



<b>Partner name:</b>	INSIGNARE – Associação de Ensino e Formação
<b>Tool name :</b>	Tinkercad ( <a href="https://www.tinkercad.com">https://www.tinkercad.com</a> )
<b>Main objective of the tool (cf. category)</b>	Online Tool to create 3D Objects, electronic components and coding. Especially created for younger users.
<b>Advantages of a tool:</b>	<ul style="list-style-type: none"> <li>• It's online and as free access;</li> <li>• All the work done stays in the account (cloud);</li> <li>• Allows project sharing and collaborating on projects;</li> <li>• It as a simulator function to verify the schematic and the code;</li> <li>• Easy to use, with quick lessons to facilitate a quick start;</li> <li>• As a learn section with tutorial and webinars;</li> <li>• As galleries of projects done by a large community of 3D design, 3D printing, coding and electronic circuits enthusiasts (Tinkercad is part of Autodesk) for the user to see and tinker with.</li> </ul>
<b>Disadvantages of a tool:</b>	<ul style="list-style-type: none"> <li>• As limited resources in 3D design and in the components library;</li> <li>• Depend on the internet connection;</li> <li>• Depend the browser and on the operating system (prefers Chrome on a Windows machine).</li> </ul>
<b>Your own experience with a tool:</b>	<ul style="list-style-type: none"> <li>• Students like to work on the platform;</li> <li>• Increase of proactivity and curiosity of the students;</li> <li>• Students can access the platform from anywhere;</li> <li>• Easy to use for beginners, with a short learning curve.</li> </ul>
<b>Recommendations:</b>	If you want to share your projects, don't forget to put the privacy option of the project as "public".
<b>Use for interdisciplinary teaching and training.</b> <i>(for team building, for creating mental maps to discuss, for self-evaluation, for decision making etc.)</i>	Useful for complex and multi-steps projects, For example, when developing an electronics project, students learn to source the parts, do the programming and design in 3D the enclosure for the device. The students can be given a task, with some instructions, and develop the project there. From the electronic schematic, to the the programming and if needed design an enclosure for the project in 3D.



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