Supporting Curiosity-Driven Learning in Preschool

John M. Kaneko & Sofia J. Frankenberg
Stockholm University, Sweden

Contact corresponding author: John M. Kaneko, E-mail: john.kaneko@buv.su.se

Children’s curiosity takes a central place within Early Childhood Education and Care (ECEC). In Reggio Emilia inspired practices children’s and adult’s curiosity is regarded as important, partly due to the emphasis on collaborative exploration. The pedagogy of listening (Åberg & Lenz Taguchi, 2018), further brings forward the idea of fully including children’s curiosity, their voices, and initiatives in the processes of discovery and learning. Interestingly, there is a lack of theoretical understanding as well as empirical studies of curiosity-driven learning in ECEC contexts.

In this study, we analyze video sequences from Socio-Emotional Material Learning practices (SEMLA) in Swedish preschools with the aim to better understand how preschool teachers scaffold children’s curiosity-driven learning processes. The analysis is conducted using a multimodal interactional perspective, together with a framework for scaffolding curiosity-driven learning which combines psychological curiosity research with that of scaffolding. The framework posits that a curiosity process or cycle begins with attention placed on an information gap, either spontaneously or by behaviors of others (for example adults or peers). This potentially leads to efforts to fill the gap or to the anticipation of information from others. The cycle is then completed when information is reached that satisfies the information gap. Although learning can happen throughout the curiosity cycle (e.g. during identification of knowledge gaps and information search), the framework highlights the importance of the completion of curiosity cycles, to fully achieve curiosity-driven learning, and scaffolding from others can facilitate this process.

The results show that ECEC teachers may use a multitude of scaffolding strategies within the different phases of a curiosity cycle. This calls for an awareness of what children know, how strategies and tools are available to them, and how they understand information.
Moreover, the results indicate that scaffolding in the different phases maintains the momentum of curiosity-driven learning and that it also includes children reaching desired information. The results also illustrate the need for teachers to be aware of children's preexisting knowledge. When information is reached, teachers are involved in framing the information as sufficient to exhaust an information gap or validating the information so that correct information is reached. This qualitative and small-scale study points to the need for more research on curiosity-driven learning and how it may be scaffolded in ECEC settings.

**Keywords:** curiosity; learning; scaffolding