



# EDUDRONE.EU

<b>Title</b>	DRONES COMPETITION
<b>Summary</b>	Test and drone driving competition.
<b>Major area of work</b>	CULTURAL AND SPORTS DAYS
<b>Key Facts</b>	<b>Location:</b> IN THE ENTRANCE OF THE SCHOOL
	<b>Target group:</b> TEACHERS AND STUDENTS
	<b>Other stakeholders:</b> A teacher (Organizer), And 30 Participants (Students and Teachers)
	<b>Objective:</b> Approach to the world of Drones
	<b>Timeframe:</b> during 4 hours in the morning
<b>Context and problem addressed</b>	The specific challenge was to extend the experience to all those who wanted it
<b>How does it work</b>	<p>A contest was organized, which consisted of avoiding several obstacles until reaching the landing point in the shortest possible time.</p> <p>The winner was awarded a small drone: € 23.</p> <p>Several batteries were acquired that were loaded as soon as they were exhausted. In this way the devices could fly uninterruptedly.</p> <p>Previously each participant was given some basic notions of drone piloting.</p> <p>There was a high participation around 35 students participated.</p>



<b>Validation</b>	<p>There is a lot of curiosity about drones. Due to the high participation, more equal days will be organized.</p>
<b>Impact</b>	<p>Thanks to the celebration of this contest the hobby and knowledge that some students have about drones surfaced.</p> <p>Some students have built their own drone, have already passed the drone pilot course, or have other types of machines or robots built by themselves.</p> <p>Therefore, the exchange of knowledge that was given was very interesting.</p> <p>On the other hand, the activity facilitated that many students and professors of different groups met and created from that day a certain complicity and camaraderie.</p> <p>It has made us consider the implementation of the design and construction of drones in the Curriculum of the training cycles of the Electricity-Electronics family.</p>
<b>Innovations and Success factors</b>	<p>There was a high participation. It was what was intended.</p> <p>Associate the image of the center with the development of innovative activities and advanced technologies.</p> <p>Exchange of knowledge between teachers and students.</p>
<b>Constraints</b>	<p>Other future contests would add the following bases:</p> <ul style="list-style-type: none"> <li>- limit the time of use of the drones by each participant, in order to enable as many people as possible to participate.</li> <li>- Limit the area in which the drone can fly. When the same one is disqualified, the contestant will be disqualified.</li> </ul>
<b>Lessons learned</b>	<ul style="list-style-type: none"> <li>- Organize the contest when all the students are in the center (many were participating in sports activities outside the institute)</li> <li>- Prepare one or several spare drones to replace the drones that are breaking down.</li> <li>- Provide a small team of tools to make repairs (screwdriver, pliers, soldering iron, tin, etc.)</li> </ul>



	<p>- During the activity several repairs were made on the fly in the drones: motors blocked, motors with defective connections, etc.</p>
<p><b>Sustainability</b></p>	<p>The activity has had very low cost: € 100.</p> <p>The cost of successive similar activities would be much lower.</p> <p>Therefore it is an economically sustainable activity, perfectly acceptable by the institute.</p> <p>Without a doubt it is worth the little money invested.</p>
<p><b>Students/teachers story</b></p>	<p>Thanks to the celebration of this contest the hobby and knowledge that some students have about drones surfaced.</p> <p>Some students have built their own drone, have already passed the drone pilot course, or have other types of machines or robots built by themselves.</p> <p>Therefore, the exchange of knowledge that was given was very interesting.</p> <p>On the other hand, the activity facilitated that many students and professors of different groups met and created from that day a certain complicity and camaraderie.</p>
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<p><b>Websites and other resources</b></p>	<p><a href="https://www.youtube.com/watch?v=Bw1efCTCjFQ">https://www.youtube.com/watch?v=Bw1efCTCjFQ</a></p> <p><a href="https://www.youtube.com/watch?v=Pj4tZQeWUOs">https://www.youtube.com/watch?v=Pj4tZQeWUOs</a></p> <p><a href="http://www.iesfranciscotomasvaliente.com">http://www.iesfranciscotomasvaliente.com</a></p> <p><a href="https://www.facebook.com/iestomvalmadrid/videos/1001326156686134/">https://www.facebook.com/iestomvalmadrid/videos/1001326156686134/</a></p>

