

# Connected Learning for Adults: An Exploratory Study of How Informal Educators Think About Teaching

Wade Berger, Northwestern University, [wadeberger@u.northwestern.edu](mailto:wadeberger@u.northwestern.edu)

**Abstract:** This poster focuses on informal educator thinking about teaching in out-of-school learning environments for young people. This work addresses a gap in understanding around informal educator thinking and serves as an exploratory study for future work understanding informal educator practices. At the time of the ICLS conference, I will be in the data analysis phase of this project and intend to display in-progress findings for discussion with visitors to this poster.

## In-progress: Informal educator thinking about Connected Learning

In a large Midwest city, over 300 people participate in a network of informal educators, hoping to learn how to best build programs for their museums, zoos, clubs, art studios, nature centers, and other out-of-school learning environments. This poster contributes to the broader understanding of how informal educators learn to design, implement, and evaluate programs for youth in informal settings and is made possible by a research-practice partnership alongside the network leadership (Coburn & Penuel, 2016; Hoadley et al., 2017).

Extensive literature exists on classroom teacher professional development; less is known about the processes through which informal educators can learn (see some findings about informal educators in Ching et al., 2015; Penuel et al., 2016; Santo, 2013; Santo et al., 2014; Santo, 2017). This study seeks to unify findings from research on museum educators (e.g., Allen & Crowley, 2014; Ash et al., 2012), youth workers (e.g., Pozzoboni & Kirschner, 2016; Vance, 2010; Walker & Larson, 2012) and makerspace facilitators (e.g., Grabman et al., 2019; Santo et al., 2015). This study draws from 23 interviews with network participants to address the question: how do educators think about recommendations for teaching in informal learning environments?

Here, I frame informal educator thinking and learning as expansive learning, where “new ideas, practices and technologies are developed based on a process of looking at current problems and tensions found in a context” (p. 2, Santo et al., 2015; see also Engeström, 2001 & 2014). Recommendations for teaching in informal environments, such as the Connected Learning Principles heavily favored by this network (Ito et al., 2013), serve as expansive learning *objects* (Engeström, 1999; Engeström et al., 2014). These recommendations, as objects, are simultaneously the goal of informal educator learning and a site for engaging in sense-making around ambiguity and tensions faced as informal educators try to make use of the recommendation in practice (Greeno & Engeström, 2014). The frame of expansive learning recognizes that informal educators implement new versions of these recommendations, which they have transformed and adapted to their evolving needs.

I sought to elicit informal educators’ sensemaking about the aforementioned recommendations through the use of talk aloud interviews (Ericsson & Simon, 1984). During the interviews, participants read aloud and provided commentary about a selection of Connected Learning recommendations. To analyze these interview data, I identified moments when participants talked about modifying, stretching, rejecting or otherwise altering Connected Learning recommendations. In these moments, I will employ analysis techniques established by Santo et al. (2015) to use expansive framing to analyze these alterations. I will then examine the qualities of the changes, including driving factors (ambiguity, tensions, influences and needs) and expected future uses. I will be in the data analysis phase with this study during the ICLS conference and I intend to discuss initial findings and directions for further analysis with visitors to this poster during the ICLS conference.

As the first of several studies planned in partnership with this network, I hope to establish an agenda for further research around informal educator learning. My goal is to bring studies on informal and formal educator into conversation, and I hope this work might inform design decisions for professional development for informal educators. The broader impact of this work is expanded by my partnership with this network as they have the potential to reach thousands of youth each year and they have a role as a model for similarly built networks in other cities.

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