

## PROJECT-BASED LEARNING FOR CRITICAL STATISTICAL LITERACY FROM EARLY CHILDHOOD EDUCATION

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It is essential that children are able to face the challenges of their sociocultural environment, that is, that they are able to discuss, analyze, and interpret this environment and act through collaborative and democratic work to sustain the bonds in a climate of trust and empathy for these and future generations. In this context in the Marques de Sobremonte Kindergarten in the city of Villa del Rosario, Argentina, a pedagogical research process is developed for the promotion of critical statistical literacy. The research focuses on sustainable development and is based on project-based learning.

This paper presents a study carried out by boys and girls about the evolution of trees located at the school and its nearby surroundings after a tornado generated large losses in 2013. From that moment, the educational community, together with the municipality, carried out reforestation actions that continue to this day. In addition to reforestation, statistical monitoring was carried out by different cohorts of 5-year-old students from different classrooms. The information is collected year after year. Data for variables of interest are collected such as species of tree, quantity per species, state of the trees, and state of the sidewalks. The data obtained by previous cohorts is registered, organized, interpreted, compared, and analyzed. Information from the data analyses is communicated in social networks through QR codes so that all citizens can access the information.

This process of critical statistical literacy was valued and found to have a high didactic suitability by the teaching team. The team regularly reviews its teaching praxis for the teaching of statistics. It is concluded that school life facilitates the improvement of research skills to identify problems, observe, record, interpret, reflect, experiment, plan, evaluate, read, and write with the lens and the pencil of critical statistics from early childhood education.

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