

## **Improving the accessibility to the curriculum for children with special educational needs and disabilities (SEND)**

<b>Challenge topic(s):</b>	5.1 Global well-being; 5.2 Governance and human rights
<b>Area(s) for inquiry:</b>	5.2C Diversity and discrimination (Ability, access, and inclusion) 5.1A Local and global inequalities (Access to education)
<b>Syllabus coverage:</b>	Concepts: 2.1 Change, 2.2 Expression, 2.3 Identity, 2.6 Systems, 2.7 Values and ethics; Content: 3.1I Data, 3.3B Apps, 3.7A Social Robots; Context(s): 4.5A Learning and education

### **About the challenge**

The United Nations International Children's Emergency Fund (UNICEF) has reported that there are approximately 240 million children with disabilities worldwide. Despite widespread agreement on how important education is, many children still have difficulties accessing education.

Inclusive education is the most effective way for children to learn and develop skills for adulthood. An inclusive education means that all children are in the same classrooms and in the same schools, which allows for diverse groups to learn side by side. However, children with special educational needs and disabilities (SEND) can often feel isolated and different from others in the classroom, which can impact their learning and social development.

There are four main categories of disability and barriers to learning:

- Cognition and learning, such as dyslexia
- Communication and interaction, such as autism spectrum disorder (ASD)
- Social, emotional and mental health, such as attention deficit hyperactivity disorder (ADHD)
- Physical and sensory, such as visual impairment

At the national level, governments must create policies and assign budgets to support an inclusive education. At the school level, teachers must be trained and students must learn with resources that improve their accessibility. Schools need to have departments that consist of specialist staff working alongside teachers and administrators to develop a learning environment that meets the needs of all children.

## About the interventions

Two interventions are outlined here.

### **Intervention 1: Social robots for use in education**

Manufacturers are developing social robots to interact with children in the classroom and provide appropriate learning interactions and activities depending on their special educational needs or disabilities.

### **Intervention 2: Assistive technologies that enhance learning for children with SEND**

An assistive technology consists of any device, software, app, or website that can help a child access their learning. Assistive technology devices include hardware, such as adaptive keyboards or software (like text-to-speech software). A range of websites and apps have been developed with learning activities to address foundation skills, such as language and mathematics literacy, as well as social and emotional skills.

There is currently a wide range of products on the market, and schools recognize the importance of identifying suitable assistive technologies and/or social robots so that money and valuable learning-opportunities are not lost.

Each intervention brings with it a range of impacts and implications to consider and should be evaluated using the HL extension framework in the guide and through inquiry from the perspective of identity and expression.

### **Additional terminology**

- Assistive technology
- Social robots
- Special education needs and disabilities (SEND)