

In this presentation the research team discussed elementary schoolers' experiences in their early exposure to robotics and programming. As a part of a National Science Foundation (NSF-1741910)-funded project, the data were collected of 4th-5th graders engaged in coding tasks at three different elementary schools from the same school district. The preliminary results showed that the students extensively worked on their construction of the unit of measure a programming language of a robot adapts. In addition, the way that the students used the classroom space and materials mediated their understanding of robotics and coding. Understanding the activity system that leads to particular actions in students' construction of robotics and coding was important to this project's research activities. Anticipated outcomes likely will lead to more studies exploring the interplay between different elements in the activity system of coding and robotics integration in elementary classrooms