

## Template to present the solution of the challenge

Title of the module/activity	HELPHY ROBY
1. Disciplines working together (business administration, marketing, electronics, finance, health care...)	Electronics, Mechanics, Design, IT, Management, Administration, English as a foreign language
2. Time for realization	4 months (during the second part of the school year)
3. Number of teachers involved	5 + external experts.
4. Aims of your module or activity (you can write which sector you are addressing, the problem you would like to solve, a situation you can imagine...).	<ul style="list-style-type: none"> <li>• Being able to work in multidisciplinary teams;</li> <li>• Flexibility to change departments;</li> <li>• Having a global vision of the company;</li> <li>• Having a global approach to problem solving.</li> </ul>
5. Short description of the module or activity	Design a robot prototype to help elderly people in tasks like ordering shopping, playing cards, having simple conversations, as a reminder of medicines, etc.
6. Information on the target group / prior knowledge to participate (which students are	<ul style="list-style-type: none"> <li>• Groups of students from different areas (see point 1), aged 17 – 20;</li> <li>• Prior knowledge: students need the basics of all the areas involved.</li> </ul>



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<p><b>you addressing? Which prior knowledge do they need?)</b></p>	
<p><b>7. Which competences could the students achieve by completing this module/activity?</b></p>	<p>SOFT SKILLS:</p> <ul style="list-style-type: none"> <li>• Research, comparing and selecting information (“selective” copy and paste);</li> <li>• Team working;</li> <li>• Open minded approach to problem solving;</li> <li>• Multicultural and multidisciplinary relationships;</li> <li>• Time management;</li> </ul> <p>HARD SKILLS:</p> <ul style="list-style-type: none"> <li>• Competences in market research and statistical analysis;</li> <li>• Competences in electronics;</li> <li>• IT competences;</li> <li>• Foreign language competences (English);</li> </ul>
<p><b>8. Describe the process you will follow (will you include common lessons? Which ones would be necessary?, how will students work together? How will interdisciplinary cooperation be</b></p>	<ol style="list-style-type: none"> <li>1) Scheduled teachers’ briefings to exactly define the challenge and the work evolution</li> <li>2) Challenge presentation to students (common lesson)</li> <li>3) Students teams division (balanced teams according to skills)</li> <li>4) Needs identification (needs the product has to answer to)</li> <li>5) Target group profile</li> <li>6) Step by step process, under teachers supervision and guided rubric (step by step evaluation too)</li> <li>7) Intermediate steps results presentation (common lessons)</li> </ol>



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<p><b>promoted? How will teachers work together?..)</b></p>	<p>8) Meetings with external experts (geriatric doctors, engineers, marketing experts and so on)              9) Create a cloud/drive/teamplace...</p>
<p><b>9. Which digital tools would you use and for which purpose?</b></p>	<ul style="list-style-type: none"> <li>• Padlet to share information in real time (initial stages)</li> <li>• “Cloud apps”</li> <li>• Gsuite (Google apps) to allow students work together on the same file in the same time</li> <li>• Google Meet to have videoconferences</li> <li>• Sausage graphs and maps (“Inspiration maps” app)</li> <li>• IDE (coding environment)</li> </ul>
<p><b>10. Which difficulties you foresee to implement this module/activity and how do you think you can solve them?</b></p>	<p>PROBLEMS:</p> <ol style="list-style-type: none"> <li>1) Teachers and students from different areas speak different “languages”</li> <li>2) Lack of time</li> <li>3) Unwillingness to cooperate</li> <li>4) Complexity of the challenge (top-down approach needed)</li> </ol> <p>SOLUTIONS:</p> <ol style="list-style-type: none"> <li>1) Multidisciplinary lessons also with external experts</li> <li>2) Accurate timing</li> <li>3) Activities aimed to team-building (escape room etc.)</li> <li>4) Step by step approach / showing some models and examples</li> </ol>



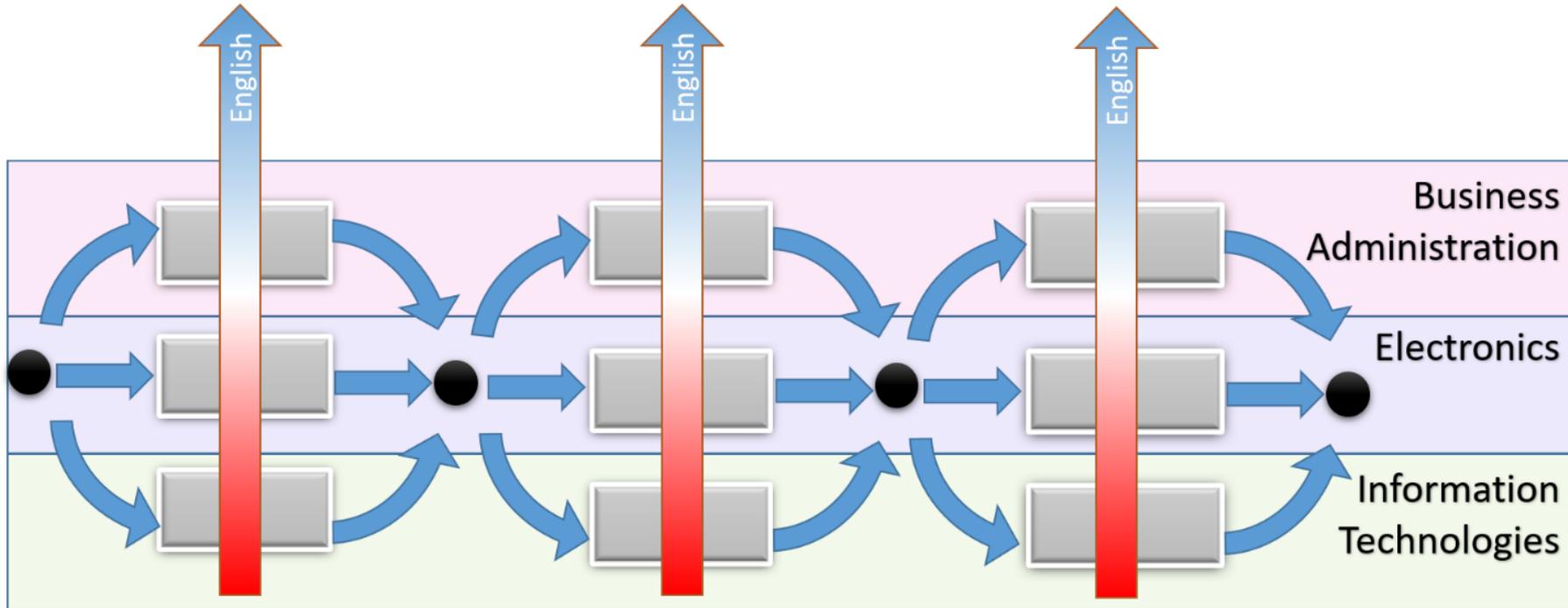
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Work in specific sectors



Intersectoral Meeting

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