curriculum planning that has occurred before, during, and after the teaching and learning event being researched. Researchers who assume that they know the classroom, the children, the teacher, and the content being covered better than those engaged in the actual teaching and learning, risk missing the complexity of the teaching and learning they are researching and alienating potential educator participants from the research. Foregrounding the notion of researching with educators can enable researchers to position themselves as a research partner with the educators (and children) with whom they are researching. In a partnership, the researcher can acknowledge the educator's expertise in pedagogy, in policy translation, and in the learning needs and capacities of their learners, hence developing trusting and respectful relationships.
- **Acknowledge that the presence of researchers will alter a classroom environment.** While not all research with educators is conducted in classrooms, or is about what occurs in classrooms, much of it is. Classrooms are ecologies, not laboratories. The inclusion of other adults such as researchers within these ecologies impacts on the relations, languages, actions, movements and, ultimately, the learning and teaching that occurs. This is not a problem if it is recognised and accounted for in the analysis and reporting of data. Research approaches that involve sustained engagement, interpretive approaches to design and analysis, and approaches that position researchers and educators as inquisitive and open to learning, can be helpful. Approaches that seek an objective truth about the work of educators – such as those that code classroom practice – of course have a place in researching with educators as well, but must not be represented as the only way to research in classrooms or as producing a "more accurate" narrative of what is occurring in classrooms.

Back to contents

Back to previous

- **Use theoretical traditions to support an analytical research approach.** Researching the practice of teaching and learning in classrooms and other learning contexts has the potential to produce rich narratives of children's lives and educators' practices. It is important that this kind of work is rigorous and theorised; without a strong foundation to ensure that this theorisation is foregrounded the work can remain descriptive rather than interpretive or analytic. Drawing on the long traditions of practitioner research (e.g. Cochran-Smith & Lytle, 2009), design-based research (Design-based Research Collective, 2003), participatory action research (McIntyre, 2014) or participatory activist research (lisahunter, Emerald & Martin, 2013) can provide a rigorous, conceptually sound foundation to ensure that research of the practice of educating in education contexts moves beyond descriptions.

For references and further sources, see *Resources: Educators.*

See also *Resources: Education settings.*

Back to contents
Back to previous

Appendix of Resources and Guidelines

Back to contents Back to previous

International guidelines and frameworks

United Nations Convention on the Rights of the Child

Article 12.1 of the **Convention** provides a rationale for including children in research on matters that concern them.

It states that "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."

The **Lundy model** and associated checklist of participation can assist in applying this in practice when working with children.

International Charter for Ethical Research Involving Children

This charter is one element of a larger initiative called **Ethical Research Involving Children** (ERIC) –– an "international hub for promoting evidence informed ethics guidance for research involving children and young people". Their website hosts a range of resources and guidelines, including case studies and a searchable library of publications. The searchable library appears particularly useful for resources about working with specific populations, such as migrant children or children with disabilities.

The **charter** itself involves the following seven commitments:

- Ethics in research involving children is everyone's responsibility
- Respecting the dignity of children is core to ethical research
- Research involving children must be just and equitable
- Ethical research benefits children
- Children should never be harmed by their participation in research
- Research must always obtain children's informed and ongoing consent
- Ethical research requires ongoing reflection.

European Early Childhood Education Research Association (EECERA) Ethical Code

This **ethical code** was developed by an EECERA working group and is designed to guide research on early childhood.

The code commits researchers to having an ethic of respect for:

- the child, family, community and society
- democratic values
- justice and equity
- knowing from multiple perspectives
- integrity, transparency and respectful interactions
- quality and rigour
- academic scholarship
- social contribution.

The code outlines relevant considerations in each of the above areas. Some are not specific to research with children but are instead about academic practice more generally, such as adequately crediting co-authors or ensuring that a project's research design is aligned with its objectives.

Back to contents Back to previous

Digital Child Ethical Research Framework

This **framework** provides a set of critically reflective questions about the following eight dimensions of a research project:

- Research design
- Regulatory committees
- Negotiation of initial consent
- Negotiation of ongoing consent
- Valuing the voices of children and parents
- Anonymity, confidentiality, and visual data
- Data, storage, and security.

The framework also outlines several vignettes from completed research projects that demonstrate how the questions can be applied to specific projects.

It was developed by researchers with expertise across early childhood education and children's media use, and is outlined in the following book chapter: Dobson, M., Murcia, K., Gifkins, K., & Holloway, D. (2021). Research ethics and digitising early childhood. In D. Holloway, M. Wilson, K. Murcia, C. Archer & F. Stocco (Eds.),**Young children's rights in a digital world** (pp. 327-341). Springer, Cham.

CO:RE Compass for Research Ethics

Children Online: Research and Evidence (CO:RE) is a European-based platform for tools, resources, and data about researching children's online experiences.

Its **Compass for Research Ethics** provides advice and information about a range of topics relating the ethics of researching with children.

Topics include:

- informed consent
- children's rights and agency in research
- reporting when something goes wrong
- incentives and beneficence
- online research with children
- processing sensitive data
- engaging children as co-researchers.

There is also a **methods toolkit** that includes a handbook with advice on specific methods and an **animated film** that can be used to inform children about their rights as research participants.

Several other CO:RE resources are included in relevant sections below.

Global Kids Online: Tools for Researchers

This website provides resources on a range of methods and is informed by the international research project, Global Kids Online.

Of particular note are the **methods guides** which cover a range of different research tools and often include discussions of ethical dimensions. These cover topics including participatory methods and surveys.

It also has a dedicated guide to **Ethical Considerations for Research with Children**

Back to contents

Back to previous

Researching Children's Experiences Online across Countries: Issues and Problems in Methodology

This report is part of the EU Kids Online project. It discusses methodological issues involved in studying children and the Internet across countries and covers a range of topics, including:

- Researching with children
- Interviewing (pp. 22-23)
- Creative methods (p. 23)
- Online methods
- Log data (pp. 29-30).

The report can be found **here**. The full details are:

Lobe, B., Livingstone, S., and Haddon, L. (2007) *Researching children's experiences online across countries: Issues and problems in methodology.* Deliverable D4.1 for the EC Safer Internet plus programme. LSE, London: EU Kids Online.

Association of Internet Researchers (AoIR) Ethical Guidelines

AoIR has released three versions of its guidelines for internet research. These documents have been foundational to emerging understandings about the ethics of doing research online.

The most recent version is available **here** and can be referenced as:

Franzke, A. S., Bechmann, A., Zimmer, M., Ess, C & the Association of Internet Researchers (2020). Internet Research: Ethical Guidelines 3.0. https://aoir.org/reports/ethics3.pdf

Back to contents

Back to previous

Australian guidelines and frameworks

Australian National Statement on Ethical Conduct in Human Research

This **statement** outlines guidelines that have been developed in accordance with the National Health and Medical Research Council Act, 1992.

Chapter 4.2 focuses on research involving children and young people. It concentrates on the challenges involved in ensuring informed consent and avoiding the risk of children being coerced. The chapter provides guidelines around research merit and integrity, justice, beneficence and respect as they relate to children and young people. It also outlines principles around parents giving standing consent for their child's involvement in certain types of research at school and around considering if the research is in the best interests of the child.

Early Childhood Australia's (ECA) Code of Ethics

The ECAs **code of ethics** is aimed at professionals who work in early childhood education and care environments. It has two parts: a set of core principles and a list of "commitments to action". While its focus is pedagogical, much of the content is relevant for early childhood researchers.

General discussions of research ethics, institutional ethics, and young children

Alderson, P., & Morrow, V. (2020). *The ethics of research with children and young people: A practical handbook*. Sage.

Dobson, M. (2020). Engaging in ethical research partnerships with children and families. In L. Green, D. Holloway, K. Stevenson, T. Leaver & L. Haddon (Eds.). *The Routledge companion to digital media and children* (pp. 28-37). Routledge.

Flewitt, R. S. (2022) Ethical provocations for early childhood research. In K. Kumpulainen, A. Kajamaa, O. Erstad, Å. Mäkitalo, K. Drotner, & S. Jakobsdóttir (Eds.). *Nordic childhoods in the digital age: Insights into contemporary research on communication, learning and education* (pp. 207-213). Routledge. DOI: 10.4324/9781003145257-23

Flewitt, R. (2019). Ethics and researching young children's digital literacy practices. In O. Erstad, R. Flewitt, B. Kümmerling-Meibauer, & I. S. Pereira (Eds.). *The Routledge handbook of digital literacies in early childhood* (pp. 64-78). Routledge.

Skelton, T. (2008). Research with children and young people: Exploring the tensions between ethics, competence and participation. *Children's Geographies*, 6(1), 21-36.

Back to contents Back to previous

Resources: Children as co-researchers

Alderson, P. (1995). L*istening to children: Children, ethics and social research.* Barnardos.

Clark, A. & Moss, P. (2011). *Listening to young children: The Mosaic approach*. (2nd ed.). National Children's Bureau.

Coyne I., Hallström I., & Söderbäck M. (2016). Reframing the focus from a family-centred to a child-centred care approach for children's healthcare. *Journal of Child Health Care, 20*(4), 494-502. **https://doi.org/10.1177/1367493516642744**

Danby, S. (2017) Technologies, child-centred practice and listening to children. In L. Arnott, (Ed.) *Digital technologies and learning in the early years* (pp. 127-138). Sage. 10.4135/9781526414502.n11

Danby, S., & Farrell, A. (2005). Opening the research conversation. In A. Farrell (Ed.), *Ethical research with children* (pp. 49-67). Open University Press.

Danby, S., & Farrell, A. (2004). Accounting for young children's competence in educational research: New perspectives on research ethics. *The Australian Educational Researcher, 31*(3), 35-49. **https://doi.org/10.1007/BF03249527**

Dockett, S., Einarsdottir, J., & Perry, B. (2009). Researching with children: Ethical tensions. *Journal of Early Childhood Research, 7*(3), 283–298. **https://doi.org/10.1177/1476718X09336971**

Einarsdottir, J., Dockett, S., & Perry, B. (2009). Making meaning: Children's perspectives expressed through drawings. *Early child development and care, 179(*2), 217-232. **https://doi.org/10.1080/03004430802666999**

Greene, S. & Hill, M. (2005). Researching children's experiences: Methods and methodological issues. In S. Greene & D. Hogan (Eds.). *Researching children's experience: Approaches and methods* (pp. 1-22). Sage.**https://doi.org/10.4135/9781849209823**

Harcourt, D., & Einarsdottir, J. (2011). Introducing children's perspectives and participation in research. *European Early Childhood Education Research Journal, 19*(3), 301-307. **https://doi.org/10.1080/1350293X.2011.597962**

Hart, R. A. (1992). Children's participation: From tokenism to citizenship. UNICEF International Child Development Centre, 1–39. Innocenti Essay no. 4.

Horgan, D. (2017). Child participatory research methods: Attempts to go "deeper". *Childhood, 24(*2), 245-259. **https://doi.org/10.1177/0907568216647787**

Horgan, D. & Kennan, D. (2021). *Child and youth participation in policy, practice and research*. Routledge.

Kjørholt, A. T., Moss, P., & Clark, A. (2005). *Beyond listening: Future prospects. In A. Clarke, A. Kjørholt, and P. Moss (Eds.). Beyond listening: Children's perspectives on early childhood services* (pp. 175-188). Policy Press. **https://doi.org/10.51952/9781447342403.ch010**

Lobe, B., Livingstone, S., & Haddon, L. (2007). *Researching children's experiences online across countries: Issues and problems in methodology*. Deliverable D4.1 for the EC Safer Internet plus programme. LSE, London: EU Kids Online. Available at: **http://eprints.lse.ac.uk/2856/**

Lundy, L. (2007). "Voice" is not enough: Conceptualising Article 12 of the United Nations Convention on the Rights of the Child. British Educational Research Journal 33(6), 927-942. **http://www.jstor.org/stable/30032800**

Lundy, L. & McEvoy, L. (2012). Childhood, The United Nations Convention on the Rights of the Child and research: What constitutes a "rights-based" approach? In M. Freeman (Ed.). *Law and childhood studies: Current legal issues,* Vol 14. (pp.75-91). Oxford. **https://doi.org/10.1093/acprof:oso/9780199652501.001.0001**

Lundy, L., McEvoy, L. & Byrne, B. (2011). Working with young children as co-researchers: An approach informed by the United Nations Convention on the Rights of the Child. *Early Education and Development, 22*(5), 714–736. **https://doi.org/10.1080/10409289.2011.596463**

Montreuil, M., Bogossian, A., Laberge-Perrault, E., & Racine, E. (2021). A review of approaches, strategies and ethical considerations in participatory research with children. *International Journal of Qualitative Methods, 20,* **https://doi.org/10.1177/1609406920987962**

Back to contents

Back to previous

Shier, H. (2001). Pathways to participation: Openings, opportunities and obligations. *Children & Society, 15*(2), 107–117. **https://doi.org/10.1002/chi.617**

Stokes, T. (2020). Using participatory methods with young children: Reflections on emergent "ethically important moments" in school-based research, *Irish Educational Studies, 39*(3), 375-387. **https://doi.org/10.1080/03323315.2019.1697944**

Supski, S., & Maher, J. M. (2021). Children as co-researchers and confessional research tales: Researcher positionality and the (dis) comforts of research. *Qualitative Research, 23*(3). **https://doi.org/10.1177/14687941211049325**

Woodhead, M. (2009). Child development and the development of childhood. In J. Qvortrup, W. A. Corsaro, & M. S. Honig (Eds.). *Handbook of childhood studies* (pp. 46–61). Palgrave Macmillan. **https://doi.org/10.1007/978-0-230-27468-6_4**

Back to contents Back to previous

Resources: Informed consent

Alderson, P. (2007). Competent children? Minors' consent to health care treatment and research. *Social Science & Medicine, 65*(11), 2272-2283. DOI: 10.1016/j.socscimed.2007.08.005

Alderson, P., & Morrow, V. (2020). *The ethics of research with children and young people: A practical handbook*. Sage.

Children Online: Research and Evidence. (2022, December 2). *Informing children about their rights as research participants: An open source animation film for researchers who work with children and young people.* Children Online: Research and Evidence. **https://core-evidence.eu/posts/open-source-movie-childrens-rights-as-research-participants**

Constand, M., Tanel, N., & Ryan, S. E. (2015). PAeDS-MoRe: A framework for the development and review of research assent protocols involving children and adolescents. *Research Ethics, 11*(1), 15-38. **https://doi.org/10.1177/1747016114523772**

Coyne, I. (2010). Research with children and young people: The issue of parental (proxy) consent. *Children & Society, 24*(3), 227-237. **https://doi.org/10.1111/j.1099-0860.2009.00216.x**

Danby, S. (2017). Technologies, child-centred practice and listening to children. In L. Arnott, (Ed.) *Digital technologies and learning in the early years* (pp. 127-138). Sage. 10.4135/9781526414502.n11

Danby, S., & Farrell, A. (2004). Accounting for young children's competence in educational research: New perspectives on research ethics. *The Australian Educational Researcher, 31*(3), 35-49. **https://doi.org/10.1007/BF03249527**

Danby, S., & Farrell, A. (2005). Opening the research conversation. *Ethical Research with Children, 5,* 43-48.

David, M., Edwards, R., & Alldred, P. (2001). Children and school-based research: "Informed consent" or "educated consent"? *British Educational Research Journal, 27*(3), 347-365. **https://doi.org/10.1080/01411920120048340**

Dockett, S., Einarsdottir, J., & Perry, B. (2012). Young children's decisions about research participation: Opting out. *International Journal of Early Years Education, 20*(3), 244-256. **https://doi.org/10.1080/09669760.2012.715405**

Dobson, M., Murcia, K., Gifkins, K., & Holloway, D. (2021). Research ethics and digitising early childhood. In D. Holloway, M. Willson, K. Murcia, C. Archer & F. Stocco (Eds.). *Young children's rights in a digital world* (pp. 327-341). Springer. DOI: 10.1007/978-3-030-65916-5_24

Flewitt, R. (2005). Conducting research with young children: Some ethical considerations. *Early child development and care,* 175(6), 553-565. **https://doi.org/10.1080/03004430500131338**

Gallagher, M., Haywood, S. L., Jones, M. W., & Milne, S. (2010). Negotiating informed consent with children in school-based research: A critical review. *Children & Society, 24*(6), 471-482. **https://doi.org/10.1111/j.1099-0860.2009.00240.x**

Mason, J., & Danby, S. (2011). Children as experts in their lives: Child inclusive research. *Child Indicators Research, 4*, 185-189.**https://doi.org/10.1007/s12187-011-9108-4**

Mayne, F., & Howitt, C. (2021). *The narrative approach to informed consent: Empowering young children's rights and meaningful participation*. Routledge.

Mayne, F., Howitt, C., & Rennie, L. J. (2017). Using interactive nonfiction narrative to enhance competence in the informed consent process with 3-year-old children. *International Journal of Inclusive Education, 21*(3), 299-315. **https://doi.org/10.1080/13603116.2016.1260833**

Sandberg, H., & Gillen, J. (2021). Investigating the digital media engagements of very young children at home: Reflecting on methodology and ethics. *Communications, 46*(3), 332–351. **https://doi.org/10.1515/commun-2021-0046**

Southern Cross University. (2022, June 16). *International charter for ethical research involving children. Ethical Research Involving Children*. **https://childethics.com/informed-consent/**

Vreeman, R., Kamaara, E., Kamanda, A., Ayuku, D., Nyandiko, W., Atwoli, L., ... & Braitstein, P. (2012). Community perspectives on research consent involving vulnerable children in Western Kenya. *Journal of Empirical Research on Human Research Ethics, 7*(4), 44-55. doi: 10.1525/jer.2012.7.4.44

Back to contents Back to previous

Resources: Context-specific considerations

Resources: Home settings

Daley, D. M. (2021). "I can do this by my own self": How four preschool-aged children navigated mobile technologies at home. *Early Child Development and Care, 192*(14), 2296-2310. **https://doi.org/10.1080/03004430.2021.2005037**

d'Apice, K., Latham, R. M., & von Stumm, S. (2019). A naturalistic home observational approach to children's language, cognition, and behavior. *Developmental Psychology, 55*(7), 1414-1427. DOI: 10.1037/dev0000733

Eisenmann, C., Peter, J., & Wittbusch, E. (2019). Ethnomethodological media ethnography: Exploring everyday digital practices in families with young children. *Media in Action. Interdisciplinary Journal on Cooperative Media,* (1), 63-80. **https://doi.org/10.25969/mediarep/16211**.

Given, L. M., Cantrell Winkler, D., Willson, R., Davidson, C., Danby, S., & Thorpe, K. (2016). Parents as co-researchers at home: Using an observational method to document young children's use of technology. *International Journal of Qualitative Methods, 15*(1), **https://doi.org/10.1177/1609406915621403**

Given, L. M., Winkler, D. C., Willson, R., Davidson, C., Danby, S., & Thorpe, K. (2016). Watching young children "play" with information technology: Everyday life information seeking in the home. *Library & Information Science Research, 38*(4), 344-352.

Hao, Y. (2017). The dialectic between ideal and real forms of "sharing": A cultural-historical study of story acting through imaginary play at home. *Early Child Development and Care, 187*(1), 99-114. **https://doi.org/10.1016/j.lisr.2016.11.007**

Marsh, J. (2019). Researching young children's play in the post-digital age: Questions of method. In N. Kucirkova, J. Rowsell & G. Falloon (Eds.). *The Routledge international handbook of learning with technology in early childhood* pp. 157-169. Routledge.

Noppari, E., Uusitalo, N., & Kupiainen, R. (2017). Talk to me! Possibilities of constructing children's voices in the domestic research context. *Childhood, 24*(1), 68-83. **https://doi.org/10.1177/0907568216631026**

Sandberg, H., & Gillen, J. (2021). Investigating the digital media engagements of very young children at home: Reflecting on methodology and ethics. *Communications, 46*(3), 332-351. **https://doi.org/10.1515/commun-2021-0046**

Scott, F. L. (2021). Family mediation of preschool children's digital media practices at home. *Learning, Media and Technology, 47*(2), 235-250. **https://doi.org/10.1080/17439884.2021.1960859**

Teichert, L. (2021). iPhone for data collection: Distraction in low-technology home. *Qualitative Research Journal, 21*(2), 148-165. **https://doi.org/10.1108/QRJ-01-2020-0004**

In-home tours of toys, play, or technology

Kennedy, A., Arnold, M., Gibbs, N., & Wilken (2020). *Digital domesticity: Media, materiality, and home life*. Oxford Academic. **https://doi.org/10.1093/oso/9780190905781.001.0001**

Marsh, J. (2019). Researching young children's play in the post-digital age: Questions of method. In N. Kucirkova, J. Rowsell & G. Falloon (Eds.). *The Routledge international handbook of learning with technology in early childhood* pp. 157-169. Routledge.

Plowman, L., & Stevenson, O. (2013). Exploring the quotidian in young children's lives at home. *Home Cultures, 10*(3), 329-347. **https://doi.org/10.2752/175174213X13739735973381**

Plowman, L., Stevenson, O., Stephen, C., & McPake, J. (2012). Preschool children's learning with technology at home. *Computers & Education, 59*(1), 30–37. **https://doi.org/10.1016/j.compedu.2011.11.014**

Back to contents

Back to previous

Resources: Education settings

Baroutsis, A., Kervin, L., Woods, A., & Comber, B. (2019). Understanding children's perspectives of classroom writing practices through drawings. *Contemporary Issues in Early Childhood, 20*(2), 177-193. **https://doi.org/10.1177/1463949117741743**

Bond, M., Zawacki-Richter, O., & Nichols, M. (2019). Revisiting five decades of educational technology research: A content and authorship analysis of the *British Journal of Educational Technology, 50*(1), 12–63. **https://doi.org/10.1111/bjet.12730**

Breathnach, H., Danby, S., & O'Gorman, L. (2018). Becoming a member of the classroom: Supporting children's participation as informants in research. *European Early Childhood Education Research Journal, 26*(3), 393-406. **https://doi.org/10.1080/1350293X.2018.1463906**

Kervin, L., Mantei, J., & Lipscombe, K. (2017). *The intricacies of classroom-based ethnography*. Sage.

Ruscoe, A., Barblett, L., & Barratt-Pugh, C. (2018). Sharing power with children: Repositioning children as agentic learners. *Australasian Journal of Early Childhood, 43*(3), 63-71. **https://doi.org/10.23965/AJEC.43.3.07**

Theobald, M., Busch, G., Mushin, I., O'Gorman, L., Nielson, C., Radanovic, S., Briant, E., & Danby, S. (2021). Empowering Global Learners: A teacher-as-researcher approach. *Research Brief*. Queensland University of Technology.

Williamson, B., Macgilchrist, F., & Potter, J. (2021). Covid-19 controversies and critical research in digital education. *Learning, Media and Technology, 46*(2), 117–127. **https://doi.org/10.1080/17439884.2021.1922437**

Australian Association Researchers in Education (AARE). (n.d.). Application form for conducting research in schools in more than one jurisdiction (sector, state or territory). Available at: **https://www.aare.edu.au/research-and-advocacy/research-ethics/national-application-form/**

Resources: Cultural institutions

Dobson, M., Murcia, K., Gifkins, K., Holloway, D. (2021). Research ethics and digitising early childhood. In D. Holloway, M. Willson, K. Murcia, C. Archer, & F. Stocco (Eds.). *Young children's rights in a digital world*. Children's Well-Being: Indicators and Research series, vol 23. Springer. **https://doi.org/10.1007/978-3-030-65916-5_24**

Flewitt, R. (2005) Conducting research with young children: Some ethical considerations. *Early Child Development and Care, 175*(6), 553-565. **https://doi.org/10.1080/03004430500131338**

Flewitt, R., Bangpan, M., Manyukhina, Y., & Wyse, D. (2023). Young children's engagement with objects in science museums: A rapid evidence assessment of research. *Curator: The Museum Journal, 66*(1), 129-148. **https://doi.org/10.1111/cura.12540**

Back to contents

Back to previous

Resources: Online platforms including social media

franzke, a.s., Bechmann, A., Zimmer, M., Ess, C. & the Association of Internet Researchers (2020). *Internet Research: Ethical Guidelines* 3.0. https://aoir.org/reports/ethics3.pdf

Bunn, A. (2019). Children and the "right to be forgotten": What the right to erasure means for European children, and why Australian children should be afforded a similar right. *Media International Australia, 170*(1), 37-46. **https://doi.org/10.1177/1329878X19848503**

Livingstone, S. & Locatelli, E. (2014). Ethical dilemmas in qualitative research with youth on/offline. *International Journal of Learning and Media, 4*(2), 67-75. doi: 10.1162/IJLM_a_00096

Pothong, K. & Livingstone, S. (2022). Consulting children during COVID-19: Managing research ethics on Zoom. In S. Kotilainen (Ed.), *Methods in practice: Studying children and youth online.* (Chapter 11). Retrieved 11 July 2023, from **https://core-evidence.eu/methods-toolkit/handbook-part3/handbook-research-ethics-on-zoom**,

Sefton-Green, J., & Pangrazio, L. (2021). Platform pedagogies –Toward a research agenda. In *Algorithmic rights and protections for children*. **Available at: https://wip.mitpress.mit.edu/pub/platform-pedagogies/release/1**

van Dijck, J., Poell, T., & Waal, M. de. (2018). *The platform society: Public values in a connective world.* Oxford. **https://doi.org/10.1093/oso/9780190889760.001.0001**

Resources: Health settings

Canadian Pediatric Society. (2008). Ethical issues in health research in children. *Paediatric Child Health, 13*(8), 707-20. doi: 10.1093/pch/13.8.707

Field, M. J., Behrman, R. E., & Field, M. J. (2004). *Ethical conduct of clinical research involving children*. National Academies Press.

Modi, N., Vohra, J., Preston, & J. et. al. A Working Party of the Royal College of Paediatrics and Child Health (2014). Guidance on clinical research involving infants, children and young people: An update for researchers and research ethics committees. *Archives of Disease in Childhood, 99*(10), 887-891. doi: 10.1136/archdischild-2014-306444.

Resources: Laboratory settings

Straker, L.M., Campbell, A., Coenen, P., Ranelli, S. & Howie, E. (2015). Movement, posture and muscle activity in young children using tablet computers. In *Proceedings of the 19th triennial congress of the IEA*, Melbourne 9-14 Aug, 2015. Available at: **http://www.iea.cc/congress/2015/1899.pdf**

Back to contents Back to previous

Resources on data-collection methods

Resources: Interviews and focus groups

Adler, K., Salanterä, S., & Zumstein-Shaha, M. (2019). Focus group interviews in child, youth, and parent research: An integrative literature review. *International Journal of Qualitative Methods, 18*. **https://doi.org/10.1177/1609406919887274**

Bodén, L. (2021). On, to, with, for, by: Ethics and children in research, *Children's Geographies*, DOI: **10.1080/14733285.2021.1891405**

Bushin, N. (2007). Interviewing with children in their homes: Putting ethical principles into practice and developing flexible techniques, *Children's Geographies, 5*(3), 235-251, DOI: **10.1080/14733280701445796**

Danby, S. (2017). Technologies, child-centred practice and listening to children. In L. Arnott (Ed.) *Digital technologies and learning in the early years* (pp. 127-138). Sage. **https://doi.org/10.4135/9781526414502**

Danby, S., & Farrell, A. (2005). Opening the research conversation. In A. Farrell (Ed.), *Ethical research with children* (pp. 49-67). Open University Press.

Danby, S., Ewing, L., & Thorpe, K. (2011). The novice researcher: Interviewing young children. *Qualitative Inquiry, 17*(1), 74–84. **https://doi.org/10.1177/1077800410389754**

Jaakkola, M. (2022). Child-centered qualitative interview. In S. Kotilainen (Ed.), *Methods in practice: Studying children and youth online* (chapter 5). Retrieved 11 July 2023, from **https://core-evidence.eu/methods-toolkit/handbook-part1/handbook-child-centred-qualitative-interview**

Lahman, M. K. E. (2008). always Othered: ethical research with children. *Journal of Early Childhood Research, 6*(3), 281–300. **https://doi.org/10.1177/1476718X08094451**

Livingstone, S. (2018). Parent as field collaborator when interviewing the pre-verbal and early verbal child. *Parenting for a digital future*. **https://blogs.lse.ac.uk/parenting4digitalfuture/**

Lobe, B., Livingstone, S., & Haddon, L. (2007). *Researching children's experiences online across countries: Issues and problems in methodology.* Deliverable D4.1 for the EC Safer Internet plus programme. LSE, London: EU Kids Online. (see pages 22-23)

Mason, J., & Danby, S. (2011). Children as experts in their lives: Child inclusive research. *Child Indicators Research, 4*, 185-189.**https://doi.org/10.1007/s12187-011-9108-4**

Resources: Ethnographic research

Eder, D., & Corsaro, W. (1999). Ethnographic studies of children and youth: Theoretical and ethical issues. *Journal of Contemporary Ethnography, 28*(5), 520–531. **https://doi.org/10.1177/089124199129023640**

Christensen, P. H. (2004). Children's participation in ethnographic research: Issues of power and representation. *Children & Society, 18*(2): 165-176. **https://doi.org/10.1002/chi.823**

Danby, S. (2017). Technologies, child-centred practice and listening to children. In L. Arnott (Ed.) *Digital technologies and learning in the early years* (pp. 127-138). Sage. **https://doi.org/10.4135/9781526414502**

García, A., & Fine, G. (2018). Fair warnings: The ethics of ethnography with children. In R. Iphofen & M. Tolich (Eds.) *The SAGE handbook of qualitative research ethics*, 367. Sage. **https://doi.org/10.4135/9781526435446**

Mills, D., & Morton, M. (2013). *Ethnography in education.* Sage Publications.

Ritchie, J. (2019). Ethnography in Early Childhood Education. In *Oxford Research Encyclopedia of Education*. **https://doi.org/10.1093/acrefore/9780190264093.013.532**

Back to contents Back to previous

Resources: Surveys

Ask Dr. Cath. (n.d.). Surveys. Retrieved 11 July 2023 from **https://www.drcath.net/toolkit/survey**

Andrews, D., Nonnecke, B., & Preece, J. (2003). Electronic survey methodology: A case study in reaching hard-to-involve Internet users. *International Journal of Human-Computer Interaction, 16*(2), 185-210. **https://doi.org/10.1207/S15327590IJHC1602_04**

Balch, C. V. (2010). *Internet survey methodology*. Cambridge Scholars Publishing.

Barbosa, A., Pitta, M., Senne, F., & Sózio, M.E. (2016). Survey sampling and administration. Retrieved 26 July 2023, from **http://globalkidsonline.net/tools/guides/sampling/**

Collins, D., d'Ardenne, J., Pilley, S., & Green, K. (n.d.). Additional guidance on surveying children and young people. National Centre for Social Research. Retrieved 26 July 2023, from **https://masassets.blob.core.windows.net/fincap-cms/files/000/000/219/original/Additional_guidance_on_surveying_children_and_young_people.pdf**

Dillman, D. A., & Brenner, P. S. (2020). *Understanding survey methodology: Sociological theory and applications*. Springer Cham. **https://doi.org/10.1007/978-3-030-47256-6**

Gideon, L. (Ed.). (2012). *Handbook of survey methodology for the social sciences*. Springer. **https://doi.org/10.1007/978-1-4614-3876-2**

Greig, A. D., Taylor, J., & MacKay, T. (2012). *Doing research with children: A practical guide*. Sage.

Livingstone, S., & Bober, M. (2004). *UK children go online: Surveying the experiences of young people and their parents*. A research report from the UK Children Go Online project. **www.children-go-online.net**. LSE, London.

Tisdall, K., Davis, J.M., & Gallagher, M. (2009). *Researching with children and young people: Research design, methods and analysis*. Sage.

Resources: Audio, visual, and audiovisual recordings

Special issue of *Attachment & Human Development* on video observations of sensitive caregiving especially in non-western cultural contexts. Available at: **https://www.tandfonline.com/doi/full/10.1080/14616734.2020.182851**

Bird, J., Colliver, Y., & Edwards, S. (2014). The camera is not a methodology: Towards a framework for understanding young children's use of video cameras. *Early Child Development and Care*, 184(11), 1741-1756. **https://doi.org/10.1080/03004430.2013.878711**

Cooper, V. L. (2017). Lost in translation: Exploring childhood identity using photo-elicitation. *Children's Geographies, 15*(6), 625-637. **https://doi.org/10.1080/14733285.2017.1284306**

Danby, S. (2020). Ways of working with video and online data: From field work to analysis. In D. Silverman (Ed.), *Qualitative Research* (pp. 283-298). Sage.

Downing, K. L., Janssen, X., & Reilly, J. J. (2019). Feasibility of wearable cameras to assess screen time and time spent restrained in children aged 3 to 5 years: A study protocol. *BMJ open, 9*(5), e028265. doi: 10.1136/bmjopen-2018-028265.

Eckhoff, A. (2015). Ethical considerations of children's digital image-making and image-audiancing in early childhood environments. *Early Child Development and Care, 185*(10), 1617-1628. **https://doi.org/10.1080/03004430.2015.1013539**

Back to contents Back to previous

Ford, K., Bray, L., Water, T., Dickinson, A., Arnott, J., & Carter, B. (2017). Auto-driven photo elicitation interviews in research with children: Ethical and practical considerations. *Comprehensive Child and Adolescent Nursing, 40*(2), 111-125. **https://doi.org/10.1080/24694193.2016.1273977**

Flewitt, R. (2005). Conducting research with young children: Some ethical considerations. *Early child development and care, 175*(6), 553-565. **https://doi.org/10.1080/03004430500131338**

Peters, M. A., White, E. J., Besley, T., Locke, K., Redder, B., Novak, R., ... & Sturm, S. (2021). Video ethics in educational research involving children: Literature review and critical discussion. *Educational Philosophy and Theory, 53*(9), 863-880. **https://doi.org/10.1080/00131857.2020.1717920**

Theobald, M., & Danby, S. J. (2019). Children's competence and wellbeing in sensitive research: When video-stimulated accounts lead to dispute. In J. Lamerichs, S.J. Danby, A. Bateman, & S. Ekberg (Eds.). *Children and Mental Health Talk* (pp. 137-166). The Language of Mental Health. Palgrave Macmillan, Cham. **https://doi.org/10.1007/978-3-030-28426-8_6**

Recording images in home-based research that involves children

Golann, J. W., Mirakhur, Z., & Espenshade, T. J. (2019). Collecting ethnographic video data for policy research. American *Behavioral Scientist, 63*(3), 387-403. **https://doi.org/10.1177/0002764218820566**

Lindsay, J., Tanner, C., Leahy, D., Supski, S., Wright, J., & Maher, J. (2021). The family meals imperative and everyday family life: An analysis of children's photos and videos. *Critical Public Health, 31*(1), 77-89. **https://doi.org/10.1080/09581596.2019.1684443**

Marsh, J. (2019). Researching young children's play in the post-digital age: Questions of method. In N. Kucirkova, J. Rowsell & G. Falloon (Eds.). *The Routledge international handbook of learning with technology in early childhood* (pp. 157-169). Routledge.

Plowman, L., & Stevenson, O. (2013). Exploring the quotidian in young children's lives at home. *Home Cultures, 10*(3), 329-347. **https://doi.org/10.1080/09581596.2019.1684443**

Sandberg, H., & Gillen, J. (2021). Investigating the digital media engagements of very young children at home: Reflecting on methodology and ethics. *Communications, 46*(3), 332–351. **https://doi.org/10.1515/commun-2021-0046**

Savadova, S. (2021). A living journals approach for the remote study of young children's digital practices in Azerbaijan. *Global Studies of Childhood, 13*(1), 64-78. **https://doi.org/10.1177/20436106211034179**

Scott, F. L. (2021). Family mediation of preschool children's digital media practices at home. *Learning, Media and Technology, 47*(2), 235-250. **https://doi.org/10.1080/17439884.2021.1960859** Uses video ethnography (observations in homes including video and and photographs) and interviews

Supski, S., & Maher, J. M. (2021). Children as co-researchers and confessional research tales: Researcher positionality and the (dis) comforts of research. *Qualitative Research, 23*(3), 727-745. **https://doi.org/10.1177/14687941211049325**

Taylor, K.H., Takeuchi, L. & Stevens, R. (2018). Mapping the daily media round: Novel methods for understanding families' mobile technology use. Learning, *Media and Technology, 43*(1) 70-84. **https://doi.org/10.1080/17439884.2017.1391286**

Back to contents Back to previous

Resources: Video stimulated accounts

Pomerantz, A. (2005). Using participants' video stimulated comments to complement analyses of interactional practices. In H. te Molder & J. Potter (Eds.), *Conversation and cognition* (pp. 93-113). Cambridge University Press. doi:10.1017/CBO9780511489990.005

Theobald, M. (2012). **Video-stimulated accounts: Young children accounting for interactional matters in front of peers.** *Journal of Early Childhood Research, 10*(1), 32-50. **https://doi.org/10.1177/1476718X11402445**

Theobald, M. (2017). **Children as research participants in educational research using video-stimulated accounts.** *International Journal of Educational Research, 86,* 131-143. **https://doi.org/10.1016/j.ijer.2017.07.008**

Theobald, M., & Danby, S. J. (2019). Children's competence and wellbeing in sensitive research: When video-stimulated accounts lead to dispute. In J. Lamerichs, S.J. Danby, A. Bateman, & S. Ekberg, S. (Eds.). *Children and Mental Health Talk* (pp. 137-166). The Language of Mental Health. Palgrave Macmillan, Cham. **https://doi.org/10.1007/978-3-030-28426-8_6**

Resources: Wearable devices

Downing, K. L., Janssen, X., & Reilly, J. J. (2019). Feasibility of wearable cameras to assess screen time and time spent restrained in children aged 3 to 5 years: A study protocol. *BMJ open, 9*(5), e028265. **http://dx.doi.org/10.1136/bmjopen-2018-028265**

Hartman A., McKendry, S., Akcakaya, M., Soehner, A., Bodison, S., DeAlmeida, D., & Bendixen, R. (2023). Characterizing rest-activity rhythms and sleep for children with and without tactile sensitivities: An observational study, *Sleep Medicine, 106*, 8-16. **https://doi.org/10.1016/j.sleep.2023.03.024**

Green, C. (2016). Sensory tours as a method for engaging children as active researchers: Exploring the use of wearable cameras in early childhood research. *International Journal of Early Childhood, 48*(3), 277-294. **https://doi.org/10.1007/s13158-016-0173-1**

Jewell, J., Milford, T. M., & Tippett, C. D. (2023). Using wearable GPS technology to explore children's authentic interest in nature. In C. Tippett & T. Milford (Eds.) *Exploring elementary science teaching and learning in Canada* (pp. 187-208). Springer, Cham. **https://doi.org/10.1007/978-3-031-23936-6**

Kelly, P., Marshall, S. J., Badland, H., Kerr, J., Oliver, M., Doherty, A. R., & Foster, C. (2013). An ethical framework for automated, wearable cameras in health behavior research. *American Journal of Preventive Medicine, 44*(3), 314-319. **https://doi.org/10.1016/j.amepre.2012.11.006**

Lloyd, A., Gray, T., & Truong, S. (2018). Seeing what children see: Enhancing understanding of outdoor learning experiences through body-worn cameras. *Journal of Outdoor Recreation, Education, and Leadership, 10*(1). **https://doi.org/10.18666/JOREL-2018-V10-I1-8192**

Sharma, K. & Giannakos, M. (2021). Sensing technologies and child-computer interaction: Opportunities, challenges and ethical considerations, *International Journal of Child-Computer Interaction, 30*, **https://doi.org/10.1016/j.ijcci.2021.100331**

Back to contents Back to previous

Resources: Screen recordings and screen grabs

Ho, W. Y. J. (2019). "I knew that you were there, so I was talking to you": The use of screen-recording videos in online language learning research. *Qualitative Research, 21*(1), 1-20. **https://doi.org/10.1177/1468794119885044**

Mavoa, J., Nansen, B., Carter, M., & Gibbs, M. (2022). Synchronizing multi-perspectival data of children's digital play at home. *Digital Creativity, 33*(3), 234-249. **https://doi.org/10.1080/14626268.2022.2083640**

Švelch, J. (2021). Redefining screenshots: Toward critical literacy of screen capture practices. *Convergence, 27*(2), 554–569. **https://doi.org/10.1177/1354856520950184**

Resources: Log files

Guzdial, M., Santos, P., Badre, A., Hudson, S. & Gray, M. (1994). Analyzing and visualizing log files: A computational science of usability. HCI Consortium, Feb 2-6. **http://hdl.handle.net/1853/3586**

Kroehne, U. & Goldhammer, F. (2018). How to conceptualize, represent, and analyze log data from technology-based assessments? A generic framework and an application to questionnaire items. *Behaviormetrika, 45*, 527–563. **https://doi.org/10.1007/s41237-018-0063-y**

Lobe, B., Livingstone, S., & Haddon, L. (2007) *Researching children's experiences online across countries: Issues and problems in methodology*. Deliverable D4.1 for the EC Safer Internet plus programme. LSE, London: EU Kids Online. Available at: **http://eprints.lse.ac.uk/2856/** (see page 29-30)

Resources: Web scraping

franzke, a.s., Bechmann, A., Zimmer, M., Ess, C. & the Association of Internet Researchers (2020). *Internet Research: Ethical Guidelines 3.0*. https://aoir.org/reports/ethics3.pdf

Bechmann, A. & Kim, J.Y. (2020). Big data: A focus on social media research dilemmas. In R. Iphofen (Ed.). *Handbook of research ethics and scientific integrity* (pp. 427-444). Springer Cham. **https://doi.org/10.1007/978-3-030-16759-2**

Bright, J. (2017). "Big social science": Doing big data in the social sciences. In N. Fielding, R. Lee & G. Blank (Eds.). *The Sage handbook of online research methods* (pp. 125-139), Sage. **https://doi.org/10.4135/9781473957992**

Bunn, A. (2019). Children and the "right to be forgotten": What the right to erasure means for European children, and why Australian children should be afforded a similar right. *Media International Australia, 170*(1), 37-46. **https://doi.org/10.1177/1329878X19848503**

franzke, a s., Bechmann, A., Zimmer, M., Ess, C and the Association of Internet Researchers (2020). Internet Research: Ethical Guidelines 3.0. **https://aoir.org/reports/ethics3.pdf**

Ignatow, G., & Mihalcea, R. (2017). *Text mining: A guidebook for the social sciences*. Sage Publications. **https://doi.org/10.4135/9781483399782**

Lomborg, S. & Bechmann, A. (2014). Using APIs for data collection on social media. *The Information Society, 30*(4), 256-265. **https://doi.org/10.1080/01972243.2014.915276**

Munzert, S., Rubba, C., Meißner, P., & Nyhuis, D. (2014). *Automated data collection with R: A practical guide to web scraping and text mining*. John Wiley & Sons. DOI:10.1002/9781118834732

Nyhuis, D. (2020). Web data collection: Potentials and challenges. In L. Curini & R. Franzese (Eds.). *The SAGE handbook of research methods in political science and international relations* (pp. 387-403), Sage Publications.

Back to contents

Back to previous

Resources: Arts-based methods

Baroutsis, A., Kervin, L., Woods, A., & Comber, B. (2019). Understanding children's perspectives of classroom writing practices through drawings. *Contemporary Issues in Early Childhood, 20*(2), 177-193. **https://doi.org/10.1177/1463949117741743**

Barton, G. (2015). Arts-based educational research in the early years. *International Research in Early Childhood Education, 6*(1), 62-78. **https://doi.org/10.26180/5ccfb17b8245f**

Bird, J., Colliver, Y., & Edwards, S. (2014). The camera is not a methodology: Towards a framework for understanding young children's use of video cameras. *Early Child Development and Care, 184*(11), 1741-1756. **https://doi.org/10.1080/03004430.2013.878711**

Blaisdell, C., Arnott., L., & Robinson, C. (2019). Look who's talking: Using creative, playful arts-based methods in research with young children. *Journal of Early Childhood Research, 17*(1) 14–31. **https://doi.org/10.1177/1476718X18808816**

Green, A., & Denov, M. (2019). Mask-making and drawing as method: Arts-based approaches to data collection with war-affected children. *International Journal of Qualitative Methods, 18*, 1–13. **https://doi.org/10.1177/1609406919832479**

Groundwater-Smith, S., Dockett, S., & Bottrell, D. (2015). *Participatory research with children and young people*. SAGE Publications. **https://doi.org/10.4135/9781473910751**

Hickey-Moody, A., Horn, C., Willcox, M., & Florence, E. (2021). Correction to: Arts-based methods for research with children. In *Arts-Based Methods for Research with Children*. **https://doi.org/10.1007/978-3-030-68060-2_7**

Knight, L. (2019). Arts-based methods. In J. Rowsell, G. Falloon, & N. Kucirkova (Eds.). *The Routledge international handbook of learning with technology in early childhood* (pp. 311-323). Routledge.

Lobe, B., Livingstone, S., & Haddon, L. (2007) *Researching children's experiences online across countries: Issues and problems in methodology*. Deliverable D4.1 for the EC Safer Internet plus programme. LSE, London: EU Kids Online. Available at: **http://eprints.lse.ac.uk/2856/**

Parry, B. (2015). Arts-based approaches to research with children: Living with mess. In E. Stirling, & D. Yamada-Rice (Eds.). *Visual methods with children and young people*, (pp. 89-98). Palgrave Macmillan.

Tian, M. (2023). *Arts-based research methods for educational researchers*. Routledge.

Wall, K. (2017). Exploring the ethical issues related to visual methodology when including young children's voice in wider research samples. *International Journal of Inclusive Education, 21*(3), 316–331. **https://doi.org/10.1080/13603116.2016.1260845**

Back to contents Back to previous

Resources on participant cohorts

Resources: Infants and toddlers

Barassi, V. (2020). *Child data citizen. How tech companies are profiling us from before birth*. MIT Press.

Chalklen, C., & Anderson, H. (2017). Mothering on Facebook: Exploring the privacy/openness paradox. *Social Media + Society, 3*(2). **https://doi.org/10.1177/2056305117707187**

Council on Communications and Media. (2016). Media and young minds, *Pediatrics, 138*(5). **https://doi.org/10.1542/peds.2016-2591**

Danby, S., & Farrell, A. (2004). Accounting for young children's competence in educational research: New perspectives on research ethics. *The Australian Educational Researcher, 31*(3), 35-50. **https://doi.org/10.1007/BF03249527**

Early Childhood Australia (ECA). (2018). *Statement on young children and digital technologies*. Canberra, ACT: ECA. **http://dx.doi.org/10.23965/ECA.001**

Flewitt, R. (2020). Ethics and researching young children's digital literacy practices. In O. Erstad, R. Flewitt, B. Kümmerling-Meibauer, & Í. S. Pires Pereira (Eds.). *The Routledge handbook of digital literacies in early childhood* (pp. 64–78). Routledge.

Flewitt, R., & Ang, L. (2020). *Research methods for early childhood education*. Bloomsbury Academic.

Leaver, T. (2017). Intimate surveillance: Normalizing parental monitoring and mediation of infants online. *Social Media + Society, 3*(2), 1-10. **Available at: https://journals.sagepub.com/doi/epub/10.1177/2056305117707192**

Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry, 10*(2), 261–280. **https://doi.org/10.1177/1077800403262360**

Livingstone, S. (2018). Parent as field collaborator when interviewing the pre-verbal and early verbal child. *Parenting for a digital future.* **https://blogs.lse.ac.uk/parenting4digitalfuture/**

Ofcom (2022). *Children and parents: Media use and attitudes report 2022*. **Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0024/234609/childrens-media-use-and-attitudes-report-2022.pdf**

Rhodes, A. (2017). *Screen time and kids: What's happening in our homes? Detailed report*. The Royal Children's Hospital Melbourne: Australian Child Health POLL.

Sandberg, H., & Gillen, J. (2021). Investigating the digital media engagements of very young children at home: Reflecting on methodology and ethics. *Communications*, 46(3), 332–351. **https://doi.org/10.1515/commun-2021-0046**

Tiidenberg, K., & Baym, N. K. (2017). Learn it, buy it, work it: Intensive Pregnancy on Instagram. *Social Media + Society, 3*(1), 1-13. **https://doi.org/10.1177%2F2056305116685108**

Trinh, M. H., Sundaram, R., Robinson, S. L., Lin, T. C., Bell, E. M., Ghassabian, A., & Yeung, E. H. (2020). Association of trajectory and covariates of children's screen media time. *JAMA Pediatrics, 174*(1), 71-78. doi:10.1001/jamapediatrics.2019.4488

Yu, M., & Baxter, J. (2016). *Australian children's screen time and participation in extracurricular activities. Annual statistical report 2015, 99*. **Available at: https://growingupinaustralia.gov.au/sites/default/files/publication-documents/lsac-asr-2015-book.pdf#page=109**

Back to contents Back to previous

Resources: Aboriginal and Torres Strait Islander children and communities

ABS (2022). *Aboriginal and Torres Strait Islander Peoples*. Australian Bureau of Statistics. **Available at: https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples**

ADM+S Centre (Automated Decision Making and Society Centre). (n.d.) *Mapping the digital gap*. **https://www.admscentre.org.au/mapping-the-digital-gap/**

AIATSIS (Australian Institute of Aboriginal and Torres Strait Islander Studies). (2020). *AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research*. Australian Institute of Aboriginal and Torres Strait Islander Studies. **https://aiatsis.gov.au/research/ethical-research**

AIHW (2022). *Profile of Indigenous Australians*. Australian Institute of Health and Welfare. **https://www.aihw.gov.au/reports/australias-health/profile-of-indigenous-australians**

Australian Government. (2020). *Closing the Gap Report 2020*. **https://ctgreport.niaa.gov.au/sites/default/files/pdf/closing-the-gap-report-2020.pdf**

Gollan, S., & Stacey, K. (2021). *Australian Evaluation Society First Nations Cultural Safety Framework*. Australian Evaluation Society, Melbourne. **https://www.aes.asn.au/images/AES_FirstNations_Cultural_Framework_finalWEB_final.pdf**

Good Things Foundation Australia & Save the Children. (2021). *Closing the Digital Divide for First Nations Families and Children: Joint Consultation Response & Recommendations.* **https://www.niaa.gov.au/sites/default/files/submissions/idip-sub-good-things-foundation-save-the-children.pdf**

Couture, S., & Toupin, S. (2019). What does the notion of "sovereignty" mean when referring to the digital?. *New Media & Society, 21*(10), 2305-2322.**https://doi.org/10.1177/1461444819865984**

de la Garza, A. (2016). Aboriginal digitalities: Indigenous peoples and new media. In C. Travis & A. von Lünen (Eds.) *The digital arts and humanities: Neogeography, social media and big data integrations and applications* (pp. 49-62). Springer. **https://hdl.handle.net/10468/7252**

Dew, A., McEntyre, E., & Vaughan, P. (2019). Taking the research journey together: The insider and outsider experiences of Aboriginal and non-Aboriginal researchers. Forum: *Qualitative Social Research, 20*(1), 1-17). DOI: **https://doi.org/10.17169/fqs-20.1.3156**

Fitzpatrick, E., Macdonald, G., Martiniuk, A., Oscar, J., D'Antoine, H., Carter, M., Lawford, T., & Elliott, E. (2019). The picture talk project: Aboriginal community input on consent for research. *BMC Medical Ethics, 20*(1), 1-15.

Laird, P., Chang, A. B., Jacky, J., Lane, M., Schultz, A., & Walker, R. (2021). Conducting decolonizing research and practice with Australian First Nations to close the health gap. *Health Research Policy and Systems, 19*(127), 1-10.

NHMRC (National Health and Medical Research Council) (2018). *Ethical Conduct in Research with Aboriginal and Torres Strait Islander Peoples and Communities: Guidelines for researchers and stakeholders*. **https://www.nhmrc.gov.au/about-us/resources/ethical-conduct-research-aboriginal-and-torres-strait-islander-peoples-and-communities**

Smith, L. T. (2021). *Decolonizing methodologies : Research and indigenous peoples*. Bloomsbury Academic & Professional.

Svastalog, A., & Eriksson, S. (2010). You can use my name: You don't have to steal my story –– A critique of anonymity in Indigenous studies. *Developing World Bioethics, 10*(2), 104-110. **https://doi.org/10.1111/j.1471-8847.2010.00276.x**

Thomas, J., Barraket, J., Wilson, C. K., Holcombe-James, I., Kennedy, J., Rennie, E., Ewing, S., MacDonald, T. (2020). *Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2020*, RMIT and Swinburne University of Technology, Melbourne. **https://doi.org/10.25916/5f6eb9949c832**

Thomas, J., McCosker, A., Parkinson, S., Hegarty, K., Featherstone, D., Kennedy, J., Holcombe-James, I., Ormond-Parker, L., & Ganley, L. (2023). *Measuring Australia's Digital Divide: Australian Digital Inclusion Index 2023*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra. Available at: **https://www.digitalinclusionindex.org.au/what-is-digital-inclusion/**

Back to contents

Back to previous

Resources: Children with disabilities

Australian Bureau of Statistics. (2018). *Disability, Ageing and Carers, Australia: Summary of Findings*. ABS. **https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release**

Alper, M. (2018). Inclusive sensory ethnography: Studying new media and neurodiversity in everyday life. *New Media & Society, 20*(10), pp.3560-3579.

Alper, M. & Irons, M. (2020). Digital socialising in children on the autism spectrum. In L. Green, D. Holloway, K. Stevenson, T. Leaver & L. Haddon (Eds.) *The Routledge companion to digital media and children* (pp.348-357). Routledge.

Bigby, C. (2020). Dedifferentiation and people with intellectual disabilities in the Australian National Disability Insurance Scheme: Bringing research, politics and policy together. *Journal of Intellectual & Developmental Disability, 45*(4), pp.309-319.

Bircanin, F., Brereton, M., Sitbon, L., Ploderer, B., Azaabanye Bayor, A. and Koplick, S. (2021, May). Including adults with severe intellectual disabilities in co-design through active support. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-12).

Carpenter, J., & McConkey, R. (2012). Disabled children's voices: The nature and role of future empirical enquiry. *Children & Society, 26*(3), 251-261. **https://doi.org/10.1111/j.1099-0860.2012.00438.x**

Ibrahim, S.B., Vasalou, A. & Clarke, M. (2020, June). Can design documentaries disrupt design for disability? *In IDC '20: Proceedings of the Interaction Design and Children Conference* (pp. 96–107). **https://doi.org/10.1145/3392063.3394403**

Jenkin, E., Wilson, E., Campain, R., & Clarke, M. (2020). The principles and ethics of including children with disability in child research. *Children & Society, 34*(1), 1-16. **https://doi.org/10.1111/chso.12356**

Livingstone, S. & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press.

Porayska-Pomsta, K., Frauenberger, C., Pain, H., Rajendran, G., Smith, T., Menzies, R., Foster, M.E., Alcorn, A., Wass, S., Bernadini, S. & Avramides, K. (2012). Developing technology for autism: An interdisciplinary approach. *Personal and Ubiquitous Computing, 16*, 117-127.

Thompson, S., Cannon, M., & Wickenden, M. (2020). *Exploring critical Issues in the ethical involvement of children with disabilities in evidence generation and use*. Innocenti Working Papers, no. 2020-04, UNICEF Office of Research - Innocenti, Florence.

United Nations Children's Fund (2021). Seen, Counted, *Included: Using data to shed light on the well-being of children with disabilities*. UNICEF Report. Available at: **https://data.unicef.org/resources/children-with-disabilities-report-2021/**

Whittaker, M., Alper, M., Bennett, C.L., Hendren, S., Kaziunas, L., Mills, M., Morris, M.R., Rankin, J., Rogers, E., Salas, M. and West, S.M. (2019). *Disability, bias, and AI - Report. AI* Now Institute, p.8.

Back to contents

Back to previous

Resources: Children and families from culturally and linguistically diverse backgrounds

Block, K., Warr, D., Gibbs, L., & Riggs, E. (2013). Addressing ethical and methodological challenges in research with refugee-background young people: Reflections from the field. *Journal of Refugee Studies, 26*(1), 69-87. **https://doi.org/10.1093/jrs/fes002**

Castillo Goncalves, D. (2020). Distinctive ethical challenges in qualitative research with migrant children. *Qualitative Research Journal, 20*(3), 293-303. **https://doi.org/10.1108/QRJ-10-2019-0076**

Due, C., Riggs, D.W., & Augoustinos, M. (2014). Research with children of migrant and refugee backgrounds: A review of child-centered research methods. *Child Indicators Research, 7*, 209–227. **https://doi.org/10.1007/s12187-013-9214-6**

Gaywood, D., Bertram, T., & Pascal, C. (2020). Involving refugee children in research: Emerging ethical and positioning issues. *European Early Childhood Education Research Journal, 28*(1), 149-162. **https://doi.org/10.1080/1350293X.2020.1707369**

Hugman, R., Pittaway, E., & Bartolomei, L. (2011). When "Do no harm" is not enough: The ethics of research with refugees and other vulnerable groups. *The British Journal of Social Work, 41*(7), 1271–1287. **https://doi.org/10.1093/bjsw/bcr013**

Liamputtong, P. (Ed.). (2008). *Doing cross-cultural research: Ethical and methodological perspectives*. Springer Dordrecht.

Marshall, A., & Batten, S. (2004). Researching across cultures: Issues of ethics and power. *Forum: Qualitative Social Research, 5*(3), 1-7. **https://doi.org/10.17169/fqs-5.3.572**

Trimble, J.E., & Fisher, C.B. (Eds.). (2006). *The handbook of ethical research with ethnocultural populations and communities*. Sage.

Woodland, L., Blignault, I., O'Callaghan, C. et al. (2021). A framework for preferred practices in conducting culturally competent health research in a multicultural society. *Health Research Policy and Systems, 19*(24), 1-11. **https://doi.org/10.1186/s12961-020-00657-y**

Resources: Parents/caregivers

Roth-Cline, M, & Nelson, R. (2013). Parental permission and child assent in research on children, *Yale Journal of Biology and Medicine, 86*, 291-301. PMCID: PMC3767214

See also *Resources: Home settings*

Back to contents

Back to previous

Resources: Social and healthcare workers

Aita, M., & Richer, M. C. (2005). Essentials of research ethics for healthcare professionals. *Nursing & health sciences, 7*(2), 119-125. **https://doi.org/10.1111/j.1442-2018.2005.00216.x**

Foster, M., Quaye, A. A., Whitehead, L., & Hallström, I. K. (2022). Children's voices on their participation and best interests during a hospital stay in Australia. *Journal of Pediatric Nursing, 63*, 64-71. **https://doi.org/10.1016/j.pedn.2022.01.003**

Foster M., Whitehead L., & Maybee P. (2010). Parents' and health professionals' perceptions of family centred care for children in hospital, in developed and developing countries: a review of the literature. *International Journal of Nursing Studies, 47*(9), 1184-93. **https://doi.org/10.1016/j.ijnurstu.2010.05.005**

Roth-Cline, M., & Nelson, R. M. (2013). Parental permission and child assent in research on children. *The Yale journal of biology and medicine, 86*(3), 291.

Spriggs, M (2010). Understanding consent in research involving children: *The ethical issues. A handbook for Human Research Ethics Committees and researchers*. The Royal Children's Hospital Melbourne. Available at: **https://www.vu.edu.au/sites/default/files/research/pdfs/ethics-children-handbook.pdf**

The Royal Australasian College of Physicians (2008) *Paediatric policy on ethics of research in children*. Available at: **https://www.racp.edu.au/docs/default-source/advocacy-library/ethics-of-research-in-children.pdf**

See also ***Resources: Health settings***

Resources: Educators

Cochran-Smith, M., & Lytle, S. (2009). *Inquiry as stance.* Teachers' College Press.

Design-based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher, 32*(1), 5–8. **https://doi.org/10.3102/0013189X032001005**

lisahunter, Emerald, E., & Martin, G. (2013). *Participatory activist research in the globalised world*. Springer.

McIntyre, A. (2014). *Participatory action research*. Sage.

Woods, A., Dooley, K., Luke, A., & Exley, B. (2014). School leadership, literacy and social justice: The place of local school curriculum planning and reform. In I. Bogotch & C. Shields (Eds.), *International handbook of educational leadership and social (in)justice* (pp. 509-520). Springer Publishing.

See also ***Resources: Education settings***

Back to contents

Back to previous

About the Authors

Dr Kate Mannell

Kate is a Research Fellow at Deakin University in the ARC Centre of Excellence for the Digital Child. Her research focuses on the design, governance, and use of digital technologies and their role in the everyday lives of families and children. She has particular interests in data privacy, digital disconnection, and technology discourses. Kate has recently published research in *Cultural Studies, Social Media + Society, M/C Journal and the Journal of Computer-Mediated Communication.*

Dr Andy Zhao

Xinyu "Andy" Zhao is a sociologist interested in studying and researching the various intersections of digital media, transnational mobility, family life, and young people. Andy holds degrees in English Language and Literature (Renmin University of China, 2015) and Sociology (Deakin University, 2020). His doctoral project was an ethnographic study of how Chinese young migrants in Australia understand and use social media in and across the spheres of everyday life. As a Research Fellow of the Australian Research Council Centre of Excellence for the Digital Child at Deakin University, Andy is particularly keen to expand our knowledge of cultural and platform diversity in Australian families and digital childhoods. Through his work in the Centre, he hopes to support migrant families and children to better engage with digital technologies in a safe, ethical, and inclusive environment.

Back to contents

Back to previous

The Digital Child Working Paper Series

In 2021, the Australian Research Council (ARC) funded a Centre of Excellence devoted to studying and researching 'the digital child'. The focus of this Centre is on very young children from birth to age 8, and describes and examines their everyday lives with and through digital technologies, their learning and their health in the family, and various kinds of kindergarten, childcare and early primary education experiences.

The Centre brings together six universities across Australia, as well as partner investigators from North America, Asia and Europe and a range of public bodies and civil society stakeholders, to focus on a holistic understanding of what it might mean to 'grow up digital' today.

The Digital Child Working Paper Series reports on our work in progress. There are five series of papers aimed at different audiences:

A **'how to'** series offers instructional papers aimed at early career researchers or those new to the principles and practices of structured review.

A **'discussion'** series consisting of discussion papers aimed at the scholarly community, raising larger conceptual challenges faced by researchers at the Centre and drawing on forms of literature review.

A '**reviews'** series consisting of scoping reviews, literature reviews and systematic reviews, all addressing specific research questions particular to any of the programme disciplines in the Centre.

A '**methods and methodologies'** series consisting of digital research capacity building resource-rich discussion papers, offering more technical support for the research community and allied scholarship. These are more focused on methods and methodologies.

A **'policy'** series consisting of more public facing, policy-oriented papers produced for stakeholder engagement.

Each of the working papers has been authored by members of the Centre and has been subject to review as explained in each paper. The arguments in each paper represent the view of the authors.

We hope that readers find each of these papers stimulating and generative and that all sections of society can draw on the insights, arguments and ideas within the papers to create healthy, educated and connected futures for all and every child.

Professor Susan Danby
Director, Centre of Excellence for the Digital Child
June 2022

Australian Government

Australian Research Council

AUSTRALIAN RESEARCH COUNCIL

Centre of Excellence for the Digital Child.