

### SP - (16200) - APPLYING ART-BASED METHODS IN SCIENCE EDUCATION RESEARCH

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#### Short Abstract

In this paper, we explore the potential of art-based methods. Unlike other fields, like anthropology, the use of art-based methods has received limited attention in science education research. One of the main potentials using art-based methods are the opportunity to engage in other ways of communication with children and young people. These methods provide them with alternative options to express thoughts and feelings in other forms than language. Therefore, this paper will cover some of the potentials these methods offer for science education research. Art-based methods are based on performative, creative, and visual approaches. This paper presents how these innovative qualitative methods can shape new forms of participant involvement and produce useful data. The paper uses the review model called snowballing to achieve knowledge about art-based methods. This data is divided into four themes identified by exploring the use of art-based methods in and outside science education research. The four themes are: knowledge through artefacts, language, power and positions, and time to reflect. The themes show the strengths embedded in art-based methods and the advantages of implementing them in research. The four themes invite to see how the participant creates new ways to express memories, feelings and experiences through a bodily commitment, a minimizing of language, an increase of ownership and increase of time to reflect. It interrogates the positions of participants and researchers and acknowledge new ways of expressing knowledge related to the participants lives. In the end of the paper we discuss the challenges of wordless knowledge and the awareness there need to be when using art-based methods because these activities might be unfamiliar to the participants. The identified point from both the analysis and the discussion will be expanded in the presentation. Especially to show the potential of applying these methods in science education research.