### School Case Study

**Agrupamento Escolas Boa Água**

<table>
<thead>
<tr>
<th>School name</th>
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<tbody>
<tr>
<td>Contributor’s name</td>
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<td>City and country</td>
<td>Quinta do Conde, Portugal</td>
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<td>Website</td>
<td><a href="https://aeboaagua.org/ebiba/">https://aeboaagua.org/ebiba/</a></td>
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<tr>
<td>Age of students</td>
<td>3-16</td>
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<td>Number of staff</td>
<td>180</td>
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<tr>
<td>Area of focus</td>
<td>STEM, Future Classroom Labs</td>
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*This school case study is part of Output 4 by the Novigado project “Guidelines in Learning Space Innovations”, available at the [project website](#).*
Background, Context and Drivers to change

In 2016, our school was already involved in projects to change learning environments. That year, the school decided to restructure the ICT room, using the Future Classroom Labs model to transform it into a real learning space, allowing teachers and students to use active learning methodologies, more motivating and effective to students.

To accomplish that, we challenged the teachers to create the project for that new space, we contacted local and national and international partners – Municipality, Altice Enterprises, SteelCase, Promethean, Leya Group – and transformed the space into the new Interactive Learning Laboratory (ILL).

Flexible/innovative learning environment

ILL is an innovative educational environment that allows any teacher to develop pedagogies of collaboration, exploration, cooperation, inverted classroom, constructive teaching and much more. It only depends on the pedagogue and their creativity.

In this space, the roles of the various actors are several times mixed, creating a common collaborative and constructive learning path. Both teachers and students become partners in the path of acquiring and exploring knowledge and skills.

There are four working areas, with no limitations between them. Each teacher is free to recreate or redefine these spaces according to their method or project.

We have the area called DEVELOPMENT - where initial ideas are given wings, knowledge is made grow, limits are expanded, and information takes shape and weight.

We also find the INVESTIGATE/EXPLORE area – here, students break through the barriers of the classroom and travel in the world of information, seeking, selecting, analyzing and treating information according to the objective proposed at the beginning of the class by the teacher.
Another area is CREATE – where you can build, film, record, produce, work with information collected and processed by students or learners.

And finally, the PRESENT/SHARING area – where students can share the result of their adventure in this journey of knowledge. Here, the teacher finishes the journey by carrying out a constructive and collaborative assessment with all students.

**Student-centred pedagogy**

This room is used by the community freely, but only with appointment. It is used by teachers to develop projects in different areas of knowledge, it is a training space for teachers and the community, it is used for the production of video and recording sound, but it is, above all, a space where the school presents its pedagogical model of learning focused on communication, in which students work in small heterogeneous groups and, independently and autonomously, develop individual learning plans.

This space was, and still is, an enhancer of pedagogical changes that are then transposed to the traditional classroom. Here, we work in discussion groups, focusing on peer communication and developing not only autonomy, responsibility, and cooperation skills, but mainly the several different literacies.

**Use of technology**

Technologies are used in this space, as in all areas of the school, as support tools for the communication-centred model of learning. Students at this School can use the technological equipment available in these spaces, but also their own personal laptops or mobile phones to carry out the tasks foreseen in their individual learning plans.

The use of technological equipment is currently widespread in all classrooms and supports most of our students' daily activities. In fact, the vast majority of tasks they perform at school depend on the use of technologies to carry out research, select information, produce presentations or simply register information in their virtual registration spaces, such as Google Classroom.
However, there is specific technology that is only available at ILL, such as the 3D printer or the laser engraver.

Impact

Benefits
- It allows the development of more interesting, engaging and motivating strategies and methodologies for learning.
- Discloses the iTEC methodology (Innovative Technologies for an Engaging Classroom - Innovative Technologies for a Captivating/Motivating Classroom), exploring Future Classroom learning scenarios and promoting its practical use in different educational contexts and educational areas.
- Supports teachers in the successful implementation of innovative teaching and learning scenarios for the traditional classroom, through the provision of resources, training and sharing of good practices.
- Provides a clear vision of innovative teaching and learning practices for a gradual and sustainable change in the education system in our Cluster of Schools and beyond.

Challenges
- Resistance to pedagogical changes, which can be overcome by involving teachers in projects that demonstrate the usefulness of these spaces, preferably through collaborative work between teachers.
- Need for high initial investment, which was overcome using external partnerships.
- Transposition of practices developed at ILL to classroom spaces. This is, perhaps, the biggest challenge that arises when using this space. The transposition of these practices to traditional classrooms implies the creation of conditions for this to happen. There must be technological resources in traditional classrooms – laptops and internet connection, for example –, the environment must be adjusted to the
development of this work – for example, organizing the space for the development of
group work - and we must show the teachers how to develop interactive learning
practices in classic classroom spaces.

**Other impact**

Another impact that was especially felt, and that sometimes is not appreciated, is that
students love to work in a different and much more pleasant space. It makes them happier!