

Indicator 4 – Report on the most appropriate technologies

The table below reports the most appropriate technologies in Formal Education according to 4 age groups (5-6; 7-9; 10-12; 13-16) and based on 8 different criteria:

1. Low cost and reliability
2. Intuitive for teachers and require lowest training
3. Can support visual orientation and mobility skills
4. Can support cognitive skills and problem solving
5. Can support cooperative play and promote socialization
6. Can support developing empathy and improve emotional intelligence
7. Can support progress on self-management (autonomy, competence, engagement, motivation and curiosity)
8. Can serve as teachers

Formal Education Most Appropriate Technologies				
Criteria	Age: 5-6	Age: 7-9	Age: 10-12	Age: 13-15
Low cost and reliability	Artificial anthropomorphic robotic hand Non-humanoid Walking Robot MS Kinect Sensor	LEAP motion device Artificial anthropomorphic robotic hand Non-humanoid Walking Robot	LEAP motion device Artificial anthropomorphic robotic hand Non-humanoid Walking Robot	LEAP motion device Non-humanoid Walking Robot Oculus Gear VR glasses MS Kinect Sensor Dash and Dot

	Cubelets Humanoid Robot NAO	MS Kinect Sensor Cubelets Dash and Dot Lego Mindstorms Humanoid Robot NAO	Non-humanoid Walking Robot MS Kinect Sensor Cubelets Dash and Dot Lego Mindstorms Humanoid Robot NAO	Cubelets VR Oculus Rift glasses Insight brainwave device Lego Mindstorms Microsoft HoloLens Humanoid Robot NAO
Intuitive for teachers and require lowest training	Non-humanoid Walking Robot Artificial anthropomorphic robotic hand MS Kinect Sensor Cubelets Humanoid Robot NAO	Non-humanoid Walking Robot Artificial anthropomorphic robotic hand Cubelets MS Kinect Sensor Humanoid Robot NAO Dash and Dot	Non-humanoid Walking Robot Cubelets MS Kinect Sensor Dash and Dot	Non-humanoid Walking Robot MS Kinect Sensor VR Oculus Rift glasses Oculus Gear VR glasses Microsoft HoloLens
Can support visual orientation and mobility skills	MS Kinect Sensor Humanoid Robot NAO	MS Kinect Sensor LEAP motion device Humanoid Robot NAO	MS Kinect Sensor LEAP motion device	MS Kinect Sensor VR Oculus Rift glasses + LEAP motion device Microsoft HoloLens Oculus Gear VR glasses
Can support cognitive	Humanoid Robot NAO	Humanoid Robot NAO	Lego Mindstorms Humanoid Robot NAO	Lego Mindstorms Samsung Gear VR glasses

skills and problem solving	Non-humanoid Walking Robot MS Kinect Sensor Artificial anthropomorphic robotic hand Cubelets	Non-humanoid Walking Robot MS Kinect Sensor Artificial anthropomorphic robotic hand Cubelets Dash and Dot	MS Kinect Sensor Programming non-humanoid robots Cubelets Dash and Dot	VR Oculus Rift glasses Microsoft HoloLens Cubelets
Can support cooperative play and promote socialization	Non-humanoid Walking Robot Cubelets	Non-humanoid Walking Robot Cubelets	Lego Mindstorms Humanoid Robot NAO Cubelets Dash and Dot	Lego Mindstorms Microsoft HoloLens interactions
Can support developing empathy and improve emotional intelligence	Humanoid Robot NAO Non-humanoid Walking Robot Cubelets	Humanoid Robot NAO Non-humanoid Walking Robot Cubelets Dash and Dot	Humanoid Robot NAO	Microsoft HoloLens interactions Humanoid Robot NAO
Can support progress on self-management	Cubelets Non-humanoid Walking Robot	Cubelets Non-humanoid Walking Robot	Humanoid Robot NAO Lego Mindstorms Cubelets MS Kinect Sensor	VR Oculus Rift glasses+ LEAP motion Oculus Gear VR glasses Lego Mindstorms Microsoft HoloLens

(autonomy, competence, engagement, motivation and curiosity)	Artificial anthropomorphic robotic hand MS Kinect Sensor	Artificial anthropomorphic robotic hand MS Kinect Sensor		Humanoid Robot NAO Programming MS Kinect Sensor Programming EMOTIV sensors
Can serve as teachers	Humanoid Robot NAO	Humanoid Robot NAO	Humanoid Robot NAO	Microsoft HoloLens VR Oculus Rift glasses+ LEAP motion Oculus Gear VR glasses