Digital Child

Annual Report 2021

BUILDING OUR FOUNDATIONS

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Australian Research Council Centre of Excellence for the Digital Child

The Australian Research Council Centre of Excellence for the Digital Child is a transdisciplinary research centre committed to generating new knowledge, technology and practices to benefit Australian children and families.

Our research innovates and intersects across fields of health, education and technology to offer a holistic view of young children and their digital experiences.

The 2021 Annual Report charts our achievements in our establishment year, as we built the foundation for delivering our vision: Australian children, healthy, educated and connected.

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Director’s Message

Building our foundations

On behalf of the Australian Research Council Centre of Excellence for the Digital Child, I am pleased to present our 2021 Annual Report.

2021 was the Centre’s first year – our establishment year to build the solid foundations for a Centre of Excellence to deliver high-quality research and high-impact outcomes. It was also a year of uncertainties and disruptions as the world continued to grapple with the impact of the COVID-19 pandemic. Establishing a new Centre is challenging at the best of times. The added obstacles only served to bring out our strength and resilience, to unite our members across borders and oceans, and to fuel a determination to connect and collaborate with researchers, partners and stakeholders. The establishment plans occurred within the development of a Centre research culture of excellence that explicitly values the practices of intellectual rigor and equity, in tandem with a culture of generosity and respect of diverse expertise, collaboration, and values of inclusivity.

A generous, nurturing research culture of excellence, and an ethos of mutual support and collegiality, and cooperative and sharing environments.

We are delighted to report the establishment of the Centre Advisory Committee. Drawn from academia, government and community, the respected members of the Advisory Committee provide strategic direction for the Centre, with a key focus on how to equitably support children from all Australian contexts in a digital age. These directions are embedded within the Strategic Plan 2021 – 2027, produced through excellent Centre-wide conversations with members to encapsulate the Centre’s vision, priorities and actions.

It’s for these reasons I look back on the Centre’s 2021 achievements with immense pride and respect for our members, partners and collaborators, who all contributed in their own ways.

These key achievements include:

- welcoming 97 members to the Centre
- establishing the Centre Advisory Committee: Taryn Marks (Chair), Professor Barbara Comber AM, Emeritus Professor Paul Chandler and Megan Mitchell AM
- establishing four committees (Executive, Research, Data Management and Advisory Committees)
- developing our Strategic Plan, facilitated by Mark Douglas (Ethos Consulting) in wide collaboration with all members and partners
- establishing 19 research projects that demonstrate our strong transdisciplinary and cross-nodal focus
- making a commitment to positively embed and advocate for Aboriginal and Torres Strait Islander peoples and voices across our research and activities with the appointment of an Indigenous Advisor
- securing a $544,400 Office of the eSafety Commissioner’s grant, a Centre partner
- celebrating Children’s Week with a series of public and internal events
- launching the Digital Child Seminar Series with five public seminars on the topic of socio-materiality in a digital age
- building a research culture that is inclusive, collaborative, supportive and respectful, including the establishment of three Centre Clubs and weekly online catchups

These achievements form part of the foundation to deliver evidence-based transdisciplinary research related to children and digital technologies over the next seven years. There’s much more to do, and we are on track to deliver research to enhance public understanding, inform policymakers, and provide guidance for families, educators and others working with children, including technology creators, to support children growing up in a rapidly changing digital world.

We’re excited that you’ve joined us at the beginning of our journey. We can’t wait to show you what’s ahead.

Professor Susan Danby FASSA
Director, Australian Research Council Centre of Excellence for the Digital Child

About the Digital Child

Our vision: Australian children- healthy, educated, connected

Who we are

The Australian Research Council Centre of Excellence for the Digital Child is the world's first research centre dedicated to creating positive digital childhoods for all Australian children.

The Centre is a collective of researchers from Australian universities, administered by QUT in collaboration with Curtin University, Deakin University, Edith Cowan University, The University of Queensland and University of Wollongong. We draw expertise from our international researchers from 14 universities around the world.

Our partnerships with government agencies, technology developers, education sectors, policy makers and community groups help us incorporate real-world insights and link our research to a wide range of real-world applications.

What we do

We provide evidence-based transdisciplinary research related to children and digital technologies that leads to positive outcomes for children. We do this by translating research into practical applications, such as guidelines, resources, and curriculum and pedagogic practices.

We aim to enhance public understanding, inform policymakers and provide guidance for families, educators and those working with children, and technology creators, to support children to be confident growing up in a rapidly changing digital world. Our research innovates and intersects across fields of health, education and technology to offer a holistic view of young children and their digital experiences.

The heart of our research program is our Longitudinal Family Cohort Study – a seven-year study of 3000 Australian families, focussing on children from birth to eight years of age. The study is designed to provide us with the big picture; and to identify potential problems and unmet possibilities associated with digital technologies in early childhood. We'll document and track digital engagement in the early years of life and the effects on the Healthy, Educated and Connected lives of young children.

Why we're doing it

Children are growing, learning and connecting with digital technology that is rapidly evolving and changing. Yet little is known about young children's use of digital technologies and the positive impacts or potential risks and harms.

Australians are asking: How can technology help my child learn? How do I know good digital engagement from bad? How much technology is safe for my child? How do I keep my child safe online?

Our program of research helps address these questions for all Australians who look out for the health, education and happiness of young children, including parents and caregivers; teachers and educators; government and policy makers; technology creators; and community and business organisations.

Our vision is to ensure young children grow up healthy, connected, and educated in a rapidly changing digital world..

Our strategic objectives

- lead a comprehensive research program globally in children's use of digital technology
- translate our research findings to create more united understandings across disciplines, governments, communities, and families
- be recognised and valued by the Australian community as a respected and trusted voice regarding children's use of digital technology because of the evidence-knowledge we communicate
- inspire, equip and mentor the next generation of researchers to examine the impact of current and emerging digital technologies on the lives of children
- to create and nurture a true transdisciplinary research culture that respects difference and values diverse research-informed views

Our members

CHIEF INVESTIGATORS

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
Centre Director and Healthy Child Co-Leader
QUEENSLAND UNIVERSITY OF TECHNOLOGY

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
Healthy Child Co-Leader (Acting)
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR LISA KERVIN
Educated Child Co-Leader
UNIVERSITY OF WOLLONGONG

PROFESSOR TAMA LEAVER
CURTIN UNIVERSITY

ASSOCIATE PROFESSOR KAREN MURCIA
CURTIN UNIVERSITY

PROFESSOR LOUISE PAATSCH
DEAKIN UNIVERSITY

DR LUCI PANGRAZIO
DEAKIN UNIVERSITY

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

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

DR SALLY STATON
Chief Investigator
THE UNIVERSITY OF QUEENSLAND

PROFESSOR LEON STRAKER
Chief Investigator and Healthy Child Co-Leader
CURTIN UNIVERSITY

PROFESSOR KAREN THORPE
Longitudinal Family Cohort Study Co-Leader
THE UNIVERSITY OF QUEENSLAND

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
CURTIN UNIVERSITY

ASSOCIATE INVESTIGATORS

ASSOCIATE PROFESSOR CRYSTAL ABIDIN
CURTIN UNIVERSITY

ASSOCIATE PROFESSOR DIANA ARABIAT
EDITH COWAN UNIVERSITY

ASSOCIATE PROFESSOR LENNIE BARBLETT AM
EDITH COWAN UNIVERSITY

PROFESSOR MATTHEW BELLGARD
QUEENSLAND UNIVERSITY OF TECHNOLOGY

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
CURTIN UNIVERSITY

DR CHRISTINA CHALMERS
QUEENSLAND UNIVERSITY OF TECHNOLOGY

DR LEESA COSTELLO
EDITH COWAN UNIVERSITY

ASSOCIATE PROFESSOR CHRISTINA DAVIDSON
CHARLES STURT UNIVERSITY

PROFESSOR SUSAN EDWARDS
AUSTRALIAN CATHOLIC UNIVERSITY

ASSOCIATE PROFESSOR STUART EKBERG
QUEENSLAND UNIVERSITY OF TECHNOLOGY

ASSOCIATE PROFESSOR COURTENAY HARRIS
CURTIN UNIVERSITY

DR SHARON HORWOOD
DEAKIN UNIVERSITY

PROFESSOR MIZUKO (MIMI) ITO
UNIVERSITY OF CALIFORNIA, UNITED STATES

DR SHANTHA KARTHIGESU
EDITH COWAN UNIVERSITY

PROFESSOR KRISTIINA KUMPULAINEN
UNIVERSITY OF HELSINKI, FINLAND

ASSOCIATE PROFESSOR JESSICA MANTEI
UNIVERSITY OF WOLLONGONG

DR MYRTO MAVILDI
UNIVERSITY OF WOLLONGONG

TROY MESTON
GRIFFITH UNIVERSITY

ASSOCIATE PROFESSOR CATHRINE NEILSEN-HEWETT
UNIVERSITY OF WOLLONGONG

DR MARIA NICHOLAS
DEAKIN UNIVERSITY

ASSOCIATE PROFESSOR PAULINE ROBERTS
EDITH COWAN UNIVERSITY

PROFESSOR ANDREW ROHL

ROS SAMBELL
EDITH COWAN UNIVERSITY

PROFESSOR LAURA SCHULZ
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DR MARNEE SHAY
Indigenous Advisor
THE UNIVERSITY OF QUEENSLAND

DR NERIDA SPINA
QUEENSLAND UNIVERSITY OF TECHNOLOGY

ASSOCIATE PROFESSOR IRINA VERENIKINA
UNIVERSITY OF WOLLONGONG

PROFESSOR KERRYANN WALSH
QUEENSLAND UNIVERSITY OF TECHNOLOGY

PROFESSOR LISA WHITEHEAD
EDITH COWAN UNIVERSITY

PARTNER INVESTIGATORS

PROFESSOR OLA ERSTAD
UNIVERSITY OF OSLO, NORWAY

ASSOCIATE PROFESSOR ANN-CARITA EVALDSSON
UPPSALA UNIVERSITY, SWEDEN

PROFESSOR REBECCA EYNON
OXFORD INTERNET INSTITUTE AND UNIVERSITY OF OXFORD, UNITED KINGDOM

DR KATE HIGHFIELD
EARLY CHILDHOOD AUSTRALIA

PROFESSOR HYEON-SEON JEONG
GYEONGIN NATIONAL UNIVERSITY OF EDUCATION, SOUTH KOREA

ASSOCIATE PROFESSOR ALEXIS LAURICELLA
ERIKSON INSTITUTE - TECHNOLOGY IN EARLY CHILDHOOD CENTER, UNITED STATES

ASSOCIATE PROFESSOR MARGARET LEAHY
DUBLIN CITY UNIVERSITY, IRELAND

PROFESSOR SONIA LIVINGSTONE
THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE, UNITED KINGDOM

PROFESSOR JACKIE MARSH
UNIVERSITY OF SHEFFIELD, ENGLAND

ASSOCIATE PROFESSOR GIOVANNA MASCHERONI
CATHOLIC UNIVERSITY OF THE SACRED HEART MILAN, ITALY

PROFESSOR JESSICA PANDYA
CALIFORNIA STATE UNIVERSITY DOMINGUEZ HILLS, UNITED STATES

PROFESSOR YVONNE ROGERS
UNIVERSITY COLLEGE LONDON, UNITED KINGDOM

PROFESSOR ELISABETH STAKSRUD
UNIVERSITY OF OSLO, NORWAY

ASSOCIATE PROFESSOR REBEKAH WILLETT
UNIVERSITY OF WISCONSIN-MADISON, UNITED STATES

ASSOCIATE PROFESSOR BIEKE ZAMAN
CATHOLIC UNIVERSITY OF LEUVEN, BELGIUM

RESEARCH FELLOWS

DR LAETITIA COLES
THE UNIVERSITY OF QUEENSLAND

DR EMMA COOKE
THE UNIVERSITY OF QUEENSLAND

DR SARAH HEALY
DEAKIN UNIVERSITY

DANICA HENDRY
CURTIN UNIVERSITY

DR SANDY HOUEN
THE UNIVERSITY OF QUEENSLAND

DR KELLY JOHNSTON
UNIVERSITY OF WOLLONGONG

DR KATE MANNELL
DEAKIN UNIVERSITY

REBECCA NG
UNIVERSITY OF WOLLONGONG

DR KYLIE J. STEVENSON
EDITH COWAN UNIVERSITY

DR XINYU (ANDY) ZHAO
DEAKIN UNIVERSITY

DR GEORGE THOMAS
CURTIN UNIVERSITY

RESEARCH ASSISTANTS

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JENNIFER IRVINE
EDITH COWAN UNIVERSITY

DR CARMEN JACQUES
EDITH COWAN UNIVERSITY
ELIZABETH PINK
QUEENSLAND UNIVERSITY OF TECHNOLOGY

STUDENTS

PHILIPPA AMERY
QUEENSLAND UNIVERSITY OF TECHNOLOGY

NATALIE DAY
UNIVERSITY OF WOLLONGONG

GAVIN DUFFY
DEAKIN UNIVERSITY

KATIE FIELDING
CURTIN UNIVERSITY

NAOMI FILLMORE
THE UNIVERSITY OF QUEENSLAND

REBECCA HOOD
CURTIN UNIVERSITY

LISA KILGARIFF
UNIVERSITY OF WOLLONGONG

KATRIN LANGTON
QUEENSLAND UNIVERSITY OF TECHNOLOGY

KATE LEWIS
UNIVERSITY OF WOLLONGONG

ANNA LOEFFLER
THE UNIVERSITY OF QUEENSLAND

KIMBERLY MASLIN
CURTIN UNIVERSITY

LEYI (LORI) OUYANG
QUEENSLAND UNIVERSITY OF TECHNOLOGY

IRINA SILVA
QUEENSLAND UNIVERSITY OF TECHNOLOGY

FRANCESCA STOCCO
EDITH COWAN UNIVERSITY

EMILY WESTWOOD
THE UNIVERSITY OF QUEENSLAND

SINEAD WILSON
CURTIN UNIVERSITY

BUSINESS OPERATIONS

SANDRA BACKSTROM
Business Support Officer
QUEENSLAND UNIVERSITY OF TECHNOLOGY

SAIMA BEG
Business Support Officer
CURTIN UNIVERSITY

CAROL HENDERSON
Business Manager
QUEENSLAND UNIVERSITY OF TECHNOLOGY

VIET THO LE
Business Support Officer
EDITH COWAN UNIVERSITY

LUCY BRYCE
Business Support Officer
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PERNILLA MILLER
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NHI PHAM
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QUEENSLAND UNIVERSITY OF TECHNOLOGY

CLARA RIVERA
Business Support Officer
UNIVERSITY OF WOLLONGONG

LISA WALKER
Chief Operating Officer
QUEENSLAND UNIVERSITY OF TECHNOLOGY

LORETTA WATSON
Business Support Officer
DEAKIN UNIVERSITY

ADVISORY COMMITTEE

EMERITUS PROFESSOR PAUL CHANDLER

PROFESSOR BARBARA COMBER OAM
UNIVERSITY OF SOUTH AUSTRALIA

TARYN MARKS
Advisory Committee Chair
FORMER GENERAL MANAGER, AIME

MEGAN MITCHELL AM

ALUMNI

PROFESSOR CAROLINE BARRATT-PUGH
Associate Investigator
EDITH COWAN UNIVERSITY

PROFESSOR CATHERINE BEAVIS
Chief Investigator
DEAKIN UNIVERSITY

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

Member Success

Digital Child researchers and students set a high standard of excellence across disciplines in 2021, demonstrated by the award recognition and grant success highlighted below.:

Awards

Two members were named a Member of the Order of Australia in the 2021 Australia Day Honours: Advisory Committee member Megan Mitchell AM for significant service to children, human rights and wellbeing initiatives; and Associate Professor Lennie Barblett AM for her service to tertiary education and early childhood teaching.

Professor Susan Danby was named a 2021 Fellow of the Academy of the Social Sciences in Australia (FASSA) for her lifetime of work dedicated to children, and in acknowledgement of her scholarly contributions to the fields of early childhood and digital technologies. Read more about Professor Danby's award below.

Professor Caroline Barratt-Pugh and Associate Professor Lennie Barblett are members of an Edith Cowan University project team awarded Outstanding Engagement for Research Impact in the 2021 Engagement Australia Excellence Awards for developing a family literacy program in partnership with the State Library of Western Australia, cumulating in a digital text-based program called Kindytxt.

Dr Marnee Shay was a national recipient of the Australian Council for Educational Leaders (ACEL) award in the Leadership category.

Ros Sambell was awarded the Institute of Nutrition Research's Capacity Building Award for her leadership on the National Nutrition Network – Early Childhood Education and Care.

Clara Rivera was awarded the Beth Southwell Award for most outstanding education research thesis, titled Extending on Our Understanding of Digital Play: Children Co-designing.

Our members were recognised for exceptional achievements by their institutions, including:

- Dr Carmen Jacques – Edith Cowan University, School of Arts and Humanities Research Medal
- Professor Tama Leaver – Curtin University's Research and Engagement Award for highest contributor to The Conversation
- Associate Professor Crystal Abidin – Curtin University's Research and Engagement Award – Early Career Researcher Award
- Dr Maria Nicholas – Deakin University, Faculty of Arts and Education Teaching and Learning Award and unmet possibilities associated with digital technologies in early childhood. We'll document and track digital engagement in the early years of life and the effects on the Healthy, Educated and Connected lives of young children.

Appointments

- Professor Sue Bennett appointed Executive Dean of the Faculty of the Arts, Social Sciences and Humanities, University of Wollongong
- Professor Lisa Kervin appointed Research Director, Early Start, University of Wollongong
- Professor Peta Wyeth appointed a member of the Queensland Government's Digital Queensland Program Advisory Board
- Professor Tama Leaver appointed President of the Association of Internet Researchers
- Professor Lisa Whitehead appointed awards committee co-chair of the International Family Nursing Association, and inducted as a Fellow of the Australian College of Nursing
- Associate Professor Pauline Roberts elected to the National Board of Early Childhood Australia

Grants

Professor Daniel Johnson leads a project awarded a $1.05 million National Health and Medical Research Council Ideas grant to explore problematic videogame play among young adults.

Dr Marnee Shay is a member of the project team awarded a $472,593 ARC Linkage grant for the project Sparking Imagination Education: Transforming inequality in schools; and is an ARC Discovery Australian Aboriginal and Torres Strait Islander Award Senior Research Fellow on a $750,000 ARC Discovery Indigenous grant to co-design Indigenous education policy in Queensland.

Professor Laura Schulz is a member of a team the University of Texas at Dallas, School of Behavioral and Brain Sciences that received a three-year, $1.25 million grant from the National Science Foundation to develop an online platform for research on cognitive development in children ages 3 to 6.

PROFESSOR SUSAN DANBY NAMED A FELLOW OF THE ACADEMY OF SOCIAL SCIENCES IN AUSTRALIA

Professor Susan Danby, Director of the ARC Centre of Excellence for the Digital Child, was appointed a 2021 Fellow of the Academy of the Social Sciences in Australia (FASSA) for her lifetime of work dedicated to children.

Professor Danby joins 36 other social science experts in the 2021 round, and over 700 in total, who have been named Fellows for their outstanding contributions to social science research or practice in Australia.

Professor Danby was acknowledged for her scholarly contributions to the fields of early childhood and digital technologies. She is one of Australia's leading experts in early years language and social interaction, childhood studies, and young children's engagement with digital technologies. Professor Danby said she was deeply grateful for the honour to be elected to the prestigious Fellowship.

"I'm honoured to join such an illustrious group of Fellows, many of whom I've been lucky to count as peers and mentors throughout my academic career of more than 30 years," said Professor Danby.

"I'd like to give my thanks to QUT and to national and international colleagues and organisations in early childhood, education and research who have invested so much in building my knowledge and practice."

Professor Danby said her career as an early childhood and primary school teacher sparked her curiosity and interest in how children learn, develop and engage with education.

"My first job was teaching a multi-age early years classroom in the regional Queensland town of Mt Perry, where I had the joy and privilege of setting the foundations for my students' learning. This ignited my drive to learn and understand more."

"As digital technologies started to become more pervasive, it became obvious that more exploration was needed to understand how children, families, educators, and health professionals engage with digital technologies across diverse settings, which could inform support for – and with – children during this exciting and challenging time of technology use."

As Director of the ARC Centre of Excellence for the Digital Child, Professor Danby leads a collective of national and international researchers and partners across education settings, government, business and the community to work towards the centre's vision – ensuring young children are healthy, connected and educated in a rapidly changing digital age.

"I'm grateful to the Australian Research Council for supporting the establishment of the Centre of Excellence for the Digital Child to help address these opportunities and challenges."

"I'm also immensely thankful to the Academy of the Social Sciences in Australia for recognising a lifetime of work dedicated to children."

Governance

Advisory Committee: The Advisory Committee is responsible for adding value and critical input to guide the Centre in delivering its mission.

Formed in August, the Committee comprises eminent people from diverse backgrounds and supports the work of the Centre through introductions and network opportunities from their own extensive networks. In 2021, the Advisory Committee held its first meeting in August to establish a terms of reference, discuss additional members and provide feedback on the Centre's Strategic Plan. The committee plans to meet once a year, in addition to running involvement in the Centre's research planning and operations.

The Committee is comprised of: Taryn Marks (Chair), Emertius Professor Paul Chandler, Professor Barabara Comber AM, Megan Mitchell AM, and the Centre Directorate (the Centre Director, Deputy Director, and Chief Operating Officer).

Message from the Advisory Committee Chair

"I am thrilled to be working with this groundbreaking initiative and for the Advisory to be working with such a wonderful range of academics and partnerships. The Advisory Committee's key message for the Centre in its establishment year was to focus on increasing the diversity of the Centre to involve younger people, children and people from non-English speaking backgrounds, including refugees, and their participation in the co-design of Centre activities and research. The importance of equity and diversity should be explicit in Centre material. There's never been a more important time, as we have seen accelerated during COVID-19, to ensure the community has accessible and informed knowledge for raising healthy and educated children and young people in a digital age."

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 Committee ensures that the Centre's resources are allocated effectively to achieve these aims. In addition, the Executive Committee acts as the formal authorising committee for the Centre budget, strategic plan, research projects, project and other partnership agreements, and applications for affiliate status.

The Committee is comprised of: the Centre Director, Deputy Director, Chief Operating Officer, and Node Representatives from each participating university.

Message from the Executive Committee Chair

"A robust governance framework is the foundation for any organisation, and particularly important for a research centre as transdisciplinary and cross-nodal as ours. In 2021, the committee focused its attention on developing important processes for project development, budget allocation, recruitment of new members, and strategies to build the Centre's research culture. An achievement of note was the founding of our '2for1 model' as a strategy to provide development opportunities for Centre members to understand and participate in the governing actions of the Executive Committee. The collegiality and resolve of our Executive Committee to establish a solid operational and strategic foundation in the Centre's establishment year was exciting, and has set a inspiring standard for the seven years to come."

Professor Susan Danby

Research Committee: The Research Committee manages and reviews the progress of the Centre's research

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

"In the Centre's establishment year, the Research Committee focussed its attention on developing initiatives and processes that would build a foundation to deliver our research plan and goals over the seven years. Among these initiatives was the establishment of a 'fast track' process for approving core research projects that would inform and guide the direction of future projects. This process set in motion 19 core and strategic projects, including Topaz, a Centre-wide activity supporting capacity building through structured reviews of digital technology and children. The committee also appointed an Indigenous Advisor and an Ethics and Integrity Advisor, and established important procedures and philosophies to support responsible ethical research and high quality publications. Building the foundations for something new is always rewarding – even more so with the knowledge that our work in 2021 will yield positive outcomes for children and families for years to come."

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.

The Committee is comprised of: Professor Simon Smith (Chair), Directorate, Data Management Specialist (to be appointed), Healthy Child Co-Leader, Educated Child Co-Leader, Connected Child Co-Leaders, and Longitudinal Study Co-Leader.

Message from the Data Management Committee Chair

"In 2021, our focus was to develop an Integrated Centre Data Management Plan to outline what research data will be created in the Centre, and a Data Governance Framework that outlines data access and licensing under the ARC Foundation Agreement (for example, standard procedures and guidelines to support the ongoing implementation of the plan). Our investigations into a data platform will continue into 2022 and is imperative to ensure our data is secure, and also accessible to the required stakeholders. In 2022, the Committee will seek expert advice to provide perspective on data management understanding, capacity building and how best to engage the Data Management Specialist role."

Professor Simon Smith

Research

RESEARCH AT THE DIGITAL CHILD

Our research is organised into three interconnected programs: Healthy, Educated and Connected. These programs focus our research on the major areas that digital technologies influence in children's lives – how they develop (Healthy), how they learn and play (Educated), and how they live and socialise (Connected) in digital worlds. Within each program, we've identified three problem-focussed strands designed to concentrate on specific aspects of children's health, education, and connectedness.

Our Longitudinal Family Cohort Study umbrellas our entire research program – a world-first study that investigates children's digital engagement at a population level. The study documents and tracks patterns of digital engagement of 3000 Australian families and their children from birth to eight years of age.

Our Policy, Innovation and Practice Framework underpins and drives our research. New knowledge and findings deliver real-world solutions and practical outcomes for children, families, education and health professionals, government, technology developers, and members of the public.

Frameworks and philosophies

In the first half of 2021, our Co-Program Leaders continued the process of conceptualising and mapping frameworks, theoretical constructs, methodologies, and research priorities for their respective programs. This collaborative process harnessed the expertise and ideas of all members through workshops, meetings and surveys.

We established shared definitions and ideas, mapped resources and expertise, and re-evaluated our original research questions against the enormous impact of COVID-19 on the digital lives of children. To this end, a process for initiating projects was established to fast-track core work that would inform and guide the direction of future projects.

Recognising that the integrity of our research and outputs can be assured only with shared values and processes, the Centre established procedures and philosophies to support responsible research ethics and quality publications. The Research Publication Philosophy and Procedures and the Responsible Research and Ethics Philosophy and Procedures provide our researchers the foundations to ensure their research and outputs foster credibility, trust and respect by our colleagues, partners, participants and communities. These important documents also specify requirements of our research, such as encouraging cross-node, cross discipline and early career researcher involvement.

Equity and diversity

The Centre is committed to ensuring all voices and perspectives are heard and included in our research work. We strive for equitable, diverse, just, and inclusive practices. We are monitoring and mapping the representation of diverse populations in our multiple research projects to ensure diversity and inclusion throughout our research. We are also establishing processes to hear the voices, perspectives, concerns and aspirations of children in key areas. In 2022, an Equity, Diversity, Justice and Inclusion (EDJI) Portfolio and Children's Reference Group will be established to drive initiatives and programs in this important area.

Research translation

A major objective of the Centre is to translate our research findings into evidence-based resources, practices and guidelines, and information that our stakeholders can use to support children's use of digital technologies.

The translation of research into products, policy or practice requires a dedication to relationship building and an intense understanding of the context in which the research outcomes will be applied. While many research centres seek to translate their research into product development or government policy, the Centre also seeks to translate research into community attitudes and 'family policy and practices'.

The Centre is committed to the translation of its research into various settings and is deliberately planning for this to happen. In 2022, the Research Translation Portfolio (RTP) will be formed to plan for this key outcome. The RTP will develop a plan that clearly outlines all aspects of the Centre's intellectual property, research translation and commercialisation arrangements and practices.

The RTP, in consultation with the Skills, Mentoring, and Research Training (SMART) Portfolio, will ensure regular intellectual property, translation and commercialisation training and workshops are available for all Centre members to have a complete understanding of principles, processes and opportunities and risks available in research translation.

CHIEF INVESTIGATORS' RETREAT

In March 2021, the Centre held its inaugural retreat for Chief Investigators. Held across three days as a hybrid workshop, Chief Investigators gathered from sites at their nodes, online or at Mooloolaba in Queensland. The retreat was an opportunity for Chief Investigators to continue discussions and planning on the Centre's projects across the Healthy, Educated and Connected programs, in addition to contributing to concept mapping for the Longitudinal Family Cohort Study.

Chief Investigators pitched project ideas via Lightning Project Talks, held focussed program and project planning meetings, and participated in a Strategic Plan session led by Mark Douglas from Ethos Consulting. Most importantly, the Chief Investigators' Retreat was an opportunity to network and build critical connections needed to lead and deliver the Centre's program of research over the next six years.

MAPPING OF STUDIES INTO DIGITAL CHILDHOODS BEGINS

In 2021, Centre researchers commenced a range of literature reviews to map out and capture what is currently known about young children's digital technology use. This includes review of studies into digital technology use by young children, family and community perspectives on young children's digital technology use, media use by families, and the potential physical impacts of digital technology use by infants and toddlers.

Chief Investigator Dr Juliana Zabatiero, who leads two of the mapping projects, said the literature reviews are critical to informing and guiding the Centre's own research projects on digital childhoods.

"There have been hundreds of studies conducted around the world into young children's digital technology use," said Dr Zabatiero.

"Most focus on earlier technologies, such as television and computers, and their sole impacts on children's health, education or connectedness – our Centre's goal is to provide a holistic and transdisciplinary view of contemporary digital childhoods across all these areas."

"We're mapping out and tapping into these existing studies to synthesise what's already known in the areas of digital childhoods, identify where the gaps are and how the Centre can further understanding and knowledge."

COVID-19 AND THE DIGITAL CHILD

The COVID-19 pandemic created a seismic shift for the digital child. Prior to the pandemic, digital technology use was often restricted or limited by parents/carers in most households. While side effects were unknown, parents were often concerned about the effects of 'screen time' on their children's development and learning.

When the pandemic sent millions of families worldwide into lockdown, children's digital technology use became essential for many. Often, it was the only means for children and their families to connect, learn and play. Online learning seemed to become the norm, birthdays were celebrated over Zoom, and extracurricular activities normally held in person were moved online. Staying healthy, educated and connected became commonly viewed as only happening with the aid of digital technology.

The role of the Centre came sharply into focus. There was no longer a question about if digital technology should be in the lives of young children, but rather that it is now considered a necessary everyday activity. The shift during the height of the pandemic lockdowns was one of promoting the value of the digital in supporting positive futures for children. But the pandemic also brought into sharp relief questions about how to engage in digital learning, and made visible the inequities in the digital world, such as limited access to the Internet, digital resources, and knowledge of the digital world.

A Curtin University study led by PhD student and Centre member Rebecca Hood, together with Chief Investigators Professor Juliana Zabatiero and Professor Leon Straker and Curtin colleagues, revealed that digital technology became a lifeline for families in lockdown. The study of Perth parents of infants aged 9 to 15 months explored how the first wave of the pandemic in 2020 influenced family routines, relationships and use of technology such as smartphones and tablet computers, among families. The study showed that the ways in which families used their devices was important in whether this was beneficial or detrimental, rather than simply the amount of time they spent on screens.

These changes in children's digital technology use have a profound impact on the Centre's program of research. Our original research questions were developed during the Centre's initial ARC Centre of Excellence applications prior to the pandemic in 2018, and in a context and environment that became markedly different when the Centre was formally established in 2020. The pandemic has led to Centre studies that ask, for example, who is the digital child now, and how do we re-imagine digital learning communities? Some core projects initiated in 2021 have been re-conceptualised and re-contextualised to reflect these shifts. Other projects, such as Pandemic Parenting, have been designed to focus specifically on the impacts of the pandemic on children's technology use. As the pandemic eases around the world, a new lens on the digital child – the effects of COVID-19 on children's digital technology use – will continue to be considered and analysed across the Centre's program of research.

OUR PROJECTS

Characterising and capturing interactional quality in children's digital experiences

Children, media and parenting in the COVID-19 Pandemic (Pandemic parenting)

Correlates and outcomes of digital technology use by young children: phase 1

Digital platforms for connecting families and ECEs

Digital play in the early years

Digital Scitech: Exploring children's creativity and connected learning experiences with digital technologies

Family and community perspectives on digital technology use by young children: phase 1

First-time parents' plans for the digital lives of their preschool child(ren)

Making to stimulate, encourage and support STEAM learning

Mapping data in the home

Mapping media use by families

Mapping the Australian children's internet

Mapping the political economy of the digital family

Measurement of technology use by children and their posture and movement: phase 1

Physical issues of technology use by children: phase 1

Staying Connected: COVID-19 as a catalyst for innovation in early education practice

The 24/7 Child: Understanding the role of digital technology in supporting young children's health, care and family patterns

Topaz – Capacity building through structured reviews on digital technology and young children

Young children's creativity and connected learning with digital technologies: Case studies from the home, early years centres and schools

INDIGENOUS RESEARCH AND ENGAGEMENT

In the Centre's first year, a firm commitment was made to positively embed and advocate for Aboriginal and Torres Strait Islander peoples and voices across our research and activities.

The disparities between Aboriginal and Torres Strait Islander and non-Indigenous child development are of significant concern. The Centre recognises its influential role in bridging the gap in these disparities and inequities. A powerful way incorporate Indigenous perspectives is to increase Indigenous research capability and scholarship through the appointment of Indigenous researchers. To this end, the Centre appointed Dr Marnee Shay as Indigenous Advisor in May 2021 to ensure Centre research methods include, acknowledge, and respect the cultural distinctiveness of Aboriginal and Torres Strait Islander communities. In addition, the Centre appointed three Indigenous members with strong backgrounds in research related to digital childhoods and Indigenous research settings. The Centre also began the process of appointing a new Indigenous Chief Investigator to join the Centre in early-2022.

Indigenous Advisor to the Research Committee appointed

Dr Marnee Shay is an ARC Discovery Australian Aboriginal and Torres Strait Islander Award (DAATSIA) Senior Research Fellow in the School of Education at the University of Queensland. Dr Shay's maternal connections are to Wagiman country (Northern Territory), and she has strong connections to Aboriginal communities in South East Queensland, where she was born and raised. Marnee has an extensive research program that spans the fields of Indigenous education and policy, flexi schooling and youth studies. She has published in a wide range of journals, books and scholarly and professional media outlets.

A message from Dr Marnee Shay

> My first goal as Indigenous Advisor is to build a community in the Centre. We know that our researchers are coming to Indigenous research from lots of positions, lenses, and experience. I want to bring Indigenous and non-Indigenous people together, have conversations, build Indigenous leadership opportunities, and share knowledge and awareness. Once this community and shared expectations are established, we can begin building researcher capacity and advocacy to approach Indigenous research in ethical, respectful and impactful ways.

Policy for Aboriginal and Torres Strait Islander research ethics

In 2021, the Centre set in motion development of an ethical framework that would enable us to set expectations, standards, and guidelines for conducting Indigenous research. Led by the Indigenous Advisor, Dr Marnee Shay, a working group was formed to develop an Aboriginal and Torres Strait Islander research ethics policy document. Set to be ratified by the Executive Committee in early-2022, the policy will be continually evaluated to consider the implications of digital data in Indigenous research, as this is an area that has been under-researched and currently lacks a national framework. Our policy outlines core principles for ethical conduct of Indigenous research, with expectation that these be applied at all phases of research conducted under the Centre that is defined as Indigenous research. This includes:

- conception of ideas (initial ideas)
- design of research (planning of research)
- conduct of research (ways of doing the research)
- reporting of research (what happened)
- dissemination of research findings (to relevant bodies and communities)

Our policy draws from and builds on two key Indigenous research ethical guidelines in Australia: the AIAT SIS 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 contemporary guidelines that are rigorous, robust, and were developed by diverse Aboriginal and Torres Strait Islander experts.

Activity plan for 2022

- develop a survey to gauge the skills sets and gaps in skills in Aboriginal and Torres Strait Islander research among Centre members
- based on the survey results, create a program of professional development and research capacity building in relation to Indigenous research
- establish an Indigenous Engagement Portfolio, comprising Indigenous and non-Indigenous Centre members across nodes and disciplines, to develop initiatives and programs that will positively embed Aboriginal and Torres Strait Islander peoples and interests in the Centre's research and activities

LONGIDTUDINAL FAMILY COHORT STUDY

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

Digital technologies are rapidly changing. They are used with, and accessed by, even the very youngest children. Our global-first Longitudinal Family Cohort Study (LFCS) 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.

Our Family Study 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, the Family Study 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 Family 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 Family 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.

Key achievements in 2021

- a LFCS Working Group was established to contribute to planning, implementation, and management of the study. Group responsibilities include review and feedback on key study documents and protocols, and decision-making regarding construct and measurement item inputs
- the stratification frame and management plan for the LFCS was developed and uploaded to the Centre Hub
- at the Chief Investigator’s Retreat (March 2021), Chief Investigators generated initial set of key research questions for the study
- developed a process and timeline for the consultation, development, and generation of the survey content
- Centre members invited to complete online survey to identify, guide and refine the focus of the survey
- in-principle additional support to appoint a Project Manager to support the study’s delivery

Activity plan for 2022

- at the Digital Child Annual Meeting (DCAM) (February 2022), collate ongoing input from Centre members and partners on key research questions, constructs and measures to inform the development of the key survey content areas and/or items
- develop and seek ethics approval for conduct of Longitudinal Family Cohort Study
- continue to develop survey design: measurement development
- initiate online survey development in chosen platform
- establish data sharing and storage platform
- establish a public-facing name for the study
- scope a platform for participant interaction
- initiate recruitment and data collection

OUR CHILDREN'S TECHNOLOGY SPACES

A major component of the Centre are two Children's Technology Spaces that provide the interface for researcher collaboration with children, families, industry partners, teachers, 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 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.

It has been designed to engage with children from birth to age 8, their families, educators (including teacher education students) and other interested industry and community stakeholders. Specifically, the CTC will enable a broad range of events and research activities related to digital childhoods and children.

The CTC is a research centre, well equipped with recording and other data collection tools and resources. It will provide a context for research conducted by Digital Child researchers across a diverse range of projects. The CTC is also a space for research translation. The CTC will host maker and play activities, and workshops and training activities for children, educators, families, teacher education students and industry and community partners. The CTC is coordinated by Dr Christina Chalmers in collaboration with QUT node researchers to design, resource and maintain the CTC as a research facility and outreach space.

In 2021, Ethics Approval was awarded to conduct a pilot project in the CTC. The aim of this pilot project is to explore the design and implementation of the CTC as a maker and technology centre. The pilot project employs design-based research techniques to set up the CTC and engage young children, educators, families and industry and community partners in a diverse range of activities including digital making, LEGO and robotics, digital gaming, and outreach activities.

To celebrate 2021 Children's Week, Digital Child members and their children were invited to play, learn, and connect in the CTC in October. Children and their adults engaged in interactive digital and maker activities such as Duplo and LEGO, digital photography, BeeBot Art, and coding with LEGO WeDo robots. While COVID restrictions limited other activities in the CTC in 2021, there are a number of activities already planned for 2022 with restrictions being lifted.

The CTC promises to provide collaborative research opportunities with Digital Child researchers working in the UOW Children's Technology Play Space, Scitech (WA) and other related children's spaces.Activity plan for 2022.

Key achievements in 2021

- received Human Research Ethics Approval to conduct design-based research to focus on the design and implementation of the CTC space
- as part of the pilot project, a series of design meetings were held to provide a collaborative research space for QUT researchers to make decisions about the materials, resources, spatial set up and data collection techniques within the CTC
- recording equipment set up and researchers trained in its use. Began purchasing tools, resources, and material and planning storage options. Furniture and other spatial elements have been planned and implemented
- hosted a Digital Play Afternoon to celebrate Children's Week 2021 in October

Activity plan for 2022

- regular Stay and Play afternoons to provide digital play opportunities in, for example, LEGO and robotics, digital making and digital gaming
- workshops for teacher education students, and opportunities to showcase outcomes of projects and design-based practice projects
- connecting with Robotics@QUT (QUT Equity Programs) in rural and remote regions of QLD. Robotics@QUT currently has a focus on children and young people in years 5 to 12, and the CTC has the potential to expand this to the early years of school and across a diverse range of digital platforms.

University of Wollongong 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.

It offers opportunity for interdisciplinary and intergenerational dialogue as children and their families use technology and engage with the space.

The core work of the UOW Children's Technology Play Space is driven by children, our research projects and connection with industry. As such, the Children's Technology Play Space serves two main functions: 1) As an extension to the UOW Discovery Space (through regular Digital Playgroups) and 2) as a site for Centre research projects. During Digital Playgroups, children inform the play and the activities by sharing their expectations of how technology works and sharing their understandings of how the space provides for digital experiences that promote child-to-child, child-to-adult, child-to-technology interactions.

It is important to acknowledge that the Children's Technology Play Space is distinctly different from children's everyday places (homes, communities, schools, parks etc). It is also different from workplaces of industry partners where available materials (collections, objects, technology) and how these are used may present unwritten rules of engagement emerging from the research. It serves as a key research translation space for UOW centres (e.g offering a technology specific perspective to the Discovery Space) and the research endeavours of the Digital Child Centre.

The UOW Children's Technology Play Space has multiple roles beginning with bridging research, technology and children's everyday practices and enabling a dialogue between researchers and children and industry partners. It fosters learning through the development of children's inherent curiosity. Its engagement with the wider community and Centre partners complements the work of the UOW enterprise (namely, Early Start, Discovery Space and Science Space). It responds to the needs of the community (specifically children, families and educators) with opportunity to connect with QUT's Children's Technology Centre, Scitech and other community and industry partners.

Key achievements in 2021

Activities for 2021 were put on hold with COVID lockdowns and restrictions.

- setting up the space within the UOW entity of Early Start
- establishing strong connection and collaboration with UOW Discovery Space and UOW Science Space

Activity plan for 2022

- officially launch the Children's Technology Play Space
- facilitate children's workshops at UOW Early Start's Festival of Play (March 2022)
- conduct weekly Digital Playgroups for Discovery Space members
- utilise as a key research space for core projects (for example, Making to stimulate, encourage and support STEAM learning)

PUBLICATIONS

A systematic review of digital health literacy among parents

The Centre's first systematic review for was published in December 2021 in collaboration with Edith Cowan University's School of Nursing and Midwifery. The paper was co-authored by Professor Lisa Whitehead and Associate Professor Diana Arabiat with Edith Cowan University colleagues Professor Evalotte Mörelius and Suzanne Robinson.

We sought to examine the effect of digital health interventions on health literacy among parents of children aged 0-12 years with a health condition. This included evaluating parents' engagement (use and satisfaction) with digital health interventions, the effect of these interventions on parental health knowledge and health behaviour and the subsequent impact on child health outcomes.

The review was developed to inform the team's knowledge of the important issue of health literacy among parents. We know that the health literacy of parents is associated with child health outcomes and that parents often use the internet to obtain health information. A number of interventions to improve health literacy among parents have been developed but no systematic evaluation of the effectiveness of these exists.

Five studies were included in the review. All were quantitative in design and included digital health interventions using web-based portals to improve parents' health knowledge and health behaviour. Parental satisfaction was assessed in three, all reporting high levels of satisfaction with the digital intervention. All studies reported improvement in parental health literacy postintervention and this was related to either an increase in disease-specific knowledge or changes in health behaviour. Only one study included child health outcomes, and this study reported significant improvements related to increased parental health knowledge.

In response to a pandemic such as COVID-19, there is an increased need for evidence-based digital health interventions for families of children living with health conditions. This review has shown the potential of digital health interventions to improve health knowledge and behaviour among parents of young children with a health condition. However, few digital health interventions have been developed and evaluated for this population. Future studies with robust research designs are needed with attention to the potential benefits of increased parental health literacy for the child.

Mörelius E, Robinson S, Arabiat D, Whitehead L

Digital Interventions to Improve Health Literacy Among Parents of Children Aged 0 to 12 Years With a Health Condition: Systematic Review

Journal of Medical Internet Research 2021;23(12):e31665

doi: 10.2196/31665

PMID: 34941559

Additional Centre member publication highlights

Books and book chapters

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- Alicia, A., & Smith, S. (2021). Digital Media and Sleep in Children
- Green, L. (2021). Digital Citizenship in Domestic Contexts
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- Houen, S., Danby, S., & Miller, P. (2021). Siblings Accomplishing Tasks Together: Solicited and Unsolicited Assistance when Using Digital Technology
- Leaver, T. (2021). Balancing Privacy: Sharenting, Intimate Surveillance and the Right to be Forgotten
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- Staksrud, E. (2021). Sexual Images, Risk and Perception Among Youth – A Nordic Example
- Stevenson, K.J. (2021). Young children's creativity in digital possibility spaces: What might posthumanism reveal?
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- Apps, T., Agostinho, S., & Bennett, S. (2021). 'Maybe it's the environment you grow up in?' Australian primary school students' reflections on their school-based digital literacy. Technology, Pedagogy and Education, 1–16. https://doi.org/10.1080/1475939x.2021.1973550
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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?

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

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

Based on our understandings, we'll develop and test processes, products and services to improve children's engagement with digital technologies. We'll also explore emerging and future technologies for their potential to support and promote children's development, health and wellbeing.

APPROACH

- observational studies of several hundred children using wearable sensors and clinical outcome assessments
- observational studies of several dozen children using in depth video ethnography and interviews
- laboratory experiments to identify precise effects of digital technology use on physical and psychosocial outcomes and explore neurophysiological, biomechanical and metabolic mechanisms for observed effects
- integrated studies that pilot and evaluate strategies to promote the use of digital technology by young children that minimise harm and maximise positive outcomes

KEY PROGRAMS

Screens and physical wellbeing

- focus on the effects of exposure to digital screens on children's physical development and behaviours
- examine the relationship between digital technology use and sleep in early education and care settings and in the home
- address effective strategies to encourage and promote active rather than passive digital use

Language and cognition

- investigate the potential 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

ENGAGEMENT AND IMPACT

Policy

- policy recommendations for sleep and digital activity, and active and passive screen time
- guidelines for language use and communication with and around digital technology
- policy relating to game rating systems that provide parents with a greater level of detail about gameplay characteristics

Innovation

Technology innovation frameworks and products for:

- movement and activity
- language and cognitive development
- game design to support wellbeing outcomes
- innovative selector systems for choosing appropriate videogames for children

Practice

- active engagement initiatives and resources targeted at families
- workforce training modules for health professionals (for example, speech pathologists) who work with children
- good gaming guidelines for children and parents

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

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

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'll use these understandings to develop models, frameworks, technology innovations and good practices of digital learning that build children's educational opportunities, to foster inclusiveness and equitable outcomes.

APPROACH

- immersive multimodal approaches that capture children's detailed and nuanced interactions with a range of digital devices, including tablets and other digital learning resources
- testing the efficacy of digital learning models and resources through experiments, video ethnographies, eye tracking of learning strategies, and learning interventions
- co-research and collaborate with children on a range of issues, including the co-design of new technologies
- actively involve children who face a range of opportunities and challenges across regional, rural and urban contexts

KEY PROGRAMS

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

ENGAGEMENT AND IMPACT

Policy

- recommendations on digital technology access and digital proficiency for young children
- wide-scale curriculum change recommendations to transform learning with digital technologies in the early years

Innovation

- frameworks to support the design of new technologies for learning, learning applications and other practical technologies, including in STEM and literacy

Practice

- guidelines for assessing children's digital content, products, services, and experiences
- resources for educators to support children's digital interactions

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?

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

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'll 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 PROGRAMS

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

ENGAGEMENT AND IMPACT

Policy

- advance knowledge about digital technology use, patterns of consumption and modes of marketing to inform policy recommendations related to regulatory settings for government, private and public institutional governance, civic responsibilities, and children's digital rights

Innovation

- develop theoretical frameworks that conceptualise children's digitally mediated interactions from a civic perspective

Practice

- design frameworks to advance the development of digitally connected products, content, services and technology innovations to support children's connected engagement with technology
- develop guidelines for activities to help families and schools make informed decisions about data capture and use
- develop early years initiatives focussed on online privacy and safety

Mentoring and capacity building

The Centre is committed to shaping future-ready researchers and professional staff who can deliver high-impact and wide-reaching research in digital childhoods.

We aim to provide quality learning opportunities that are fit for purpose, capability-focused, flexible, high quality, and impactful. The Centre is committed to delivering a robust and innovative mentoring program to provide all Centre members the opportunity to develop their practice. We aim to be recognised as an exemplar in the development of researchers who work across disciplines, have constructive relationships with government and industry, and focus on translation of research outcomes.

Our early career researchers and students (some pictured above) are the lifeblood of the Centre, bringing fresh enthusiasm for their practice and new knowledge and perspectives across disciplines. In our Strategic Plan, we identified the need to establish a formal mentoring and training program for our members. In 2022, a Skills, Mentoring and Research Training (SMART) Portfolio is being formed to deliver initiatives and programs that will help build the next generation of researchers. The SMART Portfolio will upskill our mid-career and experienced researchers with practices and knowledge to continue developing and leading their disciplines. In 2021, we established several initiatives to set in motion our SMART program:

- established three Centre Clubs, including the Digital Ethnography Club, Early Career Researcher Club and HDR Student Journal Club
- founded our '2for1' model as a strategy to expand membership on the Executive Committee. In addition to the node representative, a second member of that node attends Executive Committee meetings to develop leadership skills and participate in the Centre's governance.
- Delivered the first Digital Child Seminar Series led by Professor Annette Woods, Professor Michael Dezuanni and Professor Lisa Kervin on sociomaterial theory in the digital age.
- Delivered the Political Economy of Digital Childhoods seminar chaired by Professor Sue Bennett and featuring a presentation from Partner Investigator Professor Sonia Livingstone. A discussion document was prepared by Professor Julian Sefton-Green, Professor Michael Dezuanni and Dr Luci Pangrazio to stimulate conversation, encourage participation and engage members in a common research agenda. The seminar invited members to explore what a research agenda into the political economy of digital childhood might consist of, how such an approach might be turned into research questions and activities, and why such a theme might be important for the work of the Centre moving forward.
- Initiated the Topaz project, a Centre-wide activity supporting capacity building through structured reviews on digital technology and children. Read more about Topaz below.

TOPAZ FOR CAPACITY BUILDING

The Topaz project is a key part of the Digital Child's national program for mentoring and capacity building. Topaz provides support for members conducting high quality reviews of the evidence concerning key issues in digital technology and young children to inform future research, translation into policy, practice and products, and provide trustworthy information for the broader community. Topaz is specifically designed to provide these outputs in ways that ensure capacity building through mentoring and skill development, especially of early career researchers.

Topaz provides formal and informal processes around the conduct of structured reviews on digital technology and young children in order to facilitate capacity building. Structured reviews provide a flexible, yet well-scaffolded, mechanism for researchers from different disciplines to collaborate to produce high quality publications. The project has developed a position paper outlining the importance of transdisciplinary evidence synthesis to set the foundation for capacity building. A series of practical and conceptual seminars and workshops are being conducted to support early career researchers, and those mentoring them, through a stepped process to complete a structured review. Topaz's first seminar was held in November with an introduction to the project and to evidence synthesis reviews.

A resource hub of key support information is established, along with a compilation of expertise available within the Centre to support early career researchers. An established Working Party meets regularly to provide an informal mechanism for early career researchers to discuss ideas for reviews and seek advice on who to involve. Review topics will typically arise from core research projects, which themselves are transdisciplinary. The expectation is that each review is led by an early career researcher with the support of a transdisciplinary team with experience in relevant knowledge domains and the review method chosen. - **Professor Leon Straker,** Topaz project leader.

BRAND AND CAPACITY BUILDING

In 2021, the Centre brought on board a Visual Communications Intern to support our branding and communications. Josh Hayes was a final-year QUT Creative Industries student majoring in Visual Communication with a minor in Interaction Design. Josh undertook our internship as part of QUT's Work Integrated Learning program and gained course credit in addition to paid hours for his internship. With support and mentoring from the Centre's Digital Communications Specialist, Josh gained real-world experience in a corporate environment and produced a suite of design work for his portfolio, including the Strategic Plan, Digital Child newsletter, and assets for our events. Following his internship, Josh successfully secured full-time work as a designer at a creative digital marketing agency.

"As a design intern at the Digital Child, I was able to apply my existing knowledge and understanding of the design tools and principles I had learnt at university. I was given the opportunity to experience what it's like to work as a designer in a brand new innovative research centre, and learn how to work smarter within a corporate setting. My time here was supported by a very friendly and accommodating team who allowed me to explore diverse design solutions across a variety of disciplines."

Partnerships and collaboration

Our focus on collaborative relationships and partnerships defines much of our work. Our unique partnership across disciplines, with governments, and with industry partners with global reach is critical for the translation of our research.

The Centre supports partner engagement in co-design arrangements where our partners are core members of research activity, to design research in home and education settings, public spaces and health services. 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 also critical in communicating our findings and sharing stories and outcomes to the wider public.

In addition, our partners benefit from the translation of research findings to create more knowledge and united understandings across disciplines, governments, communities, and families.

We aim to work with our partners to:

- co-design research activity and translation of outcomes
- enable evidence-based research to inform new policy
- provide information to inform practices and make well-informed decisions regarding the use of digital technologies at home, at school and during recreation
- enable product development to be informed by research

In 2021, the Centre began work to establish and build on existing relationships with our partners. As the Centre undertook its planning, a survey was distributed to partners in August to better understand how and in what ways they would like to be involved with the Centre. The survey results indicated that partners were keen to be actively involved in research design and development, and provide specialist resourcing and skills. Our partners also indicated that outreach and engagement is an area that were interested in getting involved.

In 2021, the Centre also undertook initiatives to begin cultivating its relationship with partners, including:

- initiating a Partner Newsletter to provide regular Centre updates
- involving partners in developing key planning and strategy documents, including the Strategic Plan
- inviting partner participation and collaboration on core projects
- seeking partner engagement to identify research gaps
- engaging in co-design practices to build research projects
- inviting feedback on the survey content for the Longitudinal Family Cohort Study
- holding an online, public-facing partner panel event to celebrate Children's Week 2021 (read more below)

The Centre recognises that maintaining positive and open partnerships over the course of the Centre's life builds the foundation for genuine and impactful collaborations. In addition to ongoing shared activities and collaborative enterprises, in 2022 a Partner Reference Group is being established as a formal platform for partner engagement and collaboration.

CHILDREN'S WEEK PARTNER PANEL EVENT

To celebrate Children's Week 2021 in October, the Centre held a public online event featuring a panel of partner representatives. Chaired by Advisory Committee Chair Taryn Marks, the panel featured Samantha Yorke (Government Affairs and Public Policy, Google Australia), Kate Highfield (General Manager, Professional Learning and Research Translation, Early Childhood Australia) and Megan O'Sullivan (Statewide Operations Manager, Scitech).

The Children's Week theme in 2021 focussed on Article 15 of the United Nations Convention on the Rights of a Child – that children have the right to choose their own friends and safely connect with others. The panellists discussed how the pandemic and digital technology have given rise to children's right to make their own friendships, and the implications and opportunities. More than 150 people from around the world registered to attend the event and participate in the discussion. The event was a fantastic opportunity to engage with our partners and showcase their expertise in digital childhoods.

SCITECH AND THE DIGITAL CHILD

Scitech is a science centre and children's museum in Perth with a focus on STEM early childhood education. We are visited by more than 900,000 children and families every year who come to engage in exhibitions that inspire interactivity and creativity. Working with the Digital Child team throughout 2021 on the Digital Scitech project has been an incredible opportunity for us to focus the design and development of our exhibitions on children's learning outcomes. This project has allowed us to add a research-based lens to our design process and use evidence to inform the design of our exhibitions. It's also been fantastic to work with PhD students on these projects. We have enjoyed being involved in developing their research practice, and giving them an opportunity to apply their projects in a real-world setting.

- William Peng, Scitech General Manager – Exhibitions & Operations

Three-to-four year olds to learn about digital safety in Australian trial

Office of the E-Safety Commissioner Grant

Digital Child researchers are leading an Australian-first study to teach young children, including those aged three to four, about digital citizenship.

The trial involves pre-schools and kindergartens as well as 15 primary schools from remote, rural, and metropolitan regions across Australia from Prep to Year 6.

The project is led by Professor Michael Dezuanni and is funded by an Australian Government online safety grant administered by the Office of eSafety Commissioner. The team includes Chief Investigators Professor Susan Danby and Professor Peta Wyeth, and Associate Investigators Professor Susan Edwards and Professor Kerryann Walsh.

Professor Dezuanni says lessons about digital citizenship for young children are being developed using the principles of play-based learning that's appropriate for pre-school and kindergarten settings.

"Even very young children now use digital devices daily so it's crucial we teach children about good digital citizenship from the earlier years of their education," Professor Dezuanni said.

"We need to introduce young children to critical reflection about their technology use in ways that are engaging and fun."

Additional expertise to create the pre-school and kindergarten curriculum will be drawn from Associate Investigator Professor Susan Edwards from Australian Catholic University, who is a world-leader in play-based education and technology education.

Students from primary schools, participating in the trial, will be taught more advanced concepts as they move up through year levels.

Professor Dezuanni said the primary-school program was based on one of the world's leading digital citizenship curriculums, developed by US-based Common Sense Media in partnership with Harvard university experts.

He said the trial will evaluate the effectiveness of Common Sense Media's Digital Citizenship approach in an Australian context.

To date, there is no research-approved digital curriculum being taught in Australian schools.

The trial involves a partnership with Evolve Education to deliver teacher professional development and support for schools to implement the curriculum during the trial.

"Evolve Education are thrilled to be working with QUT and Common Sense Media to empower students across Australia with the strategies to stay safe online, build critical literacy skills and take charge of their digital wellbeing," co-founder of Evolve Education Steve Villani said.

Common Sense Education Vice President of Education Programs Kelly Mendoza said she had confidence in the partnership to empower students to stay safe online.

"Common Sense Education is committed to supporting students, educators, and schools in Australia to build a positive culture of digital citizenship," she said.

The project has been allocated $544,400 in funding that will run for one year.

OFFICE OF THE ESAFETY COMMISSIONER

$544,400

Adapting Common Sense Media's Digital Citizenship resources for impactful eSafety education in Australian early education and primary school settings

Trial USA-based Common Sense Media's Digital Citizenship Curriculum in 15 Australian schools and create and trial world leading online safety curriculum materials for pre-school settings.

OECD

Early Childhood Education (ECEC) and Care in the Digital World

Aims to support OECD member countries and jurisdictions to better understand the implications of digitalisation for ECEC.

LEGO GROUP AND UNICEF

RITEC Initiative (Responsible Innovation in Technology for Children)

In partnership with New York University, City University of New York, Western Sydney University, University of Sheffield

Centre Culture and Connection

Building a positive research culture in our establishment year is critical to the Centre's success.

Centre culture is the foundation on which our members draw the connections, collaborations and values they need to drive high-quality research work. Our Centre comprises nodes spread across the country and includes researchers based around the world, so a spirit of collaboration and an ease of connection is essential. Our Strategic Plan provides members with a shared vision, purpose and values that influence how they work with other members and the ways they approach their research. To further support this value, in 2021 the Centre delivered initiatives that contributed to a research environment where members are engaged, inspired, supported, connected and included.

Digital Child Connect

Digital Child Connect is the umbrella name for the Centre's weekly online member-wide catch up and newsletter. Led by the Centre Director, the online catch-ups began in April and quickly became a staple in the Centre's calendar. The half-hour meetings, held every Monday morning, are a casual and informal platform to share Centre updates and opportunities, and for members to share their own news and achievements. Every fortnight, the online catch-ups are followed up with a Digital Child Connect email newsletter including a wrap-up of Centre updates and news.

In December, members were surveyed on the Digital Child Connect catch-ups and newsletter. The feedback showed that members highly valued the regular opportunity to connect, share and collaborate, particularly with nodes spread across the country.

"As we are physically separated, it's great to see and hear from people that I wouldn't normally interact with."

"Great start to the week! Nice to hear news and updates… and have the opportunity to discuss new developments in the Centre."

Anonymous member feedback on Digital Child Connect

Digital Child Hub

The Hub is the Centre's online intranet for members. It's a one-stop-shop for information and resources to help members undertake their research, including information on ethics and publications processes, project information and communications. Members can read the latest news and events to keep up-to-date with Centre happenings. The Hub also houses a set of online forms to help operationalise projects and member onboarding. The Centre is built on principles of transparency and open work. For this reason, members can access all committee meeting minutes and agendas on the Hub. Since the Hub went live in March, it's organically grown to become an essential platform for sharing information and collaboration.

Centre Clubs

In 2021, the Centre established three clubs as 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 clubs below.

EARLY CAREER RESEARCHER CLUB

Dr Kylie Stevenson initiated the Early Career Researcher (ECR) Club in October 2021 after noting a gap for ECR collaboration and connection when she joined the Centre as a Research Fellow in September 2021. With support from the Centre, the first meeting was held in October 2021, where ECRs brainstormed ways to run the club and topics they were interested in discussing. The ECR Club has grown to 22 members across all nodes with a range of Research Assistants, Research Fellows, and Associate Investigators as members. The key benefit of the ECR Club is to provide an excellent capacity-building community of practice for the next generation of researchers of the digital child. ECRs share their own practice and knowledge, and use their external networks to communicate and share cutting edge research practice, growing their research skills while, at the same time, growing the skills and networks of others.

HDR STUDENT JOURNAL CLUB

The student-led HDR Student Journal Club, established in the Centre's first year, is reflective of the committed, curious, and cooperative approach to research at the Centre, that aims to bring out the best in its highly diverse research community.

Having an interest in community-building, I was very excited to get involved in establishing a student-run journal club at the Centre, when Director Professor Susan Danby first mentioned the idea. From its very inception, the aim of the club has been to provide a space for students to meet and interact with their peers around Centre-related research interests, combining opportunities for professional development, social interaction, and networking. Its growing base of monthly attendees is testament to its relevance for students, further facilitated through the Centre's excellent digital infrastructure and helpful administrative support – allowing efficient communication, and providing access to synchronous and asynchronous modes of engagement with club materials (e.g., past session recordings), via the Centre's online Hub.

The club has become an effective way to welcome new Centre students into a community of supportive peers, and an important tool that – despite the physical separation between the nodes – fosters a connected student cohort, contributing to a thriving research community.

Katrin Langton, PhD student

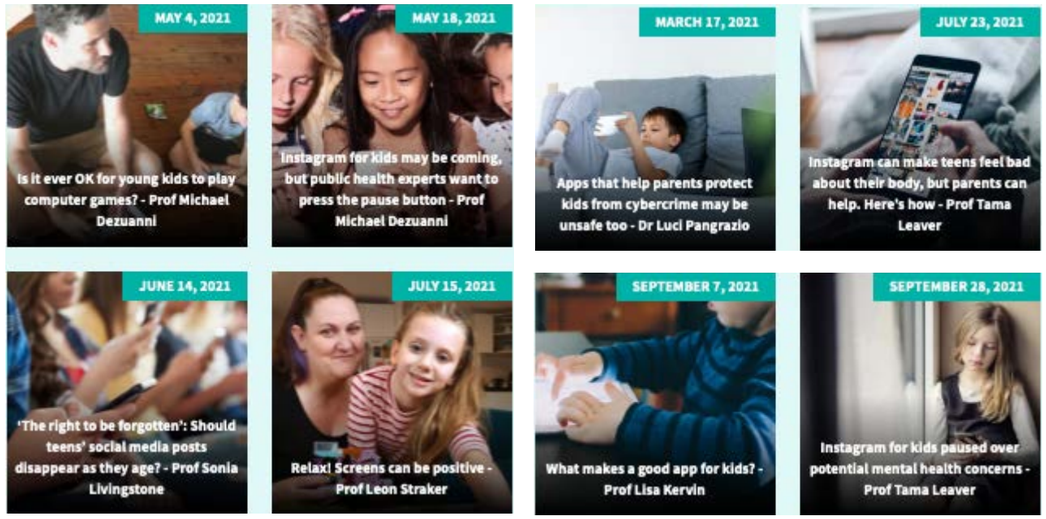
DIGITAL ETHNOGRAPHY CLUB

The Digital Ethnography Club was established 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. This club was initiated by Associate Professor Karen Murcia (pictured) as an outcome of discussions in the weekly Digital Child Connect meetings in August 2021. Researchers were wanting to share experiences and generate ideas and possibilities for the use of video and ethnographic practices. Three sessions were held in 2021, with plans for sessions to continue into 2022. These sessions included:

- Learning from past projects: sharing examples of past projects and examples of the video data collection methods and protocols developed for engaging with young children through research, led by Professor Lisa Kervin.
- Past learnings; options and opportunities for future work: Identifying affordances of fixed, flexible mountings and mobile cameras, led by Associate Professor Karen Murcia.
- Ethical considerations: Exploring the use of the terms Digital Child as presented in the National Statement on Ethical Conduct in Human Research, led by Professor Louise Paatsch.

These presentations brought together Digital Child researchers with a common interest in strengthening their research practice through the sharing of experiences and expertise. The group explored research contexts and questions about the nature of digital ethnography and considered what constitutes low-risk or higher-than-low risk when researchers are including participants under the age of 18 years and using video as a means of data collection.

Communications and engagement



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.

SUCCESSFUL ENGAGEMENT WITH THE COMMUNITY, GOVERNMENT AND INDUSTRY IS CRITICAL FOR THE TRANSLATION OF THE CENTRE'S WORK.

The Centre aims to become a trusted international authoritative source of information about children's use of digital technology. Our program of research and outcomes intends to reach all Australians who look out for the health, education and happiness of young children, including parents and caregivers; teachers and educators; government and policy makers; and community and business organisations.

In 2022, the Centre will establish a Communication, Outreach and Research Engagement (CORE) Portfolio to deliver initiatives and activities that will develop strong engagement with our industry, the academic community, and the broader community. In our establishment year, our focus was to build awareness and establish targeted communication platforms for reaching our stakeholders, including:

DIGITAL CHILD WEBSITE

The Digital Child website was launched in April 2021 and visited by 2100 unique visitors in 2021. Our website's highly visual design brings children to the fore, highlighting our research program, members, news, events and job and scholarship opportunities. As the Centre evolves, our website will grow to profile flagship projects, resources and a Digital Child Blog.

SOCIAL MEDIA PLATFORMS

In April 2021 we launched our Twitter, Facebook, Instagram and YouTube accounts. 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 nearly 400 people opting-in to receive our newsletter in 2021. Our database can be segmented by stakeholders (for example, teachers/educators, parents/carers, policy makers, etc), with the view to target newsletters to specific audiences as the Centre evolves. The Centre launched its first newsletter in September 2021 and distributed three editions. The newsletters achieved a very high average open rate of 65%, with 43% of those clicking through links. Read the September, October and November editions.

Digital Child Seminar Series

In 2021, we successfully launched the Centre's first Digital Child Seminar Series. Led by Professor Annette Woods, Professor Michael Dezuanni and Professor Lisa Kervin, Engaging (socio) materially: Critical literacy, children and media comprised five seminars featuring international experts discussing research related to sociomaterial theories, methodologies and practices. The online series attracted more than 400 attendees from around the world, positioning the Centre on the map in innovative thinking on sociomaterial approaches to research on children and digital technology. The series also allowed the Centre to build important connections with international experts in the field.

Children's Week 2021

In October, the Centre celebrated Children's Week 2021 with two events: an online partner panel discussion that attracted more than 150 registrations, and a Digital Play Afternoon in QUT's Children's Technology Centre for Centre members and their young children.

Digital Play Afternoon: On 26 October, Digital Child members and their children were invited to play, learn, and connect in the QUT Children's Technology Centre (CTC). Children and their adults engaged in interactive digital and maker activities such as Duplo and LEGO, digital photography, BeeBot Art, and coding with LEGO WeDo robots. The Digital Play Afternoon (photos above) was the first event to be held in the CTC after the pandemic restricted activity for most of the year. In addition to connecting with members and their families, it was an opportunity to 'soft launch' the CTC and test the space and activities for future events.

Partner panel event: The Digital Child: Making friends and connections in a post-pandemic world was chaired by Advisory Committee Chair Taryn Marks and featured presentations from Samantha Yorke (Government Affairs and Public Policy, Google Australia), Kate Highfield (General Manager, Professional Learning and Research Translation, Early Childhood Australia) and Megan O'Sullivan (Statewide Operations Manager, Scitech).

The Children's Week theme in 2021 focussed on Article 15 of the United Nations Convention on the Rights of a Child – that children have the right to choose their own friends and safely connect with others. The panellists discussed how the pandemic and digital technology have given rise to children's right to make their own friendships, and the implications and opportunities. More than 150 people from around the world registered to attend the event and participate in the discussion on digital children's rights, and helped place the Centre on the world map in digital child research.

Public submissions

In 2021, the Centre actively sought to respond to calls for submissions on government policies and reviews related to digital childhoods.

Public submissions allow the Centre to share its expertise and recommendations on areas that could affect our stakeholders. They also help position the Centre nationally and internationally as an authority on matters of digital childhoods. The Centre collaborated across nodes and disciplines to submit the following responses in 2021:

AUSTRALIAN GOVERNMENT'S MEDIA REFORM GREEN PAPER Led by Professor Tama Leaver with Professor Sue Bennett, Professor Susan Danby, Professor Susan Edward and Professor Lisa Kervin.

AUSTRALIAN GOVERNMENT'S ONLINE PRIVACY BILL EXPOSURE DRAFT Led by Professor Tama Leaver with Dr Anna Bunn and Professor Susan Danby.

AUSTRALIAN CURRICULUM, ASSESSMENT AND REPORTING AUTHORITY (ACARA) CURRICULUM REVIEW Led by Associate Professor Jessica Mantei with Professor Caroline Barratt-Pugh, Professor Sue Bennett, Dr Dylan Cliff, Professor Susan Danby, Professor Michael Dezuanni, Professor Susan Edwards, Associate Professor Steven Howard, Professor Lisa Kervin, Associate Professor Cathrine Neilsen-Hewett and Associate Professor Irina Verenikina.

UNITED NATIONS CONVENTION OF THE RIGHTS OF THE CHILD GENERAL COMMENTS NO. 25 ON CHILDREN'S RIGHTS IN RELATION TO THE DIGITAL ENVIRONMENT Led by Professor Lelia Green with Chief Investigators.

Finances

The Centre's spend for 2021 reflects the challenges that were faced to fully deliver Centre activities and recruitment, primarily due to COVID-19 restrictions on travel into and around Australia, and delays or freezes on recruitment at most node institutions.

Some recruitment of Research Fellows and HDR students occurred across the nodes, however the full complement is not expected until later in 2022.

1 January 2021 – 31 December 2021

Income

INCOME	TOTAL
ARC grant	$5,179,699
University contributions	$1,337,000
Partner contributions	$117,000
Other income	-
TOTAL	$6,633,699

Expenses

EXPENSES	TOTAL
Salaries	$1,038,821
PhD support	$1,342
Management and administration	$35,361
Travel, meetings and workshops	$23,849
Communication, outreach, education, engagement and other	$35,325
TOTAL	$1,135,058

Key Performance Indicators

KPI	Details	Target	Result
KPI-1	1. Number of research outputs		
KPI-1a	Journal articles	0	1
KPI-1b	Book	0	0
KPI-1c	Book Chapters	0	0
KPI-1d	Conference publications	0	0
KPI-1e	Publications with two or more Centre researchers from other nodes	0	0
KPI-2	2. Quality of research outputs		
KPI-2a	Percentage of book chapters in prestigious international presses	0	0
KPI-2b	Percentage of Q1 outputs	0	0
KPI-3	3. Number of workshops/ conferences held/offered by the Centre		
KPI-3a	Major conferences hosted/offered by the Centre	1	0
KPI-3b	Seminar series - research	6	5
KPI-3c	Workshops - research development	5	2
KPI-4	4. Number of training courses held/offered by the Centre		
KPI-4	Training Workshops	2	5
KPI-5	5. Number of additional researchers working on Centre research		
KPI-5a	Postdoctoral researchers	0	12
KPI-5b	Honours students	0	0
KPI-5c	PhD students	6	16
KPI-5d	Masters by research students	2	0
KPI-5e	Masters by coursework students	4	0
KPI-5f	Associate Investigators	0	20
KPI-6	6. Number of postgraduate completions	0	0
KPI-7	7. Number of mentoring programs offered by the Centre	1	0
KPI-8	8. Number of presentations/ briefings		
KPI-8a	To the public	6	3
KPI-8b	To government (parliamentarians and department/agencies at both State and Federal level)	5	4
KPI-8c	To industry/business/end users	4	5
KPI-8d	To non-government organisations	4	5
KPI-8e	To professional organisations and bodies	4	5
KPI-8f	Public policy seminar/event	0	0
KPI-9	9. Number of new organisations collaborating with, or involved in, the Centre		
KPI-9a	New academic collaborative relationships	0	0
KPI-9b	New industry collaborative relationships	0	0
KPI-10	10. Number of female research personnel		
KPI-10	Female percentage	60	82
Center Specific KPIs			
KPI-11	Evidence-based resources for end-users (e.g., families, educators, health professionals)	0	0
KPI-12	New end-user technologies	0	0
KPI-13	Mobility of Centre members within and across nodes and partner sites - days per annum	50	67
KPI-14	Social media content creation - posts by Centre	75	239
KPI-15	Centre Director Node Outreach Program	1	1
KPI-16	Research Fellows and HDR student representation that includes a range of cultural backgrounds	0	6

Activity Plan 2022

RESEARCH	• Establish Indigenous Engagement Portfolio • Establish Research Translation Portfolio • Establish competitive Strategic Initiatives funding • Hold two Chief Investigators meetings/retreats • See specific research project activity plans • See Longitudinal Family Cohort Study activity plan
GOVERNANCE	• Establish Partner Reference Group • Establish Digital Technologies Reference Group • Establish Children's Reference Group • Establish Parents and Caregivers Reference Group
MENTORING & CAPACITY BUILDING	• Hold an in-person Digital Child Annual Meeting • Establish Skills, Mentoring, and Research Training (SMART) Portfolio • Establish the '2for1' model for the Executive Committee • Deliver TOPAZ
PARTNERS & COLLABS	• Hold Industry Partner Forums (2 per year) • Establish Node-specific Children's Reference Groups
CENTRE CULTURE	• Establish Equity, Diversity, Justice and Inclusion (EDJI) Portfolio • Develop Indigenous Engagement Policy
COMMS & ENGAGEMENT	• Establish the Communications, Outreach & Research Engagement (CORE) Portfolio • Launch a Digital Child Blog • Deliver activities in Children's Technology Spaces • Hold public facing partner seminars • Social media awareness and capacity building