

Assembling a robot

Institution	Colégio Internato dos Carvalhos
Disciplina STEAM	Technology
IDD Student Context	Secondary students with Autism Spectrum Disorder (ASD) Level 1 and Attention Deficit Hyperactivity Disorder (ADHD)
Resource used	Kit Bot n Roll ONE A
Description of the step-by-step activity before the project	
1. Presentation of the objectives of the activity. 2. Show all the parts that make up the robot kit. 3. Explanation of the function of each part and the necessary electrical connections. 4. Clearly explain the task to the students, ensuring they understand the objectives and steps involved. 5. Allow them sufficient time to start and engage with the activity independently. 6. Provide support as needed throughout the process, offering guidance and assistance when necessary. 7. If required, revisit the instructions and clarify any doubts before continuing. 8. Conclude the activity, ensuring all students have had the opportunity to assemble is robot. 9. Observe the assembled robot, reflecting on student performance and understanding of the improvements that can be made.	

Description of the activity step by step (changes in red)	
1. Presentation of the objectives of the activity. 2. Show all the parts that make up the robot kit. 3. Classify the IDD into Taxonomy: Use the Taxonomy framework to identify sensory sensitivities and cognitive challenges associated with Down Syndrome and Intellectual Disability. 4. Create the Profile for the Students: Develop profiles detailing individual interests in colors, sensory thresholds, and learning objectives. 5. Search for Similar Activities: Identify related AR activities like "Virtual Object Exploration" or "AR in Nature." 6. Define the Activity in the User Model: Document the activity, associating it with the students' educational plans for creativity and sensory engagement. 7. Demonstration: Showcase multiple AR-enhanced coloring examples, emphasizing variety and innovation. 8. Explanation of the function of each part and the necessary electrical connections. 9. Clearly explain the task to the students, ensuring they understand the objectives and steps involved. 10. Allow them sufficient time to start and engage with the activity independently. 11. Provide support as needed throughout the process, offering guidance and assistance when necessary. 12. If required, revisit the instructions and clarify any doubts before continuing. 13. Conclude the activity, ensuring all students have had the opportunity to assemble is robot. 14. Observe the assembled robot, reflecting on student performance and understanding of the improvements that can be made.	
Extra resources	Tools, multimeter
Similar activities	Lego Mindstorms



ROBBO educational robot kit MBot



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