Digitizing care: the role of communication and registration apps in early childhood education and care.

Research Centre Pedagogy in Practice, Antwerp
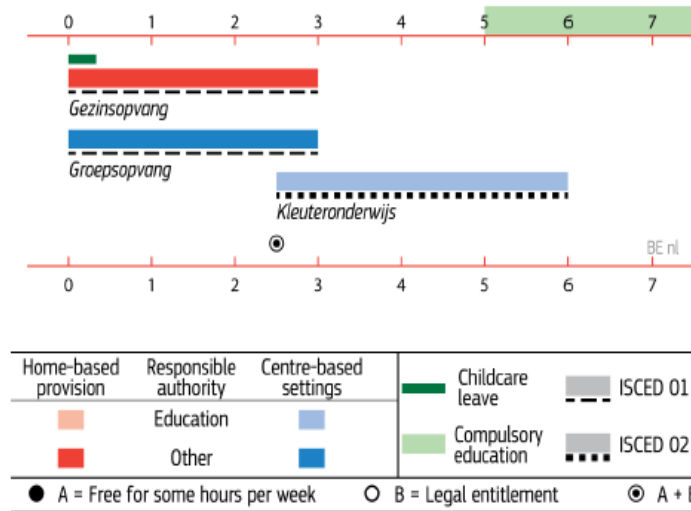
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What makes care 'good care'?

"I was putting children to sleep while using the iPad to register their nap times, but at the same time, there was a child next to me who could not sleep. It feels contradictory."

(Childcare practitioner, Case A)

Context and research orientation

Home-based provision	Responsible authority	Centre-based settings		Childcare leave		ISCED 01
	Education					
	Other			Compulsory education		ISCED 02

● A = Free for some hours per week   ○ B = Legal entitlement   ◉ A + B

Research Centre Pedagogy in Practice

- Practice oriented research projects
- Pedagogical support – related to a BA Degree in Early Childhood Education and Care

Childcare in Flanders

- Split system: 0-3 in childcare centers, 3-12 year in schools
- 0-3: ratio 1 practitioner for 9 children

European Commission/ EACEA/ Eurydice, 2025

Use of digital media

- For registration of care
- For documentation of care
- For communication with parents

First intuitions from a research on digital pedagogy in ECEC

Media use for registration, documentation and communication with parents
- Is not considered 'harmful' for children (>< media use by children)
- Is considered to go 'unnoticed' by the children
- Is present throughout the day
- Demands attention from childcare staff
- Staff assume that parents want regular/constant updates.

Growing Up Tracked: Digital Media in Early Childhood

- Digital media are widely accessible and integrated into daily lives, shaping how children perceive the world. (Plowman, Stephen, and McPake 2010; Green 2024; Chaudron, Gioia, and Gemo 2018)
- Children live in a data-driven society where behaviour is constantly managed and analysed (Gabriels, 2016; Lupton & Williamson, 2017)
- In ECEC and schools digital media apps are increasingly used to document care details and communicate with parents (Stratigos & Fenech, 2021; Wilke et al., 2024)

Opportunities

- supports effective parent involvement by providing direct access to children's daily experiences, thereby fostering connection and engagement (Mc Lean, 2019)
- help parents to stay informed and extend learning at home (Stratigos & Fenech, 2021).
- practical advantages by streamlining communication and reducing administrative burden (Xu, Akerson & Fox, 2021.

Challenges

- expectation for constant updates and accountability (Edreich, 2021), expectation of instant replies and immediate action (Fenech, 2020) and increasing workload and stress to educators (Stratigos & Fenech, 2021)
- pressure for parents, blurring lines between work and family life (Andelsman et al., 2024)
- differences in parents digital literacy and concerns about privacy and data security (Erdreich, 2021)

How does the use of digital media for registration and communication in ECEC shapes the enactment of care (including communication with parents). How does this use enhance caregiving and how might it hinder caregiving?

- What do ECEC practitioners do with digital media for registration and communication?
- When do they do this?
- What interactions (between practitioners and children, in between practitioners, between practitioners and parents) arise?
- How do practitioners and parents experience this practice?
- What values and expectations, what ideas about good practitioners, good parents, good tools are behind this practice?

Method and data

Per case study
- Observations: 1 day
- Smartphone diaries: 5 days—10 photos per day → 50 photos per diary
- Photo-elicitation interviews: 3 childcare practitioners
- Photo-elicitation interviews: 6 parents
- Focus group discussion with the team

Methodological literature used:
(Harper, 2002; Plowman & Stevenson, 2012; Liebenberg, 2018)

Conceptual framework: Care in practice (Mol, Moser & Pols, 2010) and Digital tools as "non human actors" (Latour, 2005)

2 cases

Case A

- Serves 54 children across 3 groups and part of a multi-branched childcare organisation
- App A gives real-time information (mealtimes, sleep patterns and toilet visits) including photos and messages via the chat function
- Instagram channel with photo's for a wider audience
- iPads are used to enter data into the app.

Case B

- 34 children in two groups
- App B is used for planning, billing and reporting. Educators update the app regulary but parents receive a personalised e-mail at the end of each day with information about mealtimes, sleeping and toilet visits).
- Photo's are not shared via the app but sent separately through WhatsApp.
- A closed Facebookgroup for a wider audience
- Fixed PC's are used to enter data into the app

How digital media express care

Digital media as a tool to keep parents informed

Providing parents with detailed and accurate information about their child's day
- **Eating**
- **Sleeping**
- **Nappy changes or toilet visits**

> *"Punctuality is important so parents know when their children are awake and when they are asleep. Some parents consider it essential to know when their children are sleeping, so it is crucial for us to be timely in informing them about nappy changes and sleep times."* (Childcare practitioner, Case A)

Parents have varying interests in this information, often influenced by their child's specific needs and routines.

> *"We had a situation where my child didn't take naps. We paid close attention to that, while other parents might prioritize how much he drank instead. It really depends on the child. This makes it challenging for caregivers to determine what information is most relevant for each parent. That's why it's beneficial that they document everything."* (Mother, Case A)

Different communication rhythms: real-time updates versus end-of-day summaries.

# Digital media as reassurance that children are well cared for

The role of photo's:
- **Reassurance**
- **Building trust**
- **Warning**

"*Parents don't see everything. They don't see me feeding a baby while rocking a bouncer with one foot and simultaneously separating two fighting toddlers with the other. It's intense. Parents only see the rosy picture.*"
(Childcare practitioner, Case A)

"*You can't show a parent a picture of their crying child, even when it's comforted. You can show them a picture of when the child is happy afterwards.*
You have to think: would you like to see a picture like that? No. Then don't send it."
(Childcare practitioner, Case A)

Digital media enhancing the perception of professionalism
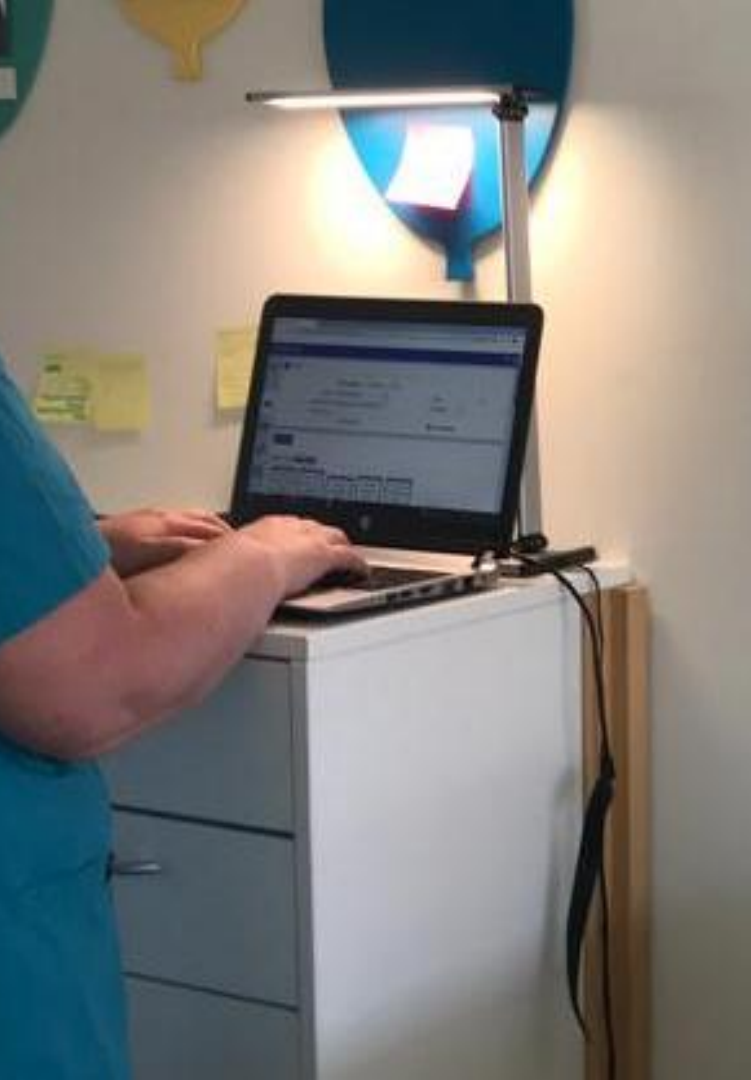
- **Elevates the professional image of childcare**
- **Given the historical underevaluation of childcare**
- **Positive feedback from parents enhances motivation**

"As a childcare practitioner, receiving a nice message from a parent gives me a huge boost. When that happens, it makes me happy, and I often share it with my colleagues: 'I just received a really nice message!'" (Childcare practitioner, Case A)

How childcare practitioners experience this care

Imagine waking up tomorrow and the internet, computers, and tablets no longer exist. What would you do differently? And what would stay the same?

"I would be more consciously aware of things like: this child ate at that time, another at a different time. We wouldn't need to document it anymore because it would already be done. I think I would feel much calmer... You don't have that pressure of needing to fill things in correctly or remembering to update everything. It would simply be: I fed the child, and that's it—it happened."
(Childcare practitioner, Case A)

Digital registration = a challenge
- **Pressure to ensure constant and immediate updates**
- **Parental expectations**
- **Workload increases**

→ especially when realtime info is given

"*So we have to update the iPad, but for us it is not so easy, because we do have the work with the children. I sometimes would like to say to parents: you should try to do this. Keeping track on the iPad, clean the rooms ... Because we do not only do childcare, we have to take care of hygiene, and the extra logistical tasks. It really is a lot of work.*

What the iPad takes away from us ... in that time we could be doing different things. It is as if parents do not understand that. I understand they don't. That's normal. But still." (Childcare practitioner, Case A)

"I find the app easy to use. During meal time or changing time, you can easily press a symbol to set all the children to 'eat' at the same time, without having to do it one by one. In a nursery without this system, you would have to note everything manually in a booklet, which takes a lot of time. This system makes it a lot easier."
(Childcare practitioner, Case B)

Digital registration = a benefit
- **Easily accessible record of care**
- **Convenient entry for large groups**

Negotiating care through the app (staff point of view)

> *"Parents ... are sometimes fixated on their child. For instance, when we have our hands full with the children and register their meals later in the day, we get a message very quickly: has he eaten? But we think: the child first, and then we'll fill in the iPad. I think App A is good for parents in a way, but also not good in a way. It's good they know how their child is doing. I would like to know that too. But not from... Parents are too fixated on that: that iPad, how is my child? That's a little bit... "*
>
> (Chidcare practitioner, Case A)

Staff understand that parents want and need information about their children.

Sometimes staff have to weigh the interests of the group to the interest of individual parents and their child.

How parents experience this care?

- **Initial high need for information**
- **Frequent app-checking (in case A up to 3x a day) when children are very new or young**
- **Information needs decreases as trust in staff grows over time**

"I check the app often and like to stay updated, but in the end, it's not the most important thing. When my eldest was in daycare, I used to stress if updates were missing—'It's already noon, and there's no record of lunch!' But now I realise the child will have eaten. It is more important that the child eats than that the iPad is replenished. I think that changed when you become more mature as a mother. (Mother, Case A)

"At some point, you just have to trust the daycare and let go. Initially, it takes time to build trust, but eventually, we may not even read the emails anymore. (Father, Case B)

Digital communication as reassurance
- **Supports evening preparation at home**
- **Valued when handovers are rushed**
- **Appreciated:**
    - **Care details**
    - **Photos and activities or pedagogical insights**

> *"But yes, the photos on Facebook, the activities, of course you are happy to see what happens to the children. Then you get another peek in the child's day."* (Father, Case B)

> *"If I see that everything is going well, then my day does go a bit smoother, because that's not something I have to worry about.* (Mother, Case A)

- **Mixed emotions: reassurance versus anxiety**
- **Immediate updates can create stress (e.g. illness alert)**
- **Parents recognise digital information are snapshots, not full reality**
- **Parents value information but prioritise quality of direct care**

"I love getting updates, but I also know they are busy. If they miss something, it's okay, as long as my child is well cared for." (Mother, Case B)

Negotiating care through the app (parent point of view)

Parents do not only receive messages but use the app or a digital tool to contact the setting, especially in case A.

"If she's sick, I'll let them know with a message. Or if we arrive later than usual.

Even if I forgot on the number of scoops I put in the jar for her milk, I'll let them know.

And then I also ask in the afternoon – if I haven't seen that she has had milk – we will come and pick her up at that hour, will she be offered another milk?

Then control comes up in me, because I know… Her brother is in the car, he's exhausted. He is already overstimulated. If my baby is also overstimulated because she hasn't had any milk, then I will be overstimulated as well."

(Parents, Case A)

Conclusions

Digital media are very present in ECEC settings: as silent actors dat co-direct the actions of childcare practitioners from the background.

Digital media both strengthens AND hinders care. Digital tools are not neutral; they shape observations, communication, and care (Latour, 2005; Mol, 2010).
They support care by enhancing communication, especially with real-time updates (e.g., food, sleep).
Yet they can also distract from embodied care, shifting focus from the child to the screen.

Real-time data reassures but also creates dependency.
- Pressure on childcare practitioners
- Emotional impact on parents
- Increase demands

Children's Position
- Children are subjects of observation, not participants.
- Little awareness or control over images/data.
- Apps often prioritize adult needs over children's agency.

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Thank you.

Interested in cooperation on the theme of digital media and young children and/or digital registration and communication?

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