PROJECT DIGITAL LITERACY IN ECEC

DIGITAL KNOWLEDGE SKILLS AND COMPETENCIES
IRISH EARLY CHILDHOOD EDUCATION AND CARE PRACTICE.

- *Funded by DCEDIY - Support organization grants for 2025.*
- *Funding to support research underpinning policy development in this area.*

- By Meera Oké (PI) and Busra Gultekin (RA)

BACKGROUND AND CONTEXT

What is the Role of Digital Technology in ECEC practice?

It is essential for ECEC educators to use digital technology.

- Functional and pedagogical use of devices (robotic toys, for coding, computers, virtual cameras, digital thermometers, safety devices). (OECD, 2023)
- Communication with parents, documenting learning journeys, administrative tasks, policy updates.
- Meeting with State level Compliances (for example, financial regulations with CORE funding, POBAL)
- Accessing funding opportunities.

What is known about the Impact of Digital Technology?

- Children spend considerable time interacting with digital tech (Common Sense Census, 2017)
- Digital and media tech offers rich learning opportunities (e.g., digital play) (Fleer, 2018; Marsh et al., 2016; Undheim & Jernes, 2020; Undheim & Ploog, 2023).
- Risks include **passive screen** engagement, linked to health and behaviour issues (Bohnert & Gracia, 2020; OECD, 2023).

CONTEXT

Changing Learning Context:

- Fundamental changes in how young children learn and develop (DES, 2020).
- Rapid developments in AI challenging traditional methods.
- Growing up in a digital world offers both opportunities and risks.

National Strategies and Plans:

- Ireland's Literacy, Numeracy, and Digital Strategy 2024-2033 emphasizes **digital awareness from birth** to young adulthood.
- 'First Five' National strategy for babies, toddlers, young children, and their families.
- Nurturing Skills workforce plan aims to enhance knowledge and skills in ECEC practice.
- 'Aistear'(2024) Early Childhood Curriculum Framework (includes exploring digital technology)

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AIM AND OBJECTIVES

The aim of the research is to identify Irish ECEC *educator needs, attitudes, competencies and capacity* related to the use of digital technology in their practice so as to support Irish policy development in the use of digital technologies in ECEC.

Objectives

1. **To describe the current use of digital technology in everyday ECEC practice.**
2. **To identify gaps in digital competencies and capacities of ECEC practitioners using the digital competency framework.**
3. **To identify attitudes and perceived challenges/benefits of using digital technology in everyday ECEC practice.**
4. **To derive implications for policy development in the use of digital technologies in ECEC.**

RESEARCH DESIGN

Mixed method, pragmatic research design (Creswell, 2007)

Philosophical underpinnings: Pragmatism

Pragmatic epistemology: Knowledge based on participant experience	**Pragmatic design**: Supports multiple ways of interpreting the world, from the perspective of participants.	**Mixed method**: Combines qualitative and quantitative methodologies.

METHODS

Quantitative: SELFIE self-assessment tool

- Describes capacities, competencies, and attitudes of ECEC educators in using digital technology

Qualitative: 4 ECEC focus group interviews

- Gain insights into challenges, benefits, and practical use of digital technologies in practice.

SELFIE TOOL

The **SELFIE tool** is designed to help educators assess how effectively they are using digital technologies for teaching and learning practice- It will be adapted for this study (European Commission)

Reflective tool: Helps early childhood, primary, and secondary educators reflect on how digital tools can enhance their professional practices.

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COMPONENTS OF THE TOOL

- The tool comprises **32 self-reflection items in 5 competence areas** based on the DigiCompedu framework (European Commission). Each item is introduced by a description of the competence and provides six competence statements following a six-level proficiency model.
- The tool has a set of **6 proficiency levels** ranging from Awareness – Exploration, Integration - Expertise – Leadership & Innovation in **five digital competency areas**. The competency areas include *Communicating*, *Handling information and content*, *Teaching and Learning, Assessment* & *Problem solving* and *Being Safe and legal online*.
- The tool takes about **25 minutes** to complete:

PARTICIPANTS

Quantitative measure: Minimum of 100 participants will complete an online survey

A stratified Random selection

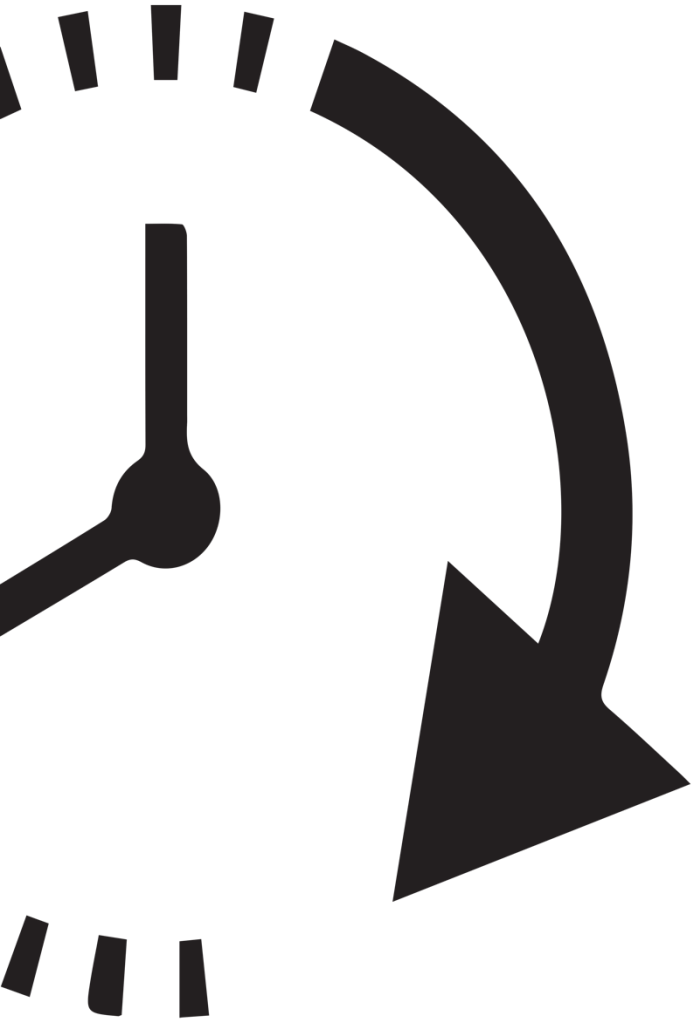
Recruited through ECEC networks (Plé, NCN, ELI, Early Childhood Ireland, Montessori and Childminding Ireland, social media groups)

Represent range of ECEC settings - urban/rural, private/community settings, full-time/session settings

Qualitative measure: Sub-sample of 20 participants

Purposive volunteer based selection

Each focus group will have 6 participants



TIME LINE

Phase 1 April- July: Recruit Research Assistant, Ethics Approval and Planning for Data collection…

Phase 2 July August – Complete Data collection and Analysis

Phase 3 August to December – Putting it all together – Complete Analysis and Report writing

COMMENTS/QUESTIONS?

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