



## Brief

# Participation, process, and product: Creativity in a collaborative technology-mediated creation process in kindergarten

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In this article I explore the concept of *creativity* in creation processes with digital technology in early childhood education and care institutions (kindergartens), in line with the Norwegian Framework plan for kindergartens' focus on creative use of digital technology together with children (Utdanningsdirektoratet, 2017). The purpose is to contribute with knowledge of a collaborative, technology-mediated creation process with young children. The research question is as follows: *What characterises a collaborative technology-mediated creation process in which a group of kindergarten children (age 4-5 years) and a kindergarten teacher create a digital picture book together?* I define a technology-mediated creation process as a process in which digital technology is used as a tool by a group of people to create something, for example, a digital picture book (Undheim, 2020a, p. 3). The study is a qualitative case study, and the empirical material consists of video observations of the process and the finished product. As the theoretical framework, I use the concepts of *possibility thinking* (Craft, 2011) and *distributed creativity* (Sawyer, 2010; Sawyer & DeZutter, 2009). The analysis shows that the children and the teacher engage in possibility thinking in different ways during the creation process and explore new possibilities together. In this process, the boundaries are shifted from *what is* to *what can become*, from recognition to transformation, and a synergy of ideas emerges. By drawing on the findings in this article, I interpret the creation process as an example of a *creative collaborative technology-mediated process* in which creativity is distributed between the participants, the activities, and the artefacts. The digital technology adds a new layer to the process, by expanding the possibilities. By drawing on their own thoughts and ideas, the children and the teacher create a new cultural resource together;

they create a product that is new, original, and meaningful to them. Further, the analysis shows that the product is important for the children. However, the product itself is only a snapshot of children's opinions in the moment when it was created. To fully understand the creative collaborative processes of the children, it is important to include both the process and the product. This article contributes with knowledge of creative use of digital technology together with groups of young children, which is central to the field of practice and the kindergarten teacher education.

**Keywords:** *creativity; digital technology; participation; technology-mediated creation process*