Faculty of Humanities

2021 Australian Government Research Training Program Scholarships

Strategic Project Profile

PROJECT TITLE: Educators and parents connecting and empowering young children's creativity with digital technologies

FIELD OF RESEARCH CODE: 1302

PROJECT SYNOPSIS:

The place of digital technologies in children's lives cannot be ignored as we know their presence and impact are enduring. There has never been a more important time to conduct applied research providing empirical evidence of how young children from diverse communities, learn and create with digital technologies. Frameworks and curricula for digital technology learning highlight the need for positioning and empowering children, to be active constructors of learning and creative producers with digital technologies. Applying both a social constructivist theoretical lens and creativity framework are critical to understanding effective design and use of innovative digital technologies with and by young children from diverse contexts and socio-cultural backgrounds.

The proposed exploration of children's educational experiences with digital technologies both in their formal early years learning environment and at home is timely, as the need to go

beyond simply moving traditional teaching methods onto online platforms has been highlighted during the COVID-19 lockdowns. Immersive digital platforms and interactive devices are becoming more accessible and affordable, making this a critical phase of development in education where the creative rights and needs of children, parents and educators should be heard and used to inform productive digital learning design and pedagogies.

It is important to recognise the ways in which children's engagement with digital technologies is shaped by age, gender, ethnicity, and socio-economic class (Hannaford & Beavis, 2018). Certain factors can intersect to marginalise some children in the way in which they access opportunities for creative and collaborative participation using digital tools for learning, connecting and communicating. Meeting the challenges and capitalizing on opportunities for young children living in the digital era, demands socio-cultural understanding and an evolution of digital tool designs and digital practices in education. A connected approach, where educators and families work together to explore their own digital literacies and knowledge of active child-centred learning practices, could enable opportunities for inspiring children's creative digital practices.

The proposed research aims to investigate the practices of educators and families from a range of socio-economic and culturally diverse early years centres for engaging young children with digital technologies both in the face to face learning environment, online and in the home. The age range of children for this project is 4 to 8-year-olds.

A systematic literature review will be undertaken, and used to frame analysis of the way in which technology is inscribed in curriculum and how policy, pedagogy and educators' and parents' digital technology self-efficacy potentially impacts on opportunities for children from diverse backgrounds to engage with creative digital learning. The literature reporting design features of digital technologies targeting young children and creative practices will be critiqued.

1. Mapping the Field: A comprehensive review of research literature focused on:

- Young children's engagement with digital technologies for creative practices in formal learning environments and in the home.

- Digital technologies design features and the impact on children's potential creativity.

- Early years learning frameworks, curricula and key government policy documents related to the creation or limitation of opportunities for children to use digital technologies.

- Educators' and parents' self-efficacy with digital technologies

2. Recruiting participants: Case study research

- A selected sample of 6 early years learning environments (Schools and Early Years Centres) to ensure diversity in relation to demographics and governance

- With an informed and approved ethical approach, educators, parents and children will be invited to participate in the study

3. Survey: Baseline data

- Capturing Educators' and Parents' attitudes, values, beliefs and practices with digital technologies (personal use and with children)

- Policy and resource audit for each case study site

4. Field Observations

- Children's digital activities and educators and parents' pedagogy/associated actions (in formal education setting and at home)

- Video capturing, voice recording, digital photos of observed engagement/interactions

- Children's self-evaluation checklist completed post digital activities observed

5. Digital Technologies Workshop (Approx., 3 hours)

- Demonstration and exploration of a range of digital technologies with potential to support children's creativity

- Capturing educators, parents and children's identification of design features of digital technologies that potentially support creativity.

6. Interviews

- Semi-structured interviews with educators, parents and children

- Prompted with video and photos from observed activities with digital technologies

- Artefactual interview method (Vasudevan &Riina-Ferrie, 2019) to enable participants to reflect on their own participation, use of digital technology and possible creative process.

- What digital technologies used; why, when and how

It is evident that technologies come and go but the key skills and capabilities developed through creative experiences with digital tools will endure and empower children to be agile learners and creators as new technologies and devices emerge. The understanding and outcomes achieved through the proposed research should assist in positioning children's needs and rights at the forefront of the design process leading to innovative digital creation tools suited to early years education. The vision being that new technologies build on existing quality early years pedagogic traditions and support rich creative learning opportunities for children.

FEASIBILITY AND RESOURCING – DESCRIPTION OF THE SUPPORT THIS PROJECT WILL RECEIVE:

Curtin University is a node in the ARC Centre of Excellence for the Digital Child ($34.8 million: 2020 - 2027). The recipient of the PhD scholarship would be welcomed into the growing community of practice evident in the Digital Child.

Curtin's School of Education offers expertise in digital innovations and working with digital technologies in both face to face and online teaching environments. The edTech Hub lead by the School's Learning Technologies Team supports staff and students to collaboratively develop innovative ways of working with a range of digital technologies and solutions.

THE SIGNIFICANCE OF THE PROJECT/ PROGRAM FOR THE ENROLLING SCHOOL OR INSTITUTION:

Curtin University is recognised in the QS World University Ranking with Education being in the Top 100. The School of Education has a strong track record in delivering online courses and has a strategic focus on innovation and quality learning enhanced with digital technologies. The proposed research will contribute expertise and knowledge needed to build capacity and on-going strength in the field. The School of Education is home to the internationally esteemed STEM Research group which incorporates the former Science and Mathematics Education Centre (SMEC). The PhD scholarship would enable closer connections and inspiration between the STEM Research Group and the Centre of Excellence for the Digital Child.

Students must express interest in this scholarship opportunity by emailing the Project Lead listed below. Please provide a copy of your current curriculum vitae and detail your suitability to be involved in this strategic project.

PROJECT LEAD CONTACT:

Name: Karen Murcia
School: School of Education
Faculty: Humanities
Email: Karen.murcia@curtin.edu.au
Contact Number: 08 9266 2150

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