



List of Challenges

Group		Challenges
A	Process and Methodology	1. Lack of innovative teaching. Teachers do not apply or adapt different tools to include all learning, pedagogical skills and teaching methods.
		2. Lack of individually planned and systematically controlled teaching process on STEAM education for children with SEN.
		3. Division of students as for gender, culture and learning styles.
		4. Lack of education methods in terms of knowledge assessment along with abilities and competences.
		5. Lack of multi-disciplinary and collaborative teaching approach especially in regards to SEN students
		6. STEAM is still being viewed as a series of hands-on tasks within certain events.
B	School Organization	1. Lack of STEAM experts at school that could help teachers or special education teachers to develop STEAM subjects of pedagogies more adaptable for SEN students.
		2. Lack of suitable infrastructure, facilities and technical support to assist children with SEN.
		3. Not enough <u>time</u> - Teachers are too busy and <u>the classes consist many students</u> to organize the educational process so that it can be implemented in the classroom
		4. The learning environment is not conducive for mutual learning and support between children and adults.
		5. Lack of flexibility in curricula to enable lecturers to use a variety of teaching methods.
C	Teacher Training	1. Lack of teacher training to acquire the appropriate skills and knowledge to successfully meet the modern demands of the STEAM community.
		2. Lack of teacher's motivation for professional development and in-depth understanding of STEAM subjects





D	Curriculum	1. Teaching STEAM is more theoretical. Critical thinking, problem based projects, inquiry based approach collaborative learning, creativity, experimental and peer teaching are not being fully exploited within all areas of the curriculum.
		2. There is a large gap between the material taught and the language used in today's reality. Classroom discussions between teachers and students are characterized by a profound linguistic divide.
		3. STEAM and Robotics is currently not part of the curriculum in the compulsory education.
E	Learning Resources	1. Lack of appropriate educational and digital resources /techniques , software programmes, games in STEAM and Robotics specifically for students with SEN.
		2. Lack of student's experience in educational resources (robots, sensors, experiments, specific software, web based simulators, arts lab, educational games and unconventional methodologies etc.)
		3. Lack of specific scientific research for the relationship between students with SEN and STEAM approaches.
F	Policy Recommendations	1. Lack of connection between school and work (real life) environment
		2. There is no focus for jobs/careers of the future, no focus on the 21 st century skills.

