Abstract

This is a Work in Progress.

In this article, we will seek to present one of the few exemplars in Chile that can be considered a pre-engineering program. The national program of Savialab. Savialab just recently won the GEDC Diversity Award granted by Airbus and the Engineering Deans Council. We'll briefly present Savialab's methodology and describe its participants. Finally, we'll describe our ongoing research methodology proposed to evaluate the programs impact as a genuine pre-engineering program. STEM study programs have become increasingly relevant in modern societies as they're considered vehicles for economic and social development. Nonetheless, one of the major concerns in STEM education is the lack of adequate representation of minorities groups in these programs. Examples of this are women, low-income, rural or first-generation students, and ethnic minorities and other social identities typically underrepresented in STEM. To overcome these challenges, many public and private initiatives have been deployed. Among these, engineering schools in the US have developed educational programs to instill engineering abilities in pre-college students. These programs have been called pre-engineering programs. Although there are a significant number of articles showing the positive impact of pre-engineering, there is still concern about the lack of standards in instructional designs. In spite of the fact that 'pre-engineering' as a concept is becoming more broadly employed in the US, it hasn't really reached popularity in Latin America, nor in Chile in particular.