

ON  
LINE

10 November 2023 – 9.30 am/6.00 pm Italian time

11 November 2023 – 9.15 am/1.30 pm Italian time

**International Conference**

# **SCHOOL<sup>4</sup>THINKING & JUDGING III Edition**

**Fostering a Critical  
Relationship with AI  
Technologies in  
Primary School.  
The Role of Aesthetic  
Experiences**

**SCHOOL<sup>4</sup>THINKING  
& JUDGING  
III Edition**



# ***Hybrid-transitions as a spaces for children's agency***


**Federico Farini,  
University of Northampton**

**Angela Scollan  
Middlesex University**

**10-11 November 2023, University of Turin**



**SCHOOL4THINKING  
&JUDGING – III Edition**



Since the early 21st century, psycho-pedagogical research has explored the impact of digital technology on the cognitive and social development of the child

suggesting that digital technology can bring learning opportunities



**SCHOOL4THINKING**  
**&JUDGING – III Edition**

Research has been concerned about the use of digital technologies *for* children's learning

overlooking children's active role as they move between digitally enhanced experiences and non-digitally enhanced experiences

This presentation discusses situations when children move between the use of AI-based technology and non-digitally enhanced interactions to co-construct narratives, showing agency by claiming authorship of valid knowledge



AI-based technology → intelligent voice assistants (IVA) technology

Children's transitions between IVA-based technology and non-digitally enhanced interactions are conceptualised as social paces where children generate and access domains of knowledge

*Hybrid-transitions.* children's movement between the use of IVA-based technology and non-digitally enhanced interactions



## Hybrid-transitions

~~elements of temporal sequences~~

✓ *social spaces* where children combine the use of IVA-based technology with non-digitally enhanced interactions in the co-construction of narratives, taking the role of autonomous authors of knowledge

children display agency:

- 1) autonomous access to domains of knowledge (epistemic status);
- 2) taking rights and responsibilities for constructing knowledge (epistemic authority)



## **SCHOOL4THINKING &JUDGING – III Edition**

Discussing today...

Ethnographic study offering examples of children who author knowledge as they transition from the use of IVA-based technology and non-digitally enhanced interactions in the context of activities in a primary school in Boston



## Contextual notes

- use of a software for the development of communication skills for children with English as second language
- 2 IVA smart speakers, connected with a tablet where the communication skills software is installed; 2 children using each IVA (8 children were observed using the software over two weeks)
- Activity: 'vampire' game. Every time that words starting with the letter 'V' are pronounced correctly, the IVA device emits a deep and scary long laugh





Use of IVA-based technology: pivot for children's agency

from the IVA experience, a rich array of non-digital face-to-face interactions develop as children co-construct narratives

co-construction of narratives → a form of agency within the peer-group. Children:

- mutually recognise their statuses as producers of valid knowledge
- co-operate in combining narratives of personal experiences, knowledge of Vampire physiology and technical skills in the use of smart speakers...



The material substrata of experiences (digital play and non-digital interactions) are two components of the same fluid, but nevertheless unified, lifeworld

The use of IVA technology and non-digitally enhanced interactions were both used by children to produce complex texts built through creative combination of individual authorships

*Display of agency* →


- authorship of knowledge
- cooperation in the authorship of knowledge: personal stories, ideas, experiences and emotions were “interlaced” in co-constructed group narratives



Main themes, generated from a perspective focused on the social use of digital technologies by young children →

- 1) digitally enhanced experiences are exchanged in non-digital interactions, and non-digital experiences are used to enrich the experience of digital resources
- 2) a sociological interpretation of hybrid-transitions as spaces of children's agency, where knowledge generated through digital resources is used in non-digitally mediated interactions, and vice-versa
- 3) IVA technology enables more cohesive and collaborative moments of storytelling



- 
- 4) the idea of a separation between digital world and non-digital world is untenable
  - 5) children effortlessly connect and understand their shared movement in 'hybrid-transitions'
  - 6) dynamic and agentic concept of transitions → in continuing transitions (between the use of IVA and non-digital interactions) children co-construct social spaces where their agency is displayed as authorship of knowledge
  - 7) *hybrid-transitions* between digital and non-digital realms occur continuously



# Thank you!

Federico Farini

[federico.farini@northampton.ac.uk](mailto:federico.farini@northampton.ac.uk)

Angela Scollan

[a.scollan@mdx.ac.uk](mailto:a.scollan@mdx.ac.uk)

ON  
LINE

10 November 2023 – 9.30 am/6.00 pm Italian time

11 November 2023 – 9.15 am/1.30 pm Italian time

**International Conference**

# **SCHOOL<sup>4</sup>THINKING & JUDGING III Edition**

**Fostering a Critical  
Relationship with AI  
Technologies in  
Primary School.  
The Role of Aesthetic  
Experiences**