A Study on the Development of Augmented Reality Social Skills Curriculum for Students with Disabilities at Universities in Taiwan

Hsin Yi, Wang

Associate Professor, Department of Special Education. National Taichung University of Education, Taiwan

Abstract:

The number of students with disabilities enrolled in colleges and universities in Taiwan has been steadily increasing. Among these students, the most common types of disabilities are learning disabilities, autism spectrum disorder, emotional and behavioral disorders, and intellectual disabilities. These four groups often face challenges with interpersonal interactions. Students with disabilities typically do not naturally acquire social awareness and interpersonal skills as they age. Therefore, implementing social skills training for students with disabilities at the college level is essential.

The use of handheld devices combined with augmented reality (AR) as visual cue aids for teaching social skills to students with disabilities aligns with the global trend of digital inclusion. Since most college students own smartphones, using mobile devices to view AR videos on social skills facilitates self-practice and enhances their ability to generalize the learned skills.

This social skills manual is based on the cognitive-behavioral theoretical framework and was developed after gathering input from 49 resource room counselors in Taiwanese universities. The manual covers six major areas, including basic communication skills, interpersonal interaction skills, family interaction skills, classroom learning skills, job-related social skill, and dormitory interaction skills, with a total of 30 units. AR videos were integrated into the teacher demonstration sections, created using commercial software ARTIVIVE (with an example of the scanning interface shown below). Students are encouraged to review the social skills videos after class. ARTIVIVE is available for download on both Android and iOS platforms.

After conducting a six-week instructional experiment using this course with college students with disabilities, the research findings indicate that students improved their social skills. Additionally, students expressed acceptance and satisfaction with using AR-based social skills practice after class.