



# Digital Child

Annual Report 2022

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# Australian Research Council Centre of Excellence for the Digital Child

Children are growing, learning and connecting with digital technology. The rapid pace of growth and change in this space means that there is an urgent and compelling need to create positive digital childhoods for all Australian children: this is the mission of the Australian Research Council Centre of Excellence for the Digital Child.

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# Director's Message

Supporting young children growing up in a rapidly changing digital age.

On behalf of the Australian Research Council Centre of Excellence for the Digital Child, I am pleased to present our 2022 Annual Report.

Following our establishment year in 2021, the past twelve months were a busy time for our Centre members and partners as we grew our research programs designed around the needs of our core stakeholders – families, teachers, educators, policymakers, and all those who work with children.

We welcomed two additional Chief Investigators in 2022: Professor Grace Sarra (QUT) and Professor Lennie Barblett AM (Edith Cowan University). You can read more about their research in our Centre highlights page.

There are multiple achievements that I could choose to highlight in this Director's Message – many you will discover in more detail in our Annual Report. I have selected a few that demonstrate the breadth and depth of our remarkable progress here:

- Centre launch with the Federal Minister for Education the Hon Jason Clare MP
- New partnership with the Australian Centre for the Moving Image (ACMI) opens door to public discourse on digital childhoods
- Collaborating on delivering citizen education with the eSafety Commissioner
- Publication of new evidence-based freely accessible resources through our Working Papers series
- Skills, Mentoring and Research Training two day capacity building event
- Supporting early career researchers with exchange grants
- Two Digital Child Annual Meetings (DCAM) delivered in twelve months. One online due to the pandemic and one in person.
- Growing our national reputation through media engagement and outreach events, including multiple events across the country for Children's Week 2022

These achievements demonstrate the truly collaborative and impactful nature of our Centre. To say nothing of the highlights for our individual researchers who were awarded multiple times in 2022 and recognised through new appointments, and new grants and scholarships.

At the close of the year, we ran an expression of interest process to replace our research co-leads for our Educated Child and Healthy Child portfolios with myself and CI Simon Smith stepping down. Thank you to CI Smith for co-leading our Healthy Child program during the Centre's establishment and welcome to our new co-leads, CI Louise Paatsch (Educated Child) and CI Dylan Cliff (Healthy Child). In addition, we have appointed new co-leads to our longitudinal study Australian Children of the Digital Age (ACODA) with CI Daniel Johnson and CI Grace Sarra joining CI Juliana Zabatiero.

We are delighted with our progress so far and are looking forward to another packed year in 2023.

**Professor Susan Danby FASSA**

**Director, Australian Research Council Centre of Excellence for the Digital Child**



## Our members

### CHIEF INVESTIGATORS

ASSOCIATE PROFESSOR LENNIE BARBLETT AM  
EDITH COWAN UNIVERSITY

PROFESSOR SUE BENNETT  
Deputy Director and Connected Child Co-Leader  
UNIVERSITY OF WOLLONGONG

PROFESSOR MARGOT BRERETON  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

DR DYLAN CLIFF  
UNIVERSITY OF WOLLONGONG

PROFESSOR SUSAN DANBY  
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PROFESSOR MICHAEL DEZUANNI  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR LELIA GREEN  
Connected Child Co-Leader  
EDITH COWAN UNIVERSITY

ASSOCIATE PROFESSOR STEVEN HOWARD  
UNIVERSITY OF WOLLONGONG

PROFESSOR DANIEL JOHNSON  
Longitudinal Family Cohort Study Co-Leader  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR LISA KERVIN  
Educated Child Co-Leader  
UNIVERSITY OF WOLLONGONG

PROFESSOR TAMA LEAVER  
CURTIN UNIVERSITY

PROFESSOR KAREN MURCIA  
CURTIN UNIVERSITY

PROFESSOR LOUISE PAATSCH  
DEAKIN UNIVERSITY

DR LUCI PANGRAZIO  
DEAKIN UNIVERSITY

PROFESSOR GRACE SARRA  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR JULIAN SEFTON-GREEN  
Connected Child Co-Leader  
DEAKIN UNIVERSITY

PROFESSOR SIMON SMITH  
Healthy Child Co-Leader  
THE UNIVERSITY OF QUEENSLAND

PROFESSOR LEON STRAKER  
Healthy Child Co-Leader  
CURTIN UNIVERSITY

ASSOCIATE PROFESSOR SONIA WHITE  
Healthy Child Co-Leader  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR ANNETTE WOODS  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR PETA WYETH  
Educated Child Co-Leader

QUEENSLAND UNIVERSITY OF TECHNOLOGY

DR JULIANA ZABATIERO  
Longitudinal Family Cohort Study Co-Leader  
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### ASSOCIATE INVESTIGATORS

ASSOCIATE PROFESSOR CRYSTAL ABIDIN  
CURTIN UNIVERSITY

DR HELEN ADAM

DR TIFFANI APPS  
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ASSOCIATE PROFESSOR DIANA ARABIAT  
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PROFESSOR MATTHEW BELLGARD  
QUEENSLAND UNIVERSITY OF TECHNOLOGY

DR KARLEY BECKMAN  
UNIVERSITY OF WOLLONGONG

DR AMBER BEYNON  
MACQUARIE UNIVERSITY

BARBARA BIGGINS OAM CF  
CURTIN UNIVERSITY

ASSOCIATE PROFESSOR SUSAN BLACKLEY  
CURTIN UNIVERSITY

FIONA BOYLAN  
EDITH COWAN UNIVERSITY

DR ANNA BUNN  
CURTIN UNIVERSITY

ASSOCIATE PROFESSOR AMITY CAMPBELL  
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DR CHRISTINA CHALMERS  
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EMERITUS PROFESSOR PAUL CHANDLER  
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DR DAVID COALL  
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DR TRISH COLLINS  
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DR LEESA COSTELLO  
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LISA WALKER  
Chief Operating Officer  
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LORETTA WATSON  
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**ADVISORY COMMITTEE**

ADVISORY COMMITTEE  
EMERITUS PROFESSOR PAUL CHANDLER  
Advisory Committee Member

PROFESSOR BARBARA COMBER OAM  
Advisory Committee Member  
UNIVERSITY OF SOUTH AUSTRALIA

TARYN MARKS  
Advisory Committee Chair  
FORMER GENERAL MANAGER, AIME

MEGAN MITCHELL AM  
Advisory Committee Member

**ALUMNI**

PROFESSOR CAROLINE BARRATT-PUGH  
EDITH COWAN UNIVERSITY

PROFESSOR CATHERINE BEAVIS  
DEAKIN UNIVERSITY

JANE BOURNE  
C&K (THE CRECHE AND KINDERGARTEN  
ASSOCIATION)

DR ANNEMARIE DE LEO  
EDITH COWAN UNIVERSITY

DR KELLY JOHNSTON  
UNIVERSITY OF WOLLONGONG

PROFESSOR JACKIE MARSH  
UNIVERSITY OF SHEFFIELD, ENGLAND

DR SALLY STATON  
THE UNIVERSITY OF QUEENSLAND

PROFESSOR KAREN THORPE  
THE UNIVERSITY OF QUEENSLAND

LUCY BRYCE  
THE UNIVERSITY OF QUEENSLAND



# Highlights from 2022

Centre members and partners were busy in 2022, nurturing research programs and creating evidence-based resources for our key audiences – teachers, educators, families, and policymakers.

We launched our Centre with an event attended by the Federal Minister for Education Jason Clare MP and Australian Research Council Chief Executive Officer Ms Judi Zielke PSM in September 2022 and delivered multiple research and training events across our nodes.

We also welcomed two new Chief Investigators to the Centre: Professor Grace Sarra (QUT) and Associate Professor Lennie Barblett AM (Edith Cowan University).

Other highlights for the year included awards for our members; new appointments; and new grants and scholarships.

## New Chief Investigators: Professor Grace Sarra

Professor Grace Sarra is an academic and researcher at Queensland University of Technology. She is of Aboriginal heritage (Bindal and Birriah clans of the Birrigubba nation) and Torres Strait Islander heritage (Mauar, Stephen and Murray Islands). She has more than 30 years of experience in teaching and leadership roles in schools and universities. Her research is in the area of Aboriginal and Torres Strait Islander education, early childhood, inclusive education, Indigenous young people and low socio-economic young people incarcerated in youth detention centres.

“I hope that my work in the Centre will address the critical social justice issues of Indigenous education inequalities through investigating best practices using culturally responsive pedagogies to inform education and policy development.”

Grace’s research projects are grounded in the belief that changing a curriculum will not improve learning unless accompanied by a whole-of-school program to challenge attendance and behaviour, encourage pride and self-belief, instil high expectations, and build local leadership and community involvement. Grace’s distinctive contribution as an Indigenous researcher has been in utilising Indigenous knowledge and frameworks with theoretical frameworks to contest prevailing assumptions and stereotypes that contribute to Indigenous students’ lack of success in schools.

Her work in the Centre will focus on new, innovative process-orientated methods based on Indigenous research paradigms to enable the inclusion of a range of diverse Indigenous voices in co-design programs in social and emotional wellbeing. This will assist in the development of digital teaching resources

for Aboriginal and Torres Strait Islander children in the early years that describe representations for their physical/social/emotional/spiritual well-being. In addition, research that focuses on Indigenous language revitalisation and technology in early years centres in Indigenous communities using digital technologies/storytelling to support curriculum and cultural learning for all students.

## Professor Lennie Barblett AM

Professor Lennie Barblett’s research focusses on curriculum development, pedagogy and pedagogical leadership for effective early childhood education that is accessible to all Australian children and their families. Embedded in this is her interest in the role that digital technologies play in children’s learning, development and wellbeing, educator’s teaching and learning, and the connection and engagement of families. A continuing theme of her research has been to influence policy development and implementation in the areas of equity, engagement and participation of children and their families and educators in quality early childhood education.

“I hope to assist in promoting the effective use of digital technologies in children’s learning, development and wellbeing.”

In 2021, Lennie was named a Member of the Order of Australia (AM) for her service to tertiary education and early childhood teaching. In the same year, she was also named winner of Engagement Australia’s Outstanding Engagement for Research Impact. Lennie is a chief investigator on the Australian Learning Frameworks Update project 2020-2022 and Kindytxt, a digital literacy texting program for families of kindergarten children.

## Awards for our members

Our members were awarded multiple times in 2022 in recognition of their contribution work on early education and research on digital technology in various contexts.

- Advisory Committee member Professor Barbara Comber AM was awarded a Medal of the Order of Australia for services to education. Barbara’s distinguished academic career has been defined by her dedication to literacy education.
- Chief Investigator Lisa Kervin was awarded for Innovation Achievement at the Wollongong Australia Day Awards, acknowledging her work and expertise in children’s literacy development and children’s use of technology.
- Alumnus Chief Investigator Karen Thorpe was awarded a prestigious 2022 ARC Laureate Fellowship. Karen’s project, Time in early education and care for better life opportunity, will identify strategies that promote child learning and redress current social inequities.
- Chief Investigator Peta Wyeth was awarded for Professional Technology Leadership at the 25th Women in Technology Awards for her work in making technology engaging, creative and healthy for children and people with disabilities.
- Research Assistant Emma Cross was awarded Early Childhood Australia’s Barbara Creaser Young Advocate Award in recognition of her emerging leadership and advocacy in the field (see feature below).
- Business Support Officer Sarah Fulford received a Curtin University Humanities Learning and Teaching Innovation Award for Outstanding Contribution to Student Learning.
- The Australian Institute of Health and Safety awarded Kelly Jaunzems the Eric Wigglesworth Occupational Health and Safety Education Medal for her PhD thesis on uses of social media in health and safety contexts.
- Associate Investigator Jian Xu won the Mid-Career Researcher Award for Career Excellence at Deakin University’s Faculty of Arts and Education Awards in November.
- The Centre’s QUT Business Operations team – Lisa Walker, Sandra Backstrom, Nhi Pham, Pernilla Miller and Narelle Low – was nominated for a 2022 QUT Vice-Chancellor’s Award for Excellence.

## New member appointments

- Research Fellow Kylie Stevenson appointed Associate Editor of the Media International Australia journal, alongside new journal editor Associate Investigator Crystal Abidin.
- Research Fellow Andy Zhao appointed to Media International Australia’s Executive Board.
- Research Fellow Amana Levido appointed Communications Officer on the Executive Committee of the Australian Association for Research in Education (AARE).
- Associate Investigator Marnee Shay appointed a Chief Investigator in the new ARC Centre of Excellence for Indigenous Futures commencing in 2023.
- Associate Investigator Lisa Whitehead appointed Editor in Chief of Collegian, the journal of the Australian College of Nursing.
- Centre Director Susan Danby appointed to the editorial board of Early Childhood Research Quarterly.

- Chief Investigator Tama Leaver appointed President of the International Association of Internet Researchers.

## Grants and scholarships

- Chief Investigator Luci Pangrazio was awarded a 2023 Discovery Early Career Researcher Award (DECRA). Luci’s project will investigate how data collection, use and disclosure is experienced and understood in schools to inform policy, protocols and guidelines for data justice in schools (see feature below).
- PhD student Emily Westwood was awarded a prestigious Fullbright Scholarship at The University of Colorado Boulder to contribute to ground-breaking experimental research measuring light and sleep in home environments for young children.
- Associate Investigator David Coall was awarded a three-year Healthway grant (Western Australian Government) for a project on the role of grandparents maintaining physical health of grandchildren, with the aim to develop a digital resource to maintain physical health.
- Alumnus Chief Investigator Sally Staton was awarded DECRA to study child sleep development in the context of family work lives.
- Partner Investigators Hyeon-Seon Jeon and Rebekah Willet and Chief Investigator Michael Dezuanni were part of a project team awarded a Social Sciences and Humanities Research Council Partnership Development Grant of \$199,376 CAD for the project Kids, KidTech and the Metaverse: Global childhoods in digital capitalism
- Deputy-Director Sue Bennett, Research Fellows Rebecca Ngand Aleesha Rodriguez, and Partner Investigator Hyeon Seon Jeon were awarded an Australian-Korean Foundation 2022-2023 grant for their project Envisioning Technologies of the Future with Australian and Korean Children
- Research Fellows George Thomas and Danica Hendry are co-lead investigators on a Curtin University School of Allied Health Research Grant to develop and evaluate wearable sensor-based systems to measure digital technology use and movement/posture in young children.
- Chief Investigator Dylan Cliff is part of a University of Wollongong Early Start program awarded \$1.2 million in funding over four years under the NSW Health Prevention Research Support program

# Governance

## Advisory Committee

The Advisory Committee is responsible for adding value and critical input to guide the Centre in delivering its mission. The committee is chaired by Taryn Marks. The other members are: Emeritus Professor Paul Chandler, Professor Barbara Comber AM, and Megan Mitchell AM. The committee met with the Centre Director and Centre Directorate four times in 2022.

### Message from the Advisory Committee Chair

“Attending the Centre’s inaugural in-personal Digital Child Annual Meeting was a highlight for me in 2022. It was fantastic to connect with Centre members face-to-face, learn more about the Centre’s research work, and observe the many discussions and dialogues that took place during the collaborative and planning sessions.

It was a privilege to speak on a panel with my fellow Committee members and share our suggestions, critiques and challenges for the Centre and researchers. My key message to Centre members was to use the exceptional opportunity they have as researchers in an ARC Centre of Excellence to drive positive change for children and families.”

**Taryn Marks**

## Executive Committee:

The Executive Committee oversees the Centre’s strategic direction and performance against the objectives of the ARC Centre of Excellence scheme and agreed performance targets. The Executive Committee is chaired by Centre Director Susan Danby. Other members include the Centre Deputy Director, Chief Operating Officer, and Node Representatives.

The Committee ensures that the Centre’s resources are allocated effectively to achieve Centre aims. In addition, the Executive Committee acts as the formal authorising committee for the Centre budget, strategic plan, research projects, project and partnership agreements, and applications for Associate Investigator (AI) status.

### Message from the Executive Committee Chair

“In 2022, the Executive Committee progressed significant initiatives for the Centre, including our Centre Portfolios, and research funding to progress current and new projects.

A highlight of the Committee’s work was the capacity building and development opportunities it provided for Centre members in 2022. We rolled out a ‘2for1’ model, a strategy where a second member of each node attended Committee meetings to develop leadership skills and participate in the Centre’s governance.

We also held a one-day, face-to-face Leadership Retreat in November to develop and explore Centre leadership strategy and direction.

Both initiatives were enormously successful in developing important leadership skills and success planning.” **Professor Susan Danby**

**Research Committee:** The committee drives initiatives to ensure that the Centre’s research is transdisciplinary and cross-nodal, strongly aligned with the Centre’s research programs, responsive to the needs of partners and provides opportunities for co-design of new projects with partners.

The Committee is comprised of: Professor Sue Bennett (Research Committee Chair), Healthy Child Co-Leaders, Educated Child Co-Leaders, Connected Child Co-Leaders, Longitudinal study Co-Leaders, Indigenous Advisor, Ethics and Integrity Advisor, and a member of the Directorate.

### Message from the Research Committee Chair

“Continued financial support and opportunities for project development and initiation are critical to the quality and innovativeness of our research outcomes.

In 2022, the Research Committee established two funding initiatives to kickstart new projects or to further established projects. The Innovation and Strategic Fund distributed \$160,000 for new projects that responded to emerging issues and new conceptualisations that had not been envisaged in the Centre’s original program and research activities. The Additional Project Funding rounds distributed more than \$650,000 for underestimated or unanticipated project needs or costs, or to pursue opportunities that offered distinct benefits to the project.

I look forward to reporting on the outcomes of these projects over the coming years as we work towards our vision to helping young children grow up healthy, educated and connected in a rapidly changing digital world.”

**Professor Sue Bennett**

## Data Management Committee:

The Data Management Committee oversees the development and implementation of the Centre’s data management plan and technologies for management, protection and integrity of Centre data to enable the Centre to achieve impact across its activities. In 2022, our Chair for the Data Management Committee ended their term. A new Chair will be appointed in 2023.



# Research

Our research is designed to help inform three key areas that impact and influence on children's lives – technology, education and policy. We are uniquely transdisciplinary – our studies intersect across areas of Health, Education and Connectedness to provide a holistic view of children's experiences and the impact of digital technologies.

## Maturing research capability

With 19 projects already underway in 2021, we initiated an additional 11 projects in 2022 to take our total number of projects to 30.

Recruitment and data collection commenced on a number of projects, with early analysis already available on some projects, bringing the Centre a step closer to producing quality outputs and new

understandings in digital childhoods – a significant achievement for a Centre only two years into operations. A selection of our projects have been highlighted below.

Continued financial support and opportunities for project development and initiation are critical to the quality and innovativeness of our research outcomes. Two funding initiatives established in 2022 helped kickstart new projects or contributed to furthering established projects.

The Additional Project Funding rounds allowed researchers to receive supplementary funds for underestimated or unanticipated needs or costs or pursue opportunities that offered distinct benefits to the project.

The Innovation and Strategic Fund distributed \$40,000 for one new project that responds to emerging issues and new conceptualisations that had not been envisaged in the Centre's original program and research activities.

These projects include:

- School social media and the datafication of children (Chief Investigator Sue Bennett)
- The digital profile of young children in Australian schools (Chief Investigator Susan Danby)
- Understanding early self-regulation in the context of children's digital recreation (Chief Investigator Steven Howard)
- The parent-child communication implications of infant feeding apps (Chief Investigator Lelia Green)
- Digital technology and sleep routines in daily life (Chief Investigator Simon Smith)
- Speculating my digital future: Children, parents, and practitioners (co)creating design fiction (Chief Investigator Michael Dezuanni)
- Wearable spectrometers for measuring light from digital technology interfaces (Chief Investigator Simon Smith)
- Early years language: Cultural stories and living histories on Country (Chief Investigator Grace Sarra)
- A day in the life of data for Australian children (Chief Investigator Sue Bennett)
- Establishing an eye movement databank: Developing tasks and protocols to enable future big data analysis (Chief Investigator Sonia White)

## Evidence-based resources

In August 2022, we achieved an important objective in research dissemination with the release of our Working Paper series. Our Working Papers are designed to capture current thinking, research, and analysis in digital childhoods, in addition to showcasing the Centre's scholarly work, generating discussion on digital childhoods, and supporting capacity building for early career researchers. Some papers act as early iterations for future or different kinds of publications; others may find their final expression in this form. This flexibility gives our researchers the intellectual freedom to explore and examine ideas and outcomes, only bound by a 'light-touch' review process comprising editorial teams responsible for ensuring papers meet the Centre's scholarly standards.

The Working Papers are categorised into five sub-series:

- 'How to' series offering instructional papers aimed at early career researchers
- 'Discussion' series consisting of discussion papers looking at conceptual challenges and aimed at the scholarly community
- 'Review' series consisting of scoping reviews, literature reviews and systematic reviews
- 'Methods and Methodologies' consisting of discussion papers but more focused on methods and methodologies
- 'Policy' series offering public facing, policy-oriented papers produced for stakeholder engagement

The Working Papers are freely available on the Centre's website, allowing open access of our research to the academic community and stakeholders, increasing impact and enabling opportunities for our research to be translated into policy and practice.

Seven Working Papers were published in 2021, including five in the Topaz series aimed at supporting researchers from different specialist areas to work together to summarise evidence regarding technology use with, by and for young children. Topaz was also designed to contribute to capacity building by giving early career researchers experience in conducting structured transdisciplinary reviews under the guidance of senior researchers. In addition to inspiring the overall Working Paper series, Topaz stimulated further work in transdisciplinarity, an area that defines and distinguishes much of the Centre's research.





## Project spotlights

**Digital technologies and sleep routines in daily life:** a first step to gather rich qualitative data about technology use in the home and use within household routines, especially sleep routines for children.

Sleep has direct consequences for learning, overall health, and emotional control and wellbeing in children. The interactions, family choices, and behaviours around technology and sleep are not well known, despite evidence of strong cross-sectional associations. Due to the speed at which technology has been advancing in recent years, the subsequent proliferation of devices available, and the near-ubiquitous use of technology, prior understandings of the use of digital technologies in the home are likely to be outdated. This project is a first step to gather rich qualitative data about technology use in the home and will identify the ways in which this technology use fits within household routines, especially sleep routines for children during the first years of formal schooling. [Find out more on our website.](#)

**Developing an EdTech Database – A design intervention:** revealing how commercial, educational, and governmental interests intersect in the growing space of edtech in Australia.

Childhood is now digital by default. In the early childhood education and care sector, service providers have increasingly partnered with edtech providers to integrate technological solutions in learning documentation, family communication, organisation and staff management, and so on. In the home, parents and caregivers are faced with a gigantic pool of ‘consumer edtech’ products, rendering informed decision-making increasingly challenging. This project aims to reveal how commercial, educational, and governmental interests intersect in the growing space of edtech in Australia by constructing a framework for developing a repository of educational and edutainment apps, software, and devices. Employing a ‘design intervention’ approach, this project asks how we can better support the development (industry), governance (government), and adoption (users) of edtech products and services. The project findings and outcomes will enable a more holistic understanding of the political economy of the edtech industry in Australia and provide an innovative approach towards advocating for real-life changes.

**Family and community perspectives on digital technology use by young children:** capturing what is known about the current perspectives of the community regarding digital technology use by young children, including parents, health professionals, service providers and industry.

The project will synthesise what is already known about current perspectives in the available literature, and methods used to capture these. The project will also involve original studies that will capture new data on current perspectives, and how parents, caregivers and health professionals access information about digital technology use. This project’s findings will inform future research and practice through enabling effective translation of evidence-based guidance to support children’s health, wellbeing and development in a digital society.

**Young children’s creativity and connected learning with digital technologies:** identifying the digital elements in children’s learning environments, nature of their digital play, teacher pedagogies and parental engagement.

This core project is multi-faceted, with nested studies investigating the impact of digitisation on the nature of young children’s creativity and connected learning experiences. Working with teachers in schools, early years centres, play group experiences and families at home, this case study research is identifying the digital elements in children’s learning environments, nature of their digital play, teacher pedagogies and parental engagement. The impact of digitisation on children’s creativity is being explored across the dimensions of Product: original and fit for purpose, Person: perspectives on who does the creative thinking, Place: elements of an enabling environment and Process: characteristics of children’s creative thinking.

**Digital safety and citizenship roundtables – using consultation and creativity to engage stakeholders:** a model for engaging key stakeholder groups in discussions about children’s digital citizenship. In 2022, Connected Child researchers at Edith Cowan University partnered with the LEGO Group to conduct a 15-month investigation into children’s digital citizenship in India, the Republic of Korea and Australia.

Children’s roundtables were conducted in 2022 with 3–13-year-old Indian, Korean and Australian children that explored their perspectives of digital citizenship through creative, play-based research methods. This approach ensured children’s voices were authentically captured and amplified. [Find out more on our website.](#)

## New Children’s Technology Spaces

Our Children’s Technology Spaces are a major component of the Centre’s research infrastructure.

These spaces provide the interface for researcher collaboration with children, families, industry partners, teachers, educators, health practitioners and technology designers.

These dedicated technology spaces for children are physical sites where researchers and digital technology users can investigate concepts and potential technological advances. In play-based learning, children accompanied by family members or educators have on-the-ground access to good examples of digital technology, and research and professional learning sites for understanding children’s use of a range of different technologies. These outreach spaces are ideal sites to support parents and educators in gaining knowledge about positive digital practices for children.

**QUT’s Children’s Technology Centre:** The Queensland University of Technology (QUT) Children’s Technology Centre (CTC) is a purpose-built space located in the Education Precinct at QUT’s Kelvin Grove campus.

In 2022, we set out to support Digital Child members by providing a dedicated space for children, and their families and educators to engage with digital technologies. Our goals were to complete set up of the Children’s Technology Centre (CTC) as a well-resourced, innovative research and outreach space, and to provide an inclusive space where diverse children are able to play and learn with technologies. We were proud to work collaboratively to think through ethical, participatory approaches to researching with young children in the space.

### Highlights of 2022

- Facilitation of children’s participation in the Centre’s official launch event
- Collaborating with researchers from QUT Digital Media Research Centre (DMRC) to provide public engagement activities for young children and their families at Flowstate (Southbank, QLD) in October, 2022
- Hosting the Responsible Innovation in Technology for Children project over a period of 9 months.
- Hosting nine Stay and Play sessions for children and their families, including a Children’s Week event (pictured).
- Hosting several events for early childhood educators and teacher education students.

### Activity plan for 2023

- Continue to find appropriate ways to provide access to the CTC space and equipment to an increasing number of children from diverse backgrounds, their families and educators.
- Continue to support Digital Child members to access the CTC for research purposes.
- Disseminate findings of work being conducted in the CTC.

**University of Wollongong’s Children’s Technology Play Space:** The University of Wollongong (UOW) Children’s Technology Play Space is housed within Early Start at UOW (alongside the Discovery Space) and serves as a living laboratory for the Centre.

Our goals for the Children’s Technology Play Space (CTPS) in 2022 were to create a space designed for children’s digital play on UOW campus that would serve as a living lab for the Centre but also connect to and expand the work and reach of Early Start at UOW. The CTPS is a translation space for research to help children, families and educators realise the potential of digital technologies in their lives. In 2022 the space open for more than 150 hours for Digital Playgroups with more than 250 children visit with their adults (many of whom became repeat visitors!).

### Highlights of 2022

- Designed a space where children and families want to visit – a space that includes digital technologies alongside the non-digital, within a carefully thought-out space conducive to early childhood pedagogies.
- Officially launching the space in March (pictured), welcoming children and their adults to play and learn through a range of digital activities and gaining media coverage about the space.
- Hosted weekly Digital Playgroup sessions with a different focus each month. In 2022 we worked with children and their families with a range of technologies including digital microscopes, augmented reality apps, iPads and Apple pencils, cameras, iMovie, GarageBand and robots.
- Provided children and their adults with experiences that have a strong research base enabling us to talk with families about current research and expose children to meaningful and appropriate experiences
- Facilitated virtual excursions to children and educators in pre-schools around NSW to support Simultaneous Read Aloud, Indigenous Literacy Day, Book Week and Children’s Week
- Launched and held our first film festival where children scripted, filmed and edited their own short films

### Activity plan for 2023

- In March 2023 we will co-host (with UOW Early Start’s Discovery Space) a Festival of Digital Play where we will welcome children and their adults to explore digital play
- Offer Digital Playgroup sessions in direct connection with CORE centre projects (as example, in 2023 we will implement a STEAM program informed by recent systematic review work that highlighted where and with whom our attention needs to be)
- Engage families and children in robust conversation about data privacy and digital futures

## Indigenous research and engagement

### New Centre policy to enhance digital futures for Aboriginal and Torres Strait Islander families.

A new policy at the ARC Centre of Excellence for the Digital Child will ensure Indigenous research undertaken by the Centre ethically and positively serves Aboriginal and Torres Strait Islander children and families.

The Aboriginal and Torres Strait Islander Research Ethics Policy sets expectations, standards, and guidelines for conducting Indigenous research, from the conception of initial ideas through to dissemination of research findings.

Led by the Centre's Indigenous Advisor, Associate Professor Marnee Shay, the policy demonstrates the Centre's commitment to positively embed and advocate for Aboriginal and Torres Strait Islander peoples and voices across its research.

"We know that Indigenous people are among the most researched people in the world, yet that research has not resulted in significantly improving our wellness, education, imprisonment rates, and a whole range of other social, economic, and health indicators," said Dr Shay.

"This policy ensures that Indigenous research undertaken within the Centre produces rigorous research and high-quality outcomes that reflect Indigenous children and families' aspirations, interests, and voices."

The policy draws from two key Indigenous research ethical guidelines in Australia: the AIATSIS Code for Ethics for Aboriginal and Torres Strait Islander Research (2020) and the NHMRC Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders (2018).

"These are rigorous guidelines that were developed with input from diverse Indigenous experts and researchers. The Centre's policy is grounded in these principles, definitions, and frameworks to conduct research in a way that enables Indigenous self-determination, leadership, high impact, value, and accountability," said Associate Professor Shay.

The policy was developed in collaboration with Indigenous and non-Indigenous Centre members: Professor Susan Danby, Troy Meston, Professor Grace Sarra and Professor Annette Woods. The policy will be supported by a professional development program for Centre researchers to build capacity and capability in implementing the policy in research settings.

Associate Professor Shay, whose maternal connections are to Wagiman country in the Northern Territory, is an ARC Discovery Australian Aboriginal and Torres Strait Islander Award Senior Research Fellow with extensive research expertise in Indigenous education and policy. She is leading new research that explores the role of co-design in research, policy and practice in Indigenous education settings.

These projects include Co-designing Indigenous education policy in Queensland (funded by the ARC), and Binung Ma Na Du: cultural stories and living histories on Wakka Wakka Wakka Country (funded by Australian Institute of Aboriginal and Torres Strait Islander Studies), which will provide the first evidence of its kind on how co-design is conceptualised and enacted with aim of improving outcomes in Indigenous education.

"As an Aboriginal researcher, I know the impact that research underpinned by the principles in the policy can have in Indigenous communities when it is done well. It leaves seeds that continue to grow and be nurtured well beyond the life of the project," said Associate Professor Shay.

### Yarning about Reconciliation

The theme for Reconciliation Week in 2022 was Be Brave. Make Change. Chaired by the Centre's Indigenous Advisor, Associate Investigator Marnee Shay, this event was an opportunity for members to listen to the stories and wisdom of renowned Elder, educator and artist, Aunty Denise Proud, and Linda Harnett (Reconciliation QLD) about their many years of advocacy and work in the Australian reconciliation movement nationally.

Reconciliation has diverse meanings for different people. While Aunty Denise could not attend the event due to illness, we unpacked the many perspectives on reconciliation, Australian histories, the path forward in 'making change' and the implications for researchers and for Centre members in implementing the principles that underpin the Indigenous Research policy.

### World Indigenous Peoples Conference on Education 2022

The World Indigenous Peoples Conference on Education 2022 was held from 26-30 September in Adelaide, under the theme Indigenous education sovereignty: our voices, our futures.

Chief Investigator Grace Sarra and renowned Elder, educator, artist and friend of the Centre, Aunty Denise Proud, represented the Centre and delivered a presentation titled Research capacity building and beneficence in Indigenous research.

The room was at full capacity, and there was lots of engagement about the concept of codesign and the research projects that the Centre is undertaking and has undertaken with Indigenous communities.



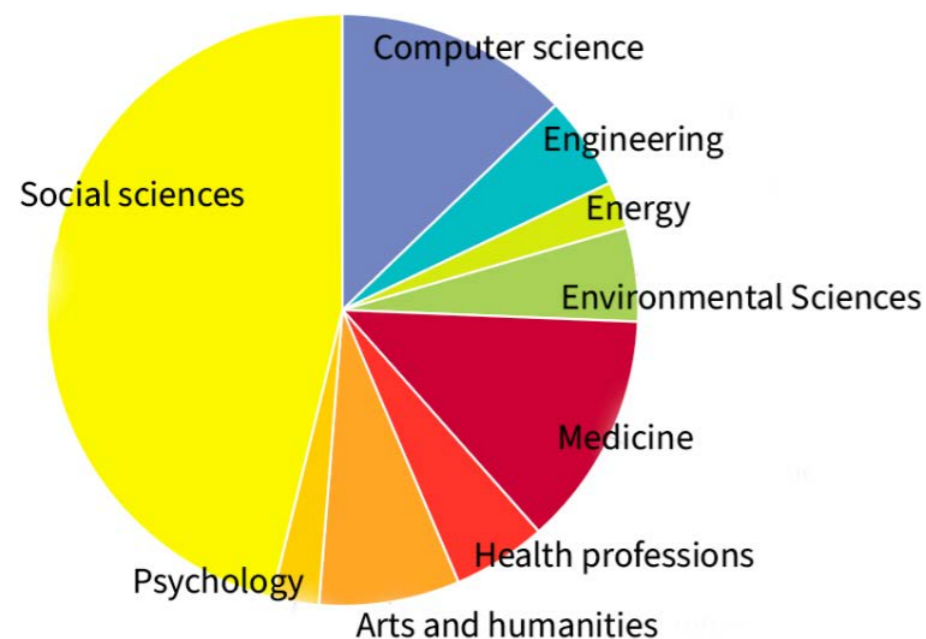
## Supporting transdisciplinary research

Our transdisciplinary approach to research defines our work, and ensures that our research outcomes intersect across areas of Health, Education and Connectedness to provide a holistic view of children's experiences and the impact of digital technologies. To support our researchers to collaboratively create new conceptual, theoretical, methodological, and translational innovations that integrate discipline-specific approaches, Chief Investigator Julian Sefton-Green, Research Fellow Kate Mannell and Research Fellow Romaine Logere developed and ran a series of transdisciplinary workshops across August – October 2022.

In the first three workshops, theories of transdisciplinarity from a range of fields, and areas of transdisciplinary connection between member's research interests and disciplines were examined. From these conversations a list of common issues was compiled, from which the following themes emerged:

- Issues/anxieties around how technology is perceived
- Centring children's voices and agency

In the final workshop – a full-day session held at Deakin Node in Melbourne – members tested whether a transdisciplinary project could be developed from these themes and established plans for ongoing transdisciplinary work in the Centre. The



SciVal analysis that gives an overview of the Subject Areas of research outputs. These Subject Areas are assigned to all articles via the journals in which they are published. An article can belong to more than one Subject Area.

outcomes include:

- A project that will create and amplify stories about how digital technologies are being developed and used by Gunya Meta, a non-profit organisation that serves the needs of Aboriginal and Torres Strait Islander children and their families in Logan, Queensland.
- A collaborative Working Paper reflecting on the group's experience of the workshop process (working title: Seeding a healthy, educated, and connected transdisciplinary culture: opportunities & challenges).
- A journal article examining the methodological considerations of conducting transdisciplinary workshops within an online environment.
- Opportunities for continuing to develop a transdisciplinary community of practice across the Centre in 2023, including a seminar series and an annual workshop.
- Establishing the Research Infrastructure, Support and Transdisciplinarity (RIST) Portfolio to manage and support ongoing production of the Digital Child Working Paper series and other research capacity building related to a transdisciplinary approach to digital childhood.

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# ACODA

LONGITUDINAL STUDY

## AUSTRALIAN CHILDREN of the Digital Age.

### Australian Children of the Digital Age - Longitudinal Study

“What and how much technology is currently used by young children, and to what effect?”

Digital technologies are rapidly changing. They are used with, and accessed by, even the very youngest children. Our global-first Australian Children of the Digital Age (ACODA) Longitudinal Study investigates the extent, nature and ongoing effects of Australian children's engagement with digital technologies. We are the first study in the world to investigate children's digital engagement at a population level, documenting and tracking patterns of digital engagement of more than 3000 Australian families and their children from birth to seven years of age.

Our study is designed to provide the big picture; to identify potential problems and unmet possibilities associated with digital technologies in early childhood. Our study will build new understandings to help identify policy and practice 'hot spots' for detailed investigation, with the aim of informing solutions and opportunities for optimisation for the diversity of Australian children, their families and society. ACODA is uniquely transdisciplinary, intersecting across areas of Health, Education and Connectedness to provide a holistic view of children's experiences and the impact of digital technologies.

Additionally, ACODA will identify how contemporary use of digital technology varies – across different social and geographical groups – along with other factors that relate to digital technology use; for example, characteristics of the child (such as gender, birth order), family make up (e.g., single parent, teen parents, dual income, high-tech use parents).

Sitting within the longitudinal study are nested studies that focus on the Healthy Child, Educated Child and Connected Child. These studies will use subsamples of either several hundred or several dozen participants from the study. While they vary in design, methodological approaches and analytic frameworks, each of the programs link and connect with others to provide a holistic view of children's experiences digital technologies and their impact.

### Progress in 2022

#### Establishment of Leadership Team and Working Group

An ACODA Leadership Team was established, comprising Centre Director Susan Danby; Chief Investigators Daniel Johnson, Grace Sarra and Juliana Zabatiero; and Project Manager Shelby Marrington. An ACODA Working Group was formed and met regularly throughout the year, comprising researchers across the Centre's six nodes and covering a range of disciplines and expertise.

#### Progress on study ethics application

Major work was undertaken to finalise the ACODA ethics application, with plans to submit in early 2023. The ethics application has a number of components, including (but not limited to) survey question pool, consent forms, participant information sheets, recruitment procedure and project description document.

#### Survey development

Significant progress was made to develop and refine the study survey, including wide-ranging consultation with members and partners on the survey's constructs and measures, and drawing from well-established pools of research measures available. These constructs and measures include areas of technology exposure, socio demographics, child characteristics and behaviours, and child physical activity and sleep.

#### Partner consultation

We undertook extensive partner consultations to form recruitment strategies, survey questions ideas and other ways to connect the research to real world applications. Some of the important issues raised by partners within this space that need to be measured include relationships and communication, health and well-being, citizenship, play and pedagogy, safety and privacy, content and use, child's voice and experience, equity and inclusion/exclusion, diversity, awareness and knowledge.

#### Branding the study

A new name and logo were created for the longitudinal study – the Australian Children of the Digital Age (ACODA) Longitudinal Study. Formed in consultation with Centre members and partners, the new brand will help create a visual profile for the study as it heads towards recruitment and marketing in 2023.



## Healthy Child program

How do we balance the health risks of digital technologies against access to knowledge and social interactions that provide opportunity for positive physical and emotional wellbeing?

Our Healthy Child research program aims to produce high-quality evidence about the positive and negative health and wellbeing effects associated with digital technology use by young children and the ways that these should be navigated.

We focus on the key developmental areas of physical wellbeing, language and cognition, and self-regulation, focussing on screens, communication, and videogames.

Drawing on research outcomes, we'll develop and test processes, products and services to improve children's engagement with digital technologies. The program will also explore emerging and future technologies for their potential to support and promote children's development, health and wellbeing.

### Key projects address

#### Screens and physical wellbeing

- Effects of exposure to digital screens on children's physical development and behaviours
- Relationship between digital technology use and sleep in early education and care settings and in the home
- Effective strategies to encourage and promote active rather than passive digital use

#### Language and cognition

- Investigate possible positive and negative effects of digital technology use on children's cognitive development, including language and visual processing
- Address concerns about the detrimental effect that digital technology use may have on children's language development
- Provide guidance to understand how peers, siblings, and adults should interact with each other during digital play

#### Video games and children's wellbeing

- Examine the influence of video game play on young children's wellbeing and development, particularly focusing on social and emotional development, self-regulation and mood

### Project highlight: Digital technology and sleep routines in daily life

Sleep has direct consequences for learning, overall health, and emotional control and wellbeing in children. The interactions, family choices, and behaviours around technology and sleep are not well known, despite evidence of strong cross-sectional associations. Due to the speed at which technology has been advancing in recent years, the subsequent proliferation of devices available, and the near-ubiquitous use of technology, prior understandings of the use of digital technologies in the home are likely to be outdated. This project is a first step to gather rich qualitative data about technology use in the home and will identify the ways in which this technology use fits within household routines, especially sleep routines for children during the first years of formal schooling

### Project highlight: Family and community perspectives on digital technology use by young children

This project will capture what is known about the current perspectives of the community regarding digital technology use by young children, including parents, health professionals, service providers and industry. The project will synthesise what is already known about current perspectives in the available literature, and methods used to capture these. The project will also involve original studies that will capture new data on current perspectives, and how parents, caregivers and health professionals access information about digital technology use.



Healthy Child co-leads: Professor Simon Smith, Professor Leon Straker, and Associate Professor Sonia White

### Research outputs

This list of research outputs are examples of the publications authored by researchers in this program during 2022.

Arabiati, D., Al Jabery, M., Robinson, S., Whitehead, L., & Mörelius, E. (2022). Interactive technology use and child development: A systematic review. In *Child: Care, Health and Development*. Wiley, DOI: 10.1111/cch.13082

Burley, J., Samir, N., Price, A., Parker, A., Zhu, A., Eapen, V., Contreras-Suarez, D., Schreurs, N., Lawson, K., Lingam, R., Grace, R., Raman, S., Kemp, L., Bishop, R., Goldfeld, S., & Woolfenden, S. (2022). Connecting Healthcare with Income Maximisation Services: A Systematic Review on the Health, Wellbeing and Financial Impacts for Families with Young Children. In *International Journal of Environmental Research and Public Health* (Vol. 19, Issue 11, p. 6425). MDPI AG. DOI: 10.3390/ijerph19116425

Hood, R., Zabatiero, J., Silva, D., R. Zubrick, S., & Straker, L. (2022). 'There's good and bad': parent perspectives on the influence of mobile touch screen device use on prenatal attachment. In *Ergonomics* (Vol. 65, Issue 12, pp. 1593–1608). Informa UK Limited. DOI: 10.1080/00140139.2022.2041734

Straker, L., Booth, V., Cleland, V., Gomersall, S., Lubans, D., Olds, T., Reece, L., Ridgers, N., Stylianou, M., Tomkinson, G., & Hesketh, K. (2022). Reimagining physical activity for children following the systemic disruptions from the COVID-19 pandemic in Australia. In *British Journal of Sports Medicine* (Vol. 56, Issue 16, pp. 899–900). BMJ. DOI: 10.1136/bjsports-2021-105277

## Educated Child program

How do we harness digital technologies to optimise learning and access to knowledge through active interactions and development of engaging and thought-provoking technologies?

Our Educated Child program aims to advance understandings of how children in diverse communities participate in digital learning and explore how participation might engage with curriculum guidelines and educational and learning practices.

We will use this knowledge to develop models, frameworks, technology innovations and good practices of digital learning that build children's educational opportunities, to foster inclusiveness and equitable outcomes.

### Key projects

#### Learning in diverse settings

- investigate the uses of digital technology within a family context across diverse settings
- explore how children learn by using digital technologies across a wide range of informal and formal learning settings (for example, at home, in playgroup and childcare, museums, libraries and schools)

#### Digital technology design to inform learning

- design new technologies that are scalable and affordable to support early childhood curriculum and foster interactions in educational settings, including in face-to-face and distance modes
- collaborate with children, teachers and parents in technology design and implementation
- focus on aspects of curriculum and pedagogy in early childhood classrooms and other learning spaces

#### Active learning and play in digital worlds

- investigate children's engagement with digital technologies that shape creativity, curiosity, inquiry, problem solving, and knowledge production to support curriculum and pedagogies of learning
- undertake research within a range of playful learning sites designed to spark curiosity and engagement by encouraging hands-on exploration and learning through play

### Project highlight: Young children's creativity and connected learning with digital technologies – Case studies from the home, play-group experiences, early years centres and schools

This core project is multi-faceted, with nested studies investigating the impact of digitisation on the nature of young children's creativity and connected learning experiences. Working with teachers in schools, early years centres, play group experiences and families at home, this case study research is identifying the digital elements in children's learning environments, nature of their digital play, teacher pedagogies and parental engagement.

The impact of digitisation on children's creativity is being explored across the dimensions of Product: original and fit for purpose, Person: perspectives on who does the creative thinking, Place: elements of an enabling environment and Process: characteristics of children's creative thinking.



Educated Child co-leads: Professor Susan Danby, Professor Lisa Kervin, and Professor Peta Wyeth.

### Research outputs

This list of research outputs are examples of the publications authored by researchers in this program during 2022.

Barblett, L., & Barratt-Pugh, C. (2022). Shifting the balance of power for families through a strengths-based book gifting program. In *Relationships with Families in Early Childhood Education and Care* (pp. 113–121). Routledge. DOI: 10.4324/9780367816100-14

K. J. Murcia, C. Campbell, M. M. Joubert, & S. Wilson (Eds.), (2022), *Children's Creative Inquiry in STEM. Sociocultural Explorations of Science Education*. Springer International Publishing. DOI: 10.1007/978-3-030-94724-8

Church, A., Bateman, A., & Danby, S. (2022). Conversation Analysis for Early Childhood Teachers. In *Talking with Children* (pp. 21–37). Cambridge University Press. DOI: 10.1017/9781108979764.002

Corser, K., Dezuanni, M., & Notley, T. (2022) How news media literacy is taught in Australian classrooms. *Australian Educational Researcher*, 49(4), pp. 761-777. DOI: 10.1007/s13384-021-00457-5

Houen, S., & Danby, S. (2022). Digital Technologies. In *Talking with Children* (pp. 204–226). Cambridge University Press. DOI: /10.1017/9781108979764.011

Johnston, K., Kervin, L., & Wyeth, P. (2022). STEM, STEAM and Makerspaces in Early Childhood: A Scoping Review. In *Sustainability* (Vol. 14, Issue 20, p. 13533). MDPI AG. DOI: 10.3390/su142013533

Murcia, K., & Cross, E. (2022). Empowering Early Childhood Teachers to Develop Digital Technology Pedagogies: An Australian Action Research Case Study. In *STEM, Robotics, Mobile Apps in Early Childhood and Primary Education* (pp. 33–53). Springer Nature Singapore. DOI: 10.1007/978-981-19-0568-1\_3

Theobald, M., Busch, G., Mushin, I., O'Gorman, L., Nielson, C., Watts, J., & Danby, S. (2022). Making Culture Visible: Telling Small Stories in Busy Classrooms. In *Storytelling Practices in Home and Educational Contexts* (pp. 123–148). Springer Nature Singapore. DOI: 10.1007/978-981-16-9955-9\_8

## Connected Child program

How do we balance access to social and knowledge connections in the digital world against risks of surveillance, infringements of privacy, and child rights?

Our Connected Child research program investigates important issues associated with children's use of the Internet and mobile technologies related to data analytics, online engagement and commercial influences.

We will use these understandings to produce technology innovations for young children that shape positive relationships with peers, family, community, government and commercial entities. We aim to deliver outcomes that respect children's privacy, rights, and citizenship; and advance knowledge about the role of companies and government as big data penetrate everyday family life.

### Key projects

#### Data analytics and the digital child

- investigate how data from digitally connected interactions are being captured, analysed and used
- explore the impact that this widespread analysis may have on children and their families, and the risks and opportunities
- examine digital profiles and educational analytics, personal technology that tracks and supports behaviour and personalises experiences, the Internet of toys, and online games and apps
- investigate the influences of data collection and analytics by examining what, how and why of data capture, and considering who 'owns' the data

#### Children online

- explore what constitutes safe and positive interactions in online environments that create new ways for children to communicate and engage with others
- focus on the extent to which young children encounter unsettling content through online media and investigate strategies for protecting children from such interactions
- co-design activity focusing on strategies that allow for the development of new digital technologies for enabling greater child control and agency in online social interactions, and mechanisms to support respectful interactions

#### Commercialisation and the Digital Child

- examine how commercial interests affect children's behaviour, shape family dynamics and influence educational institutions
- investigations will encompass marketing of food, toys and media; commercialisation in school, leisure and at home; and influences on contemporary digital childhoods

#### Project highlight: Digital safety and citizenship roundtables with LEGO Foundation Asia-Pacific

researchers at ECU partnered with the LEGO Foundation Asia-Pacific to explore 3–13-year-old Indian, Korean, and Australian children's experiences of digital citizenship. In roundtable discussion groups utilising play-based, participatory methods such as drawing and LEGO play, children as young as 3 displayed developing senses of personal agency and individual responsibility in digital contexts. Demonstrating knowledge and experiences of risks like cyberbullying and hacking, positive affordances including socialisation and play with users, identity formation, and consideration of others were also revealed.

#### Project highlight: Developing an EdTech Database: A design intervention

Childhood is now digital by default. In the early childhood education and care sector, service providers have increasingly partnered with edtech providers to integrate technological solutions in learning documentation, family communication, organisation and staff management, and so on. In the home, parents and caregivers are faced with a gigantic pool of 'consumer edtech' products, rendering informed decision-making increasingly challenging.

This project aims to reveal how commercial, educational, and governmental interests intersect in the growing space of edtech in Australia by constructing a framework for developing a repository of educational and edutainment apps, software, and devices.



Connected Child co-leads: Professor Sue Bennett, Professor Lelia Green, and Professor Julian Sefton-Green.

### Research outputs

This list of research outputs are examples of the publications authored by researchers in this program during 2022.

Dezuanni, M. (2022) Nordic childhoods and entertainment 'supersystems' in the digital age. In Kumpulainen, Kristiina, Kajamaa, Anu, Erstad, Ola, Mäkitalo, Åsa, Drotner, Kirsten, & Jakobsdóttir, Sólveig (Eds.) *Nordic Childhoods in the Digital Age: Insights into Contemporary Research on Communication, Learning and Education*. Routledge, Abingdon, Oxon, pp. 201-206. DOI: 10.4324/9781003145257-22

Foster-Thorpe, F., Bennett, S., (2022), Digital lifetime of a child born today, *Journal and Proceedings of the Royal Society of New South Wales*, DOI: 10.3316/informit.576666159906350

Green, L., & Le, V. T. (2022). Holding the Line: Responsibility, Digital Citizenship and the Platforms. In *Palgrave Global Media Policy and Business* (pp. 85–109). Springer International Publishing. DOI: 10.1007/978-3-030-95220-4\_5

Matamoros-Fernández, A., Rodriguez, A., & Wikström, P. (2022). Humor That Harms? Examining Racist Audio-Visual Memetic Media on TikTok During Covid-19. In *Media and Communication* (Vol. 10, Issue 2, pp. 180–191). Cogitatio. DOI: 10.17645/mac.v10i2.5154

Pangrazio, L., & Sefton-Green, J. (2022). *Learning to Live with Datafication*. Routledge. DOI: 10.4324/9781003136842

Ruiz-Gomez, A., Leaver, T., & Abidin, C. (2021). Playing YouTube: How the Nancy YouTuber doll and app position children as aspiring YouTube influencers. In *International Journal of Cultural Studies* (Vol. 25, Issue 2, pp. 121–140). SAGE Publications. DOI: 10.1177/13678779211063222

# Partner engagement

## Fostering collaborative partnerships

Our partners provide us with real-world intelligence and specialist skills about children's digital technology experiences, including children's rights and online safety. Our partners are critical in communicating our findings and sharing stories and outcomes to the wider public.

In 2022, the Centre welcomed ACMI (the Australian Centre for the Moving Image) and the Isolated Children's Parents' Association Queensland (ICPA Qld) as new partners. Read more about our new partners and ongoing partner work below and in our spotlight engagements on engaging with Centre Partner Investigators, Digital citizenship education and foregrounding rural and remote voices.

### ACMI partnership opens up public discourse on digital childhoods

A series of seminars delivered in partnership with the Australian Centre for the Moving Image (ACMI) has opened to the public ideas, discussion and debate on digital childhoods.

"We see this as a really important opportunity to collaborate with other institutions and organisations, as well as provide the wider community with insights from experts in the field," said Chief Investigator Luci Pangrazio, who convened the first seminar on 2 June on the topic of children's digital rights and data privacy.

Led by panel chair Associate Investigator Anna Bunn, the panel included Victorian Information Commissioner Sven Bluemmel, Reset Australia's Rys Farthing, UK lawyer Emma Day, and Associate Professor Cathrine Neilsen-Hewett.

The panel discussion centred around the recent introduction of the Children's Code in the UK, and how it compares to Australia's protection of children's personal information.

The second seminar on 26 October brought together education technology developers, industry experts and academics to discuss Australian EdTech for better digital childhoods.

Led by panel chair Chief Investigator Julian Sefton-Green, the panel included ABC's Head of Digital Education Annabel Astbury, CEO and Founder of TalkiPlay Dr Annie McAuley, Simon Torok from Google's Education Technology, and Founder and CIO of Xplor Mark Woodland. Digital Child Associate Investigator Professor Susan Edwards acted as panel discussant.

"It was wonderful to bring together stakeholders from the industry, community and academia in this seminar to talk about what educational technologies mean for Australian children and how we can work together for better digital childhoods," said event convener Research Fellow Andy Zhao.

"Such cross-sectoral conversations are much needed as to support children and families in the digital age requires input and efforts from all sectors of society. I believe this seminar is only a starting point for future conversations and collaborations on creating healthy, educated and connected futures for children."

### Scitech partnership supports PhD student project

PhD student Kim Maslin has had the unique opportunity to work closely with Centre partner Scitech, an interactive exhibition space in Perth, on her project examining how to foster children's creativity with STEM activities in online learning environments.

"I've been working with Scitech to deliver parts of their program live to Year 1 children online, including an explosive science show, interactive puppet show and four hands-on STEM workshops during the school-based program," said Kim.

"Following this, they delivered four STEM challenges during the home-based program. The team at Scitech posted packages of materials for the teacher and families to use during the activities. The two Scitech facilitators were also interviewed about their experiences."

Kim said the real-world insights that she gained working with Scitech have been invaluable to her project.

"Scitech's industry expertise meant they were able to make suggestions for the delivery that I wouldn't have otherwise considered, certainly strengthening the overall quality of the research design," said Kim.

"The children were particularly excited about engaging in so many Scitech activities! It has also been wonderful to hear feedback from Scitech about how participating in this project has assisted them with their future planning."

Craig Bloxsome, General Manager Customer-Facing Delivery at Scitech, said being involved in the study has advanced their understanding of a workable digital school delivery method by 1-2 years.

"This project gave us the opportunity to rapidly prototype, go through a live trial and error process, and get to a point where we found something magical in one of our last show deliveries," said Craig.

Craig said the opportunity to collaborate directly with a regional teacher to shape a program to their needs was invaluable.

"We have continued our contact with the school that participated in Kim's research and will be collaborating with them again to trial the digital delivery of a different program to help us in our journey on being able to see more regional schools each year," said Craig.

### Collaborating across the globe

#### Strengthening our relationships with Centre Partner Investigators

The Centre's 14 international Partner Investigators across seven countries are global leaders across digital technologies, education, and media. Each contribute their expertise and insight across the research programs, and encourage mutual international collaborations and networks for research fellows and doctoral.

In 2022, work continued on strengthening research links and collaborations with our Partner Investigators, including Associate Professor Bieke Zaman, who visited the Centre in September.

I worked on the Internet of Toys project (Australian Research Council – DP180103922) led by Professor Lelia Green from Edith Cowan University (Australia) and in collaboration with the Catholic University of the Sacred Heart (Italy) and the University of Sheffield in (UK).

In this project, we studied the emerging communication world of the Internet of Toys –including communication in the family context, communication in the media, and communication in the toy industry. The central research question revolves around the positive affordances and potential negatives of children's internet-connected toys.

I am super grateful to have been invited to speak at the Centre's QUT node on 21 September, in conjunction with the official launch event. The talk was part of the International panel event "Internet of Toys: socialization, play and domestication", featuring panellists PhD student Francesca Stocco, and Partner Investigators Louise Kay and myself. The presentation reported on the findings of our ARC Internet of Toys study undertaken as part of an international research collaboration in Australia, Belgium, Italy and the UK. Our talk was also given at Curtin University, co-hosted by Edith Cowan University.

I found my visit to the Centre's nodes at QUT, ECU and Curtin a truly enriching and enjoyable experience. I am grateful to Chief Investigator Lelia Green who created the conditions to travel to Australia and meet warm and intelligent people in real life. Thank you Chief Investigator Lennie Barblett for introducing me to almost all people from the Centre who were present

at the launch event in September. Now I can finally put faces to names. I also enjoyed the conversations with researchers I never met before and this way hear more about the broad range of research, policy and services performed as part of the Centre. Thanks to the presentation sessions, I also had the opportunity to discuss research findings in more depth with many of the Centre's researchers. It was a privilege to speak to Centre Director Susan Danby in person and learn more about her insightful long term vision and the Centre's broader strategic programme.

Definitely, my role in the Centre broadens my academic network and is a true leverage for international collaborations. Thanks to the fruitful conversations during my recent visits to the Centre nodes in Australia, I also got to know more about the pedagogical and educational aspects of digital technologies, which is complementary to my own media, tech and communications background. I also got to know more about the situational differences related to learning, education and literacy programmes and how it matters for shaping the opportunities for children in a digital world. I think the Centre sets an example of how to work interdisciplinary and make strong societal impact. And I'm sure, the best is yet to come. The Centre supports Partner Investigators like me, in that they have defined a governance model which includes a variety of roles and stakeholder engagements. In this context, I am particular grateful to Lelia Green, not only for leading an important node within the Centre, but also for being such a perfect mentor and liaison for us as Partner Investigators.

– Partner Investigator Bieke Zaman



## Partnership foregrounds rural and remote voices

The Isolated Children’s Parents’ Association Queensland (ICPA Qld) rural and remote membership base has more than half the branches of ICPA Australia and over 1200 family members, offering excellent diversification of experience and interest, providing a valuable depth and breadth of potential study participants.

There is a real thirst for accurate and relevant information being shown by rural and remote families to help guide successful and useful digital engagement. With rural and remote children starting their online schooling experience at age five with e-Kindy and extending through to tertiary, being accurately informed about how to keep them educated, healthy and connected is critical.

Online learning is a highly utilised form of education for rural and remote students, especially for students of Distance Education. These students, due to the very nature of delivery of their core lessons, amass up to 3000 hours (exclusive of all other digital time) of online learning, before the completion of primary schooling. Given the digital challenges in educating some of the world’s most geographically isolated students who have limited access to adequate internet and hardware, there is understandably a heightened concern regarding children’s digital experiences. The rate of change to online learning has ICPA Qld members deeply concerned for their student’s education, health, and wellbeing.

Additionally, as demonstrated in the Digital Inclusion Index, lower-than-average digital literacy, access to hardware and available and affordable internet services put the rural and remote demographic at a real and significant disadvantage. As expectations rise on student’s digital connectedness, it is paramount that all children in Australia, regardless of their geographic location or socioeconomic level, have access to the mean level of digital experiences.

To date, ICPA Qld and the Digital Child have successfully passed ethics and commenced Stage One of the study into rural and remote children and the effects of online education. With a clear intention of gaining insight into a digital day in the life of a rural and remote child, the Centre and ICPA Qld continue to work towards a deeper understanding of concerns held by families who have limited educational access or opportunity.

ICPA Qld’s members’ main concerns lie around physical eye and ear development, cognitive retention of digital information and the quality and quantity of required online lessons. There is also interest in transferable knowledge beyond online programs and of understanding screentime involvement. Social and mental wellbeing, and participation inclusivity are also listed as being of concern. Along with the need to gain better understanding of neurodivergent children, consideration of the method, frequency and content of the on-air requirements for students receiving an Independent Education Plan, as these children are only accompanied by a home tutor and a teacher on the screen.

Further concern is also held for poor learning outcomes

and student engagement with limited teacher performance evaluation of online lesson delivery. ICPA Qld supports and encourages specific courses for training teachers and upskilling for practicing teachers for successful online delivery of the curriculum with best practice guidelines and measurable outcomes.

Teacher shortages, undeliverable core subject selections and globally connected themes has meant the inevitable push to an even greater reliance on being digitally connected for rural and remote students. While access to online services has many benefits, potential side effects are currently largely unknown, so it is essential that this form of learning is well understood.

These multifaceted concerns brought forward by our members, have helped shape the first stage of the newly formed partnership’s study. The first short questionnaire will be presented to member families in the near future and from there, families will directly engage with the Centre to generate more extensive research.

ICPA Qld hopes to forge a long-standing and mutually beneficial relationship. By facilitating access to ICPA Qld’s extensive member base for participation, along with ICPA’s national networks for sharing of information, the partnership endeavours to collect data from an often-untapped sector, who have much to offer from their experiences as end-users and in turn then providing relevant and accurate information to guide safe and successful students and their families with digital engagement. ICPA Qld is delighted that findings, current and upcoming, will be beneficial to all Australian students, and indeed, across the world.

Not all Australian children have the opportunity to play with other students at lunch or after school, or be involved in sports or bands, for sometimes months on end. As such, ICPA Qld recognises the need for digital education to complement human interaction and looks to quantify a balanced approach.

ICPA Qld additionally hopes to close the gap on online learning engagement through achievable participation and improved digital literacy and capacity combined with safe and informed approaches. We would seek to ensure that this is accomplished all while ensuring rural and remote children are not left behind and digitally excluded due to their non-urban location.

As this partnership has invited the participation of the Qld Department of Education, we hope the outcomes could influence future curriculum delivery, guide appropriate connectivity requirements, and shape teacher education programs.

ICPA Qld has enjoyed sharing some of the wonderful work the Centre has already completed with national ICPA members. The Centre produces high quality and relevant information that is a welcome balance to inaccurate and overwhelming fear driven information.

– Megan Easton (Communications Portfolio Leader, ICPA Qld)

## Collaborating to delivery digital citizenship education

As digital technology use becomes common place in the daily lives of young children, education on good digital citizenship is critical in the early years of their education.

While topics like privacy and security, cyberbullying, media literacy, and online relationships may seem like heavy subjects for children at 3 or 4 years of age, research indicates that the earlier these concepts are taught to children, the better prepared they will be to live in a digital world.

A new project funded by the eSafety Commissioner and led by investigators in the Centre is looking into how digital citizenship can be introduced to young children, and how we can help schools and educators empower their students to use technology responsibly and safely.

The Australian-first project will trial a digital citizenship curriculum in 15 schools around the nation developed in the US by Common Sense Education, a not-for-profit research and advocacy group who work to make the digital world better for children.

The Centre is partnering with Evolve Education, an organisation that delivers online safety and digital wellbeing programs to schools across Australia, to roll out the trial curriculum.

“We found that in most schools, online safety was just a patchwork of approaches. There didn’t seem to be any meaningful, consistent, or constant education happening in the space,” said Rebecca.

As a former teachers, Steve and Rebecca understand the pressure that’s on schools and educators to deliver effective digital citizenship education.

“For something to really work, it has to be sustainable, cost effective, and teacher-friendly,” Rebecca added.

Common Sense Education’s ‘plug-and-play’ curriculum ticked these boxes, including scoped and sequenced content for Prep/Foundation to Year 6 with resources such as videos, worksheets, and even a script for teachers.

“The Common Sense curriculum covers the broad range of skill sets and mind sets children need to make the most of the digital world,” Steve said.

These topics include privacy and security, media balance and wellbeing, news and media literacy, cyberbullying, and hate speech and digital drama.

“Most importantly, the curriculum addresses new online safety and digital literacy learning areas and general capabilities in version 9.0 of the Australian Curriculum,” Steve added.

Early data collected by Centre researchers as part of the project found that the curriculum was hitting the mark with teachers and students.

“Teachers are feeling confident, supported and excited about helping students navigate a space that primarily has been kept

in the shadows,” said Chief Investigator Michael Dezuanni, the Centre’s lead investigator on the project.

The feedback from students has also been positive, most evident by the rich discussions that occur during the lessons.

Professor Dezuanni said that it’s been fantastic from a researcher’s perspective to be working with Evolve Education to trial the curriculum and looks forward to the ongoing collaboration.

“We hope to build on the momentum of this project and continue to work with Evolve Education to bring digital citizenship education to as many schools as possible across the country,” said Professor Dezuanni.

# Mentoring and capacity building

## Building human capacity through mentoring and training

In 2022, the Centre delivered a number of programs and initiatives to shape future-ready researchers who can deliver high-impact and wide-reaching research in digital childhoods

Key initiatives included:

- establishing the Skills, Mentoring and Research Training (SMART) Portfolio, a working group comprising Centre members that drove and delivered capacity building and mentoring initiatives, including a series of masterclasses and a two-day SMARTer Days training event.
- awarding more than \$14k for three new projects led by early career researchers as part of our Capacity Building Grant, a funding initiative to enable our students and Research Fellows to undertake new and innovative projects.
- awarding two Early Career Researcher Exchange Grants (\$56,000) to give early- and mid-career researchers the opportunity to collaborate and build their research networks nationally or internationally..
- supporting a Writing Retreat for early career researchers at QUT node.
- running a series of transdisciplinary workshops to support our researchers to collaboratively create new conceptual, theoretical, methodological, and translational innovations that integrate discipline-specific approaches.
- facilitating the Research Leadership Workshop for Executive Committee members to enhance collaborative relationships, build a greater sense of shared leadership, and enable an integrative approach and culture.
- actively encouraging cross-nodal and cross-discipline higher degree research student supervision.

### SMARTer Days training event

SMARTer Days was a two-day training event hosted by the SMART Portfolio in August. Held off the back of our first in-person Digital Child Annual Meeting, SMARTer Days was designed to develop and enhance Centre members' research practice. More than 80 members – many of them early career researchers – gathered at QUT node or online to participate in the event.

Research Fellow Aleesha Rodriguez co-organised the event, and said that the opportunity to play a lead role in delivering the event under the mentorship of Chief Investigator Sonia White was beneficial to her as an early career researcher.

“The opportunity allowed me to work closely with senior academics and Centre professional staff, which helped facilitate informal mentorship. I learnt how to organise and run a two-day conference event, which had parallel sessions and social activities. These newly learnt skills equip me with the knowledge and confidence to continue facilitating conference events in the future,” said Aleesha.

Day one of SMARTer Days was led by Centre partner MCERA (Media Centre for Education Research Australia). Designed to build researchers' skills and confidence in working with the media and disseminating their research, the sessions included a presentation from The Conversation editor Misha Ketchell, a panel on engaging with the media, and interactive sessions on getting to know the media and helping researchers hone their message.

“I found the media training workshop to be the most beneficial because our job is not just about producing research but communicating that research to the broader public. The session presented approaches to confidently accept and deliver media requests and opportunities, as well as, it provided resources and strategies to navigate the ever-changing media landscape,” Aleesha continued.

Day two of SMARTer Days was targeted to early career researchers and higher degree research students. The day included practical sessions on writing for different audiences, securing research income and building a public profile, in addition to small group mentoring sessions.

### PhD supervision across nodes

“I genuinely feel fortunate to be the first HDR student at the Centre to be supervised by investigators from two nodes. I work under the supervision of Associate Investigator Jessica Mantei (University of Wollongong), Chief Investigator Lisa Kervin (University of Wollongong), and Chief Investigator Sonia White (QUT). The supervisory team and I meet fortnightly via Zoom. As I'm based in Brisbane, Sonia and I will meet at QUT node to work on eye tracker devices, setting up procedures, recordings, extracting, and planning data analysis.

The uniqueness of this supervisory research team is that we come from different backgrounds, perspectives, and research interests, but we all share a passion for early childhood research. I've had a rich experience working with Jessica and Lisa, who are passionate about children's literacy, in addition to working with Sonia, who is nationally recognisable in eye tracking research. This wealth of transdisciplinary knowledge has been an eye-opener and has helped me discover many research paths and learning opportunities.” – PhD student Salma Alruthaya

“I feel that Centre members benefited the most from the intimate nature of the training days. The two-days saw Chief Investigators sitting next to higher degree research students and the mix of formal training alongside informal mentorship provided the space to nurture a more tight-knit research community within the Centre,” Aleesha said.

### Grants enhance learning and opportunities for early career researchers

Research Fellow Aleesha Rodriguez was awarded an Early Career Researcher Exchange Grant, which gave her the opportunity to travel to Europe to meet Partner Investigator Margaret Leahy (Dublin City University), attend three international conferences and undertake a four-week exchange as a Visiting Scholar at the University of Sheffield.

“Networking and collaborating with international colleagues are invaluable to an ECR. The funding allowed me to meet and be known to folks whom I wouldn't have met otherwise, and be exposed to new ideas, methods, and research. I now have a better understanding of the field of children's rights in the digital environment and a clearer picture of who's-who and how my research in the Centre aligns with this emerging scholarship. I now feel more confident to approach colleagues and scholars to talk about ideas and potential collaborations, and to apply for opportunities in the future (e.g., grants, fellowships etc). I feel inspired and energised about the possibilities of my research within the Centre and more focused on how it can make an impact and contribute to world-leading research.” – Research Fellow Aleesha Rodriguez

PhD student Katie Fielding was awarded an Interstate Travel Grant. Based at Curtin University node in Perth, the grant allowed Katie to travel to QUT node in Brisbane where she met with QUT node researchers and spent time discussing the synergies between QUT and Curtin projects, potential data sharing opportunities, and in-depth discussions about future collaborations.

“The visit to QUT provided opportunities to make connections with and hear advice from Centre researchers outside of my node.”

“As a PhD student who began my research near the beginning of the COVID-19 pandemic, such travel to meet others in person has been very limited to date. The impact of meeting people outside of the confines of a Zoom call is immense. The connections made during this week will be built upon in my role as a Research Assistant in the 'Creative Cove' project which provides opportunities to work with the QUT 'See Us Using Technologies' team. The funding provided by the Centre in the form of the Internode Travel Grant meant that I was able to make an interstate trip which would have otherwise been out of reach, and I am very grateful for the opportunity.” – PhD student Katie Fielding

# Centre Culture and Connection

## Encouraging positive Centre culture and connection.

We have established several mechanisms for engaging members at every level, from student to Chief Investigator, and across all nodes in the Digital Child. These mechanisms include a fortnightly Digital Child Connect virtual catchup – a ZOOM meeting run by Centre Director Susan Danby which highlights Centre updates and invites questions from any member – and our annual meeting, the Digital Child Annual Meeting (DCAM).

In 2022, we had five portfolios – committees consisting of Centre members – that aim to foster developments in equity and diversity, Indigenous engagement, capacity and capability, research translation, communication and engagement, and research infrastructure and transdisciplinarity.

Our students and early career researchers have continued to drive activity in Centre clubs on Digital Ethnography, Early Career Research, and journal club.

### Avenues for connection

#### Digital Child Connect

Centre’s weekly online catch-up meetings are open to all Centre members and are an opportunity to hear the latest Centre news and updates and connect with fellow members.

The meeting is chaired by Centre Director Susan Danby.

#### Digital Child Annual Meeting (DCAM)

Our Digital Child Annual Meeting (DCAM) is the Centre’s flagship meeting for members. It is the centrepiece of knowledge-sharing and networking, with the aim to create links across members and the Centre’s six university nodes.

Due to a COVID-19 outbreak in early 2022, our inaugural DCAM in February was moved online, with the in-person DCAM rescheduled to August and held at Noosa in Queensland. Both events were significant occasions in the Centre calendar, allowing members to establish critical relationships, build research agendas, and progress research projects and planning.

#### Digital Child Annual Meeting (DCAM) Online

9-11 February

More than 90 members gathered online for three days of invigorating presentations, workshops and conversations at our inaugural DCAM in February. Originally scheduled to be held in Noosa, a last-minute change to an online meeting due to a worsening COVID-19 outbreak did not dampen the success and spirit of the event.

Highlights of the meeting included discussions on the Centre’s fundamental research questions and grand challenges, mentoring sessions for early career researchers, conversations on the Centre’s research culture, and discussions on ethical dilemmas in researching digital childhoods and the critical principals for ethical conduct of Indigenous research.

At the conclusion of DCAM Online, node-based dinners held

in Brisbane, Melbourne and Perth provided an opportunity for members to reflect and connect on the meeting.

“As a PhD student who has not yet done any research with children, it was fantastic to have researchers with a wealth of practical experience in this space” – PhD student Katrin Langton

“What really struck me was the growing sense of familiarity with each other – people were sharing spontaneously on screen, swapping contact details and setting up plans for connecting on projects across and within programs.” – Associate Investigator Jessica Mantei

#### Digital Child Annual Meeting (DCAM) In-person

22-24 August

Our inaugural in-person DCAM Noosa held on the Sunshine Coast in Queensland was a fantastic opportunity for our members to finally put Zoom faces to names!

“At DCAM Noosa I had the valuable opportunity to share the current progress and plans for a research study we were conducting, and I had other Centre members approach me to discuss the study.

This sparked conversations about similarities in their research work and encouraged us to think about how we might collaborate, or how our work could meet Centre objectives. Forming these connections was the highlight for me.” – Research Fellow Janelle Mackenziel DCAM in February.

Highlights of the three-day meeting included:

- hearing 3 Minute Project (3MP) updates from early career researchers
- rolling up our sleeves to collaboratively identify our research strengths and challenges, and contributing to a 12-month research plan
- an interactive transdisciplinary workshop to bring lines of inquiry into dynamic and generative discourse with other conceptual frameworks
- a panel discussion with the Advisory Committee who shared their suggestions, critiques and challenges for the Centre
- learning about children’s privacy and how it relates to Australian law.

## Centre clubs continue to flourish

Our Centre clubs continue to be platforms for members to develop their research skills and establish a community of practice in certain areas of research or within member groups.

The Digital Ethnography Club is for members interested in exploring aspects of digital and video ethnographic practices, such as digital equipment and resources, engaging in sustainable digital ethnography practices, and analysis of digital ethnographic data.

The Early Career Researcher (ECR) Club and HDR Student Journal Club are clubs for respective members to connect, share and learn with their peers.

The clubs are both self-organised and managed by ECRs and students, providing members who are young in their research practice with the autonomy and licence to set their own growth and development. Read more about our club's activities and achievements in 2022 below.

### HDR Journal Club

The Centre's Journal Club for Higher Degree Research students continues to be a well-attended monthly event that attracts research students at all levels of candidature to talk about academic research publications that inspire them. We have heard from research students at many different nodes, and across research backgrounds, including the health sciences, education, and media and communication.

As the club's goal has been to facilitate both academic and social connections between research students, we have also introduced quarterly HDR Roundtable discussions. These complement the Journal club by providing additional space to raise questions and share concerns regarding the challenges of higher degree research. The student community that has grown around the Journal Club's monthly events has also begun to support each other outside of these organised activities.

The club now provides a shared resources folder, which can be accessed by all Centre students, and includes student-curated resources on designing impactful research presentations, and candidature milestone documents. Interactions around club activities have also led to informal peer-mentoring. The Journal Club's student-led structure has seen it adapt to the Centre students' changing needs, with a generous and inclusive student community, keen to see each other succeed. – Katrin Langton, PhD student

### Early Career Researchers Club

In 2022, this ECR Club that supports Digital Child early career researchers grew to a membership of 50 people from all tiers of the Centre for the Digital Child, including one Chief Investigator, five Associate Investigators and the remainder being Centre Research Fellows and Research Assistants.

The membership is a national network as it spans all of the Centre's nodes. The idea of the ECR Club is that it is informal, collaborative and conversational. It is not a structured training session as such but a space for ECRs to collaborate with one another, present ideas in early formation, ask any question in a supportive environment, and to engage with the whole continuum of research colleagues from highly experienced researchers to those newly (or soon to be) qualified with PhDs.

The ECR Club has had international leaders in their fields present on using social media for research communications, creative approaches to academic writing, and the current state of play in EdTech, along with ECRs presenting on the early childhood education sector, digital citizenship, media literacy, and children's technology spaces. The ECR Club continues to be a highly valued space of connection for emerging Digital Child researchers. – Kylie Stevenson, Research Fellow

### Digital Ethnography Club

The Digital Ethnography Club was established after Centre members identified shared interest in exploring ways of researching digital childhoods using digital ethnographic methods. The club has relied on the generous contributions from centre members to lead and facilitate sessions that centre around the following themes:

1. Deepening understandings of what is 'digital ethnography'
2. Sharing examples/case studies from previous or ongoing research projects
3. Doing data analysis
4. Practicalities of data collection and methods
5. Ethical considerations

As an HDR student, participating in the Digital Ethnography Club has provided opportunities to learn and collaborate with beginning, early career, and highly experienced researchers, share research ideas and methods, and gain access to new research tools and resources. Additionally, participating in the digital ethnography club has enabled Centre members to stay up-to-date with emerging trends and issues in the field, as well as deepen our knowledge and understanding of digital culture. On a personal level, participating has been a generative experience that has supported my own research practice in couple of ways. First, by giving me the opportunity to present and seek feedback on my own research in a supportive environment. Second, by providing rich insights into digital ethnography methods, particularly around the practicalities of collecting and analysing data and the ethical considerations required. – Pip Amery, PhD Student

## Digital Child Portfolios

### Skills Mentoring, and Research Training (SMART)

The SMART Portfolio set out to establish a program for members founded on authentic consultation, with a Centre-wide survey used to identify the most important research training priorities. Based on the results of the survey, we were proud to deliver SMARTer Days, a two-day hybrid training event and three online masterclasses presented by international and national experts, industry partners and Centre members: The Masterclasses were:

- Professor David Silverman (Goldsmiths College, London), delivered a Qualitative Methodologies Masterclass Series and a public lecture on Qualitative Research for Social Impact.
- Representatives from industry partners Early Childhood Australia (Dr Dan Leach-McGill), C&K (Sandra Cheeseman) and Goodstart Early Learning (Dr Kate Liley) presented a panel on Early Childhood Education and Care Contexts and the Digital Child.
- A panellist of scholars from diverse perspectives presented on Ethics and Digital Research with Children, including Kim Gifkins (Curtin University), Associate Investigator Madeleine Dobson (Curtin University), Chief Investigator Louise Paatsch (Deakin University), and PhD student Gavin Duffy (Deakin University).

We formed and developed a cohesive Portfolio team, including an early career researcher and Chief Investigator co-chair arrangement for capacity building. All portfolio members actively contributed to SMART initiatives, but importantly our Portfolio members—who include Chief Investigators, early career researchers and PhD students—all shared organisational leadership of the different events.

### Indigenous Engagement

The portfolio set out to achieve two key objectives. The first was to develop a design work that speaks to Aboriginal and Torres Strait Islander children and families for engagement purposes. We appointed Indigenous graphic designer, Elaine Chambers (Cultural Edge Designs), to create a logo that incorporates Indigenous design and iconography. We look forward to launching the logo in 2023.

The second was to develop a survey to be implemented across the Centre to gain an informed understanding of where the Centre's strengths are in Indigenous research and what sorts of development opportunities people would like to improve their understanding and practice in Indigenous research settings. We engaged Research Assistant Naomi Fillmore to work with a core team from the portfolio to develop a survey of Indigenous research capability in the Centre.

The Centre increased its Indigenous researcher membership in 2022 with the appointment of Chief Investigator Grace Sarra and Associate Investigator Troy Meston. Our growing membership, in addition to creating a community of diverse Indigenous researchers in the Centre, is an ongoing goal for the Portfolio.

### Equity, Diversity, Justice, and Inclusion (EDJI)

We are committed to building an internal culture and an external approach to our research that demonstrates dedication to the principles of Equity, Diversity, Justice and Inclusion (EDJI). This committee will: establish core policies to ensure we meet our stated objectives, set up mechanisms for complaints and

address the behaviours as well as support anyone experiencing discrimination, harassment, or inappropriate behaviour; offer training and programs to support equity, diversity, justice and inclusion; ensure that recruitment advertisements use inclusive and unbiased language, and selection and interview panels reflect the diversity in the community; and encourage participation from diverse groups at all levels within the Centre.

EDJI supports flexible workplace practices, including alternative working hours and meeting times, video-conference options, and working from home arrangements and will develop strategies to increase employment/involvement of members of underrepresented groups, monitor and map the representation of diverse populations in our multiple research projects to ensure our commitment to diversity and inclusion throughout our research, and establish processes to hear the voices, perspectives, concerns and aspirations of children in key areas across our research.

### Research Translation

The Research Translation Portfolio aims to develop a Research Translation Plan that clearly outlines all aspects of the Centre's intellectual property, research translation and commercialisation arrangements and practices. In 2022, the RTP created the portfolio Terms of Reference and Working Document, outlining the group's objectives and strategies for research translation within the Centre.

Drawing from feedback from a Centre survey, which indicated that Centre members were keen to get practical and creative examples of research translation, in 2023 the portfolio will set out to create a zine to demonstrate examples of research translation, including virtual exhibitions, photo essays and even a puppet show. The 'zine' aims to demonstrate key research translation ideas for the Centre and give inspiration to creative translation for future research. The portfolio also plans to run a research translation competition and podcast series.

### Communication, Outreach, and Research Engagement (CORE)

The CORE Portfolio's purpose is to drive initiatives and activities that will support the communication and outreach objectives and strategies outlined in the Centre's Strategic Plan, including the following initiatives:

- Profile the Centre's research projects as core Centre work on the Digital Child website.
- Began development of a podcast series that reflects the research work being undertaken in the Centre and in alignment with issues of contemporary importance for stakeholders, set to launch in 2023.
- Provided Centre members with information on content creation and communication channels, including access to funding, to ensure members were aware of the opportunities available to translate research outcomes.
- Offer Centre members media support, including 'on-call' coaching from media mentors within the Centre.

Most importantly, the portfolio provided members across nodes and ranging from students to Chief Investigators with a forum share ideas and expertise that support the Centre's objective to become a trusted international authoritative source of information about children's use of digital technology.

# Communication and outreach

## Growing a national reputation through communication and outreach

Our research attracts strong interest from stakeholders who look after the health, education and digital lives of children; those who create and make technology for children; and from academic peers and institutions around Australia and the world.

In 2022, our researchers were featured in stories by a variety of news outlets and wrote articles for The Conversation.

The Centre also launched in the past year at an event attended by the Federal Minister for Education. We ran events for Children's Week 2022 with a series of online and in-person events across Australia and participated in external outreach initiatives.

### Communication Channels

#### Digital Child Blog launched

The Digital Child blog was launched in 2022 as a platform for the Centre to showcase its vibrant activity and provide insights into matters of digital childhoods for parents/carers, teachers and educators, and other stakeholders. Our blog posts were among the top visited pages on our website in 2022, with topics ranging from how to select apps to encourage imaginative play, how digital technology use influences children's behaviour and brain development, and how thinking about technology as the beach may lead to better outcomes for children.

The Digital Child Blog also launched an International Perspectives series, a collection of posts authored by the Centre's collaborators and connections from around the world. Curated by Chief Investigators Julian Sefton-Green and Michael Dezuanni, this initiative engages a range of international voices involved in innovative and original enquiries into digital childhoods. In our first posts, Professor John Potter (University London College, UK) wrote about learnings from the Play Observatory project, and Dr Inés Dussel (CINVESTAV, Mexico) shared reflections from her study on how teenagers use YouTube for school purposes in Argentina and Mexico.

#### Media coverage

The Centre gained traction in the media in 2022, with more than 70 media appearances or mentions of our researchers or the Centre on television and radio, and online. In addition to raising the Centre's profile, media coverage plays an important role in research dissemination. Early outcomes of some of our projects have been covered by the media, including the Pandemic Parenting project led by Research Fellow Andy Zhao, who

discussed the project's early findings on outlets that included ABC News and 9News Melbourne.

#### Social media platforms

Our Twitter, Facebook, and YouTube accounts continue to be an important platform for communication, connection and engagement. Twitter is our most active and engaged platform, with a strong following of researchers and academics interested in our work. As the Centre evolves, we aim to use our Facebook and Instagram platforms to share activities and outputs (such as resources and events) for families, carers, educators and health professionals, for whom these platforms are primarily targeted.

#### Digital Child newsletter

The Digital Child newsletter is a major communication channel for the Centre. It is a powerful and direct channel to share news, events, project information and resources. The Digital Child newsletter is available to anyone with an interest in the Centre, with more than 700 subscribers on our mailing list receiving seven editions over the course of 2022. The newsletters achieved a very high average open rate of 65%, with 43% of those clicking through links.

### Centre launch at QUT

On Wednesday 21 September, the Federal Minister for Education Hon Jason Clare MP officially launched the Centre at QUT Kelvin Grove among dancing LEGO robots and digital children!

The official launch is a significant milestone for the Centre, signalling to key stakeholders and the general public that the Centre has commenced operations.

Mr Clare was joined by presentations from QUT Vice-Chancellor and President Professor Margaret Sheil AO; Centre Director Professor Susan Danby FASSA; Australian Research Council Chief Executive Officer Ms Judi Zielke PSM; and Australia's eSafety Commissioner Ms Julie Inman-Grant.

The launch was MCed by Centre Deputy-Director Sue Bennett, together with Centre children Maggie, Ally and Harper.

"[This Centre] is a welcome addition to Australia's education and innovation excellence, and I am so very proud to be here today to formally open this Centre of Excellence."

– Hon Jason Clare MP, Federal Minister for Education

"This is the sort of research that can make a real difference to the lives of children and families across Australia as they navigate our ever changing digital age."

– Judi Zielke, Australian Research Council CEO

"I'm confident that the work of the Centre will have positive outcomes for children and those who will lead the digital and knowledge economy."

– Professor Margaret Sheil AO, QUT Vice Chancellor and President

"This Centre has the potential to supercharge our efforts to empower children to be the leaders and shapers of their online destinies."

– Ms Julie Inman Grant, eSafety Commissioner

"Our vision is to ensure young children grow up confident and healthy, connected and educated for the digital world"

"This has become especially important these last few years and the pandemic has changed the ways we live and reinforced the urgency and importance of our centre that investigates children and digital technologies."

– Centre Director Professor Susan Danby

## Children’s Week 2022

In October, the Centre celebrated Children’s Week 2022 with a series of online and in-person events hosted by our nodes across the country. The 2022 Children’s Week theme was based on the United Nations Convention on the Rights of a Child (UNCRC) Article 27: All children have the right to a standard of living that supports their wellbeing and healthy development. Through our Children’s Week activities, the Centre publicly demonstrated its support for a child’s right to a standard of living adequate for their physical, mental, spiritual, moral and social development, specifically through equitable access to digital technologies and positive support of its use.

Our celebrations included six seminars and two children’s events at our Children’s Technology Spaces, attended by more than 200 people in-person and online across the country. A selection of the seminars are available to view below. The celebrations also included a special Spotlight forum on ABC Radio Perth’s Mornings program featuring Chief Investigator Tama Leaver and Associate Investigator Crystal Abidin on a panel discussing the topic of social media, child influencers and online safety.

## Digital Child Play Zones @ Flowstate, Southbank

We were excited to be a part of the QUT Digital Media Research Centre’s 2022 showcase event at South Bank’s Flowstate venue in Brisbane on Saturday 8 October 2022. It was fantastic to welcome hundreds of children and families with digital activities and workshops in the Digital Play Zone pop ups facilitated by our QUT Children’s Technology Centre team, which included EV3 robots, Bee-Bots and Augmented Reality drawing apps.

We organised three Digital Child Play Zones:

**Art robots (2 – 8 year olds):** Create your own robot assisted art and talk to our researchers about implications of these technologies for learning. Bring your robot to life with Augmented Reality (AR) technology

**Robots in action (2 – 8 year olds):** Explore how a robot carries out your commands. Explore movement and control with robots to navigate a maze or complete a journey.

**Games and Avatars (2 – 8 year olds):** Create your own digital interactive game or an avatar.

“Not every child is going to be a programmer, and we know that. But these types of activities engage them in that world where they’re actually going to be using coding or programming. So getting [children] slowly into this at an early age helps excite and engage them, and helps them think about their future as well.”

– Associate Investigator Chris Chalmers

## ANZCA and AARE Conferences

The Centre was well-represented at this year’s Australian & New Zealand Communication Association (ANZCA) Conference (22-25 Nov) and Australian Association for Research in Education (AARE) Conference (27 Nov-1 Dec). The following Centre members were invited to speak:

### ANZCA Conference

- Curtin: CI Tama Leaver, AI Anna Bunn
- Deakin: RFs Jane Mavoa, Andy Zhao, Gavin Duffy & Kate Mannell
- ECU: RF Kylie Stevenson, RA Emma Jayakumar
- QUT: RA Guy Healy, CI Michael Dezuanni
- UOW: Deputy-Director Sue Bennett, AIs Tiffani Apps & Karley Beckman, RF Rebecca Ng

### AARE Conference

- Curtin: CI Leon Straker
- Deakin: CI Luci Pangrazio; AI Eve Mayes; RFs Andy Zhao, Jessica Laraine Williams & Alumnus Sarah Healy; PhD student Gavin Duffy
- ECU: CI Lennie Barblett; AI Pauline Roberts
- QUT: CIs Susan Danby, Annette Woods & Michael Dezuanni; RFs Sandy Hoen, Amanda Levido, Maryanne Theobald & Aleesha Rodriguez
- UQ: CI Alumni Karen Thorpe & Sally Staton; RF Laetitia Coles; PhD students Emma Cooke, Zhaoxi Zheng, Emily Westwood & Naomi Fillmore
- UOW: AIs Tiffani Apps & Karley Beckman, RF Rebecca Ng
- ACU: AI Suzie Edwards
- Advisory Committee: Barbara Comber
- Partner Investigators: Kate Highfield, Rebekah Willett

# Finances

2022 saw an increase in activity and expenditure from 2021 as expected with the recruitment of research staff, the Centre's inaugural in person Annual Meeting and the Centre's official launch occurring.

Awarding scholarships continued to be challenging, however several offers were made in 2022 for commencement in 2023 which will see an increase in this line item.

1 January 2021 – 31 December 2021

## Income

INCOME	TOTAL
ARC grant	\$5,218,698
University contributions	\$1,253,000
Partner contributions	\$154,000
Other income	-
<b>TOTAL</b>	<b>\$6,625,698</b>

## Expenses

EXPENSES	TOTAL
Salaries	\$3,029,814
Student scholarships	\$154,773
Research consumables and Equipment	\$131,334
Travel, meetings and workshops	\$228,058
Communication, outreach, education, engagement and other	\$94,108
Management and administration	\$40,058
<b>TOTAL</b>	<b>\$1,135,058</b>

## Digital Child In-Kind Partner Organisations

IN-KIND CONTRIBUTIONS	TOTAL
Queensland University of Technology	\$783,088
Curtin University	\$397,738
Deakin University	\$147,586
Edith Cowan University	\$319,714
University of Wollongong	\$318,274
The University of Queensland	\$90,000
ACMI	\$5,000
Australian Association for Research in Education	\$4,300
Australian Council on Children and the Media	\$10,000
Australian Human Rights Commission	\$2,000
California State University, Dominguez Hills	\$2,305
Catholic University of Leuven, Belgium	\$15,432
Catholic University of the Sacred Heart, Milan, Italy	\$4,158
Child Australia NT	\$14,950
Department of Education	\$100,000
Dublin City University	\$138,999
Early Childhood Australia	\$197,937
Eat More Pixels Pty Ltd	\$31,500
Erikson Institute	\$8,801
eSafety Commissioner	\$20,000
GOOGLE Australia Pty Ltd	\$25,000
Gyeongin National University of Education	\$9,826
Kinderling Kids Radio Pty Ltd	\$16,000
Lego Australia Pty Ltd	\$15,000
Media Centre For Education Research Australia	\$12,500
Oxford Internet Institute, University of Oxford, UK	\$15,208
Playgroup WA (INC)	\$5,000
SBS	\$38,000
SCITECH Discovery Centre	\$58,580
State Library of Western Australia	\$62,500
The Creche and Kindergarten Association Limited	\$17,000
The Isolated Children's Parents' Association of Queensland	\$20,000
The London School of Economics and Political Science	\$53,435
The Smith Family	\$13,132
The University of Sheffield, UK	\$32,996
University College London	\$5,208
University of Oslo, Norway	\$35,377
University of Wisconsin, Madison	\$13,400
Uppsala University, Sweden	\$31,797
<b>TOTAL IN-KIND CONTRIBUTIONS</b>	<b>\$3,091,741</b>

# Key Performance Indicators

KPI	Details	Target	Result
<b>KPI-1</b>	<b>1. Number of research outputs</b>		
KPI-1a	Journal articles	30	19
KPI-1b	Book	0	2
KPI-1c	Book Chapters	0	10
KPI-1d	Conference publications	0	1
KPI-1e	Publications with two or more Centre researchers from other nodes	4	4
<b>KPI-2</b>	<b>2. Quality of research outputs</b>		
KPI-2a	Percentage of book chapters in prestigious international presses	75%	75%
KPI-2b	Percentage of Q1 outputs	50%	50%
<b>KPI-3</b>	<b>3. Number of workshops/conferences held/offered by the Centre</b>		
KPI-3a	Major conferences hosted/offered by the Centre	2	2
KPI-3b	Seminar series - research	12	15
KPI-3c	Workshops - research development	5	22
<b>KPI-4</b>	<b>4. Number of training courses held/offered by the Centre</b>		
KPI-4	Training Workshops	4	18
<b>KPI-5</b>	<b>5. Number of additional researchers working on Centre research</b>		
KPI-5a	Postdoctoral researchers	6	9
KPI-5b	Honours students	6	7
KPI-5c	PhD students	1	7
KPI-5d	Masters by research students	4	0
KPI-5e	Masters by coursework students	4	4
KPI-5f	Associate Investigators	6	16
<b>KPI-6</b>	<b>6. Number of postgraduate completions</b>	0	5
<b>KPI-7</b>	<b>7. Number of mentoring programs offered by the Centre</b>	1	0
<b>KPI-8</b>	<b>8. Number of presentations/briefings</b>		
KPI-8a	To the public	12	21
KPI-8b	To government (parliamentarians and department/agencies at both State and Federal level)	10	2
KPI-8c	To industry/business/end users	8	16
KPI-8d	To non-government organisations	8	9
KPI-8e	To professional organisations and bodies	8	15
KPI-8f	Public policy seminar/event	1	1

KPI	Details	Target	Result
<b>KPI-9</b>	<b>9. Number of new organisations collaborating with, or involved in, the Centre</b>		
KPI-9a	New academic collaborative relationships	2	1
KPI-9b	New industry collaborative relationships	2	2
<b>KPI-10</b>	<b>10. Number of female research personnel</b>		
KPI-10	Female percentage	60%	92%
<b>Center Specific KPIs</b>			
KPI-11	Evidence-based resources for end-users (e.g., families, educators, health professionals)	1	7
KPI-12	New end-user technologies	0	0
KPI-13	Mobility of Centre members within and across nodes and partner sites - days per annum	90	25
KPI-14	Social media content creation - posts by Centre	150	234
KPI-15	Centre Director Node Outreach Program	1	1
KPI-16	Research Fellows and HDR student representation that includes a range of cultural backgrounds	2	8

# Activity Plan 2023

<b>RESEARCH</b>	<ul style="list-style-type: none"> <li>• Launch Longitudinal Study (ACODA) and conduct year 1 data gathering</li> <li>• Hold at least two Chief Investigator meetings/retreats</li> <li>• Complete research mapping of Centre projects</li> <li>• Pursue research agendas within each Centre research program (Healthy, Connected, and Educated)</li> </ul>
<b>GOVERNANCE</b>	<ul style="list-style-type: none"> <li>• Convene at least two Advisory Committee meetings</li> <li>• Replace Chair of Data Management Committee</li> </ul>
<b>MENTORING &amp; CAPACITY BUILDING</b>	<ul style="list-style-type: none"> <li>• Establish and launch formal mentoring program</li> <li>• Deliver training for HDR and ECR members</li> </ul>
<b>PARTNERS &amp; COLLABS</b>	<ul style="list-style-type: none"> <li>• Deliver stakeholder resources in partnership with collaborating organisation from industry or government</li> <li>• Hold at least two partner events</li> </ul>
<b>CENTRE CULTURE</b>	<ul style="list-style-type: none"> <li>• Hold in-person Digital Child Annual Meeting</li> <li>• Maintain Digital Child Connect virtual meeting series</li> <li>• Hold research translation competition during Digital Child Annual Meeting</li> </ul>
<b>COMMS &amp; ENGAGEMENT</b>	<ul style="list-style-type: none"> <li>• Launch Digital Child podcast</li> <li>• Enable Centre members to communicate about their research and engage stakeholders</li> <li>• Deliver public facing communication initiatives, including events and resources</li> </ul>



