

Older Adults' Perceptions of Science and Engineering in Appalachia

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Poster

This study documents the perceptions of science and engineering in Appalachia by conducting semi-structured interview case studies. The information procured from the interviews will support the design of Appalachian science and engineering education activities for schools. Participants ($n = 4$) were asked a series of questions about their perceptions of science and engineering, along with sharing an item that highlights science and engineering in Appalachia, which was subsequently photographed. Each interview was transcribed and coded. The term *science* was often defined as a *subject that included chemistry, physics, and electronics* or referred to as an object such as the *Farmer's Almanac*. The majority of the participants when asked about a specific activity they engage in often were able to connect the activity with either science or engineering. For example, a photographer explained why understanding chemistry and lighting is important to produce photographs. Participants were asked to share an object that connects science and engineering to specific leisure activities related to Appalachia. A male participant connected engineering to the structure of the mandolin due to the sound it produced. While most of the participants were able to discuss how their activities connect to science and engineering, these individuals do not perceive themselves as scientists or engineers. There may be a connection to how science is facilitated in K-12 classrooms. The future goal of this study is to connect the lived-experiences and perceptions of science and engineering in Appalachia to relevant and meaningful science learning experiences for K-12 students.