Assembly of The Push Buttons and Enclosure - v1

MaFEA – Making Future Education Accessible
PR3 - EDUCATIONAL LEARNING PATHS

Technology tools:	Hololens, electrical tools and components
Tool version:	Hololens 2
Date:	03.11.2022
College:	Tartu Vocational College
Author (optional):	
Subject of the lesson(s):	Pre-defined tags

Lesson title/subject: Building motor control circuitry

Intention: What do you wish for or hope to happen? (Intentions are often not measurable or tangible, but help you in developing the design process.)
1. Students use Hololens 2 glasses and physical components to assemble the hands-on work. Students learn how to assemble given components and in doing so acquire practical skills.

Desired Outcomes: One or more measurable and tangible goals the teacher aims for with this lesson/these lessons.
1. Students correctly assemble the enclosure with push buttons, contacts and make correct wire connections.   2. The work is finished when all components are correctly connected and wired.

Agenda: HOW are you going to reach the goals? Description of the lesson plan / educational activities / working methods.
1. Students log into Hololens.   2. Students select the correct Wi-Fi network so that the instructor can monitor the activity from the multimedia projector.   3. Students open the "Guides" program and select the correct guide.   4. Students scan a QR code on a paper that has physical components.   5. According to the instructions students build the assembly.   6. Students check their work.

Roles: Who facilitates what? Who participates? What do we expect of the students?
1. The teacher prepares the Hololens and puts the components of the practical work on the table.   2. Participants are Electrician students who have previous experience with building electrical circuits   3. Students complete the guide and finish assembly within a given time.

Rules: Rules or principles are about how you want to learn and work together.
1. Other students can help the person who is doing the practical work.   2. The practical work must be assembled according to the instructions.   3. Work performance is checked by the teacher.

4. If there are mistakes, the student finds the mistake and corrects it and checks again if he has done everything according to the instructions.

Time: Describe the time path: What time do we start / finish / break? When is the time for reflection? What happens between contact times?

1. Students log into Hololens. (4 minutes)
2. Students select the correct Wi-Fi network so that the instructor can monitor the activity from the multimedia projector. (4 minutes)
3. Students open the "Guides" programs and open the correct Guide (3 minutes)
4. Students scan a QR code that is on a piece of paper with physical components on it. (1 minute)
5. According to the instructions students build the assembly. (40 minutes)
6. Students check their work (5 minutes)
7. Reflection (20 minutes)
8. Cleanup, packing up the tools(5 minutes)