

## Microgravity for Visually Impaired Students

**Dorina Girbovan**

Beyond The Stars Education

**Patricia Girbovan**

Beyond The Stars Education

### **Abstract:**

This paper presents innovative methods for teaching the concept of microgravity to visually impaired students. Microgravity, represented by the sensation of weightlessness is usually experienced by astronauts, and it poses unique challenges for those unable to rely on visual hints. While the astronauts use sight to orient themselves in space, visually impaired individuals may struggle to grasp this concept without the help of specific methods. Studies present the impacts of microgravity on the perception of verticality, mentioning that visually impaired people often present differing verticality estimations. Through the participation in a specially dedicated Space Camp, these students will not only engage with scientific principles related to microgravity but also increase their confidence and their overall well-being. Furthermore, this paper will include the steps done by the organization, in order to nurture this type of experience for the Romanian visually impaired students. By creating an inclusive and supportive learning environment, this initiative aims to empower visually impaired students to better understand microgravity and share their experiences with peers, fostering both educational growth and social integration.