

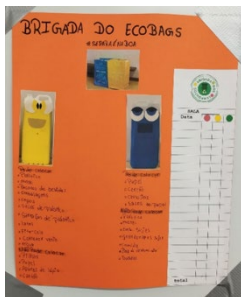
PT-DS02-IN10 PROMOTING PROPER WASTE SORTING AND ENCOURAGING ECO-FRIENDLY BEHAVIOURS THROUGH INTER-CLASS COMPETITIONS. SCHOOL WASTE PRODUCTION

Secondary school



A recycling competition was implemented across all 8th-grade classes with the goal of improving waste separation practices and increasing environmental awareness. The competition focused strictly on the waste produced within each classroom, ensuring that students were accountable for managing their own space and promoting sustainable behaviours in their daily routines. Each classroom received dedicated recycling bins, and points were assigned based on the quantity and correct sorting of materials.

The process was coordinated by two teachers and a selected 8th-grade class, which played a leading role in managing the competition. This student group conducted awareness sessions in classrooms, monitored compliance with the rules, verified the contents of the bins, and maintained the scoreboard throughout the week. The initiative relied on clearly defined rules and internal oversight, reinforcing a sense of responsibility, fairness, and ownership among participants. The structured, student-led model fostered strong engagement through collaboration and playful competition, culminating in a symbolic prize awarded to the winning class.



Relevant difficulties

- ◆ Rules were not fully clear or uniformly enforced across all classes.
- ◆ Student motivation was partly extrinsic (focused on prizes), though some showed deeper engagement.
- ◆ Teacher engagement varied, with some highly committed and others less involved, affecting implementation.
- ◆ Some students manipulated the system (e.g., bringing waste from outside the school to boost their class scores).
- ◆ Limited infrastructure (e.g., lack of recycling bins in key areas) created logistical challenges.
- ◆ Maintaining motivation and environmental commitment beyond the competition period proved difficult.

Resources

Human	
Time	
Costs	

Individual Competences	Collective Competences	Technical-material Competences
<ul style="list-style-type: none"> ✓ Intrinsic motivation for sustainability: Some students expressed that what mattered most was helping the planet, not winning prizes. This shows a shift toward internalised environmental values. ✓ Autonomy and personal responsibility: Students took the initiative to follow the rules, suggest improvements, and reflect on their own behaviour regarding waste. ✓ Critical awareness of daily practices: Students began observing how others dealt with waste, often taking on a peer-monitoring role and reflecting on what could be improved. ✓ Sense of impact and agency: Students realised their actions had real consequences, both within the school and potentially at home, encouraging a feeling of empowerment. 	<ul style="list-style-type: none"> ✓ Collaboration within and between classes: The class-based competition structure encouraged teamwork and strategic collaboration to increase scores. ✓ Participatory decision-making: Students helped define and adjust the competition rules, co-designing part of the process with teachers and staff. ✓ Strengthened school community identity: The shared goal of improving sustainability fostered a collective sense of pride and responsibility toward the school environment. ✓ This competence was particularly strengthened through the delegation of leadership and monitoring tasks to one of the 8th-grade classes, which took on an active role in overseeing the competition, fostering ownership, peer engagement, and responsibility. 	<ul style="list-style-type: none"> ✓ Correct waste sorting and recycling practices: Students learned to identify, separate and dispose of paper, plastic, and organic waste appropriately. ✓ Familiarity with waste collection systems: They became aware of how school bins were used, the limitations of external collection (e.g., Valorsul not entering the school), and discussed infrastructure improvements. ✓ Eco-point usage and monitoring: Students engaged with eco-points and adapted to the school's specific system, applying rules in a real context.

Sustainability competences in place in the intervention



Engagement

The intervention managed to actively engage students, especially through the competitive format. Many students reported feeling motivated by the idea of points and prizes, but others revealed that the environmental goal itself was important, showing intrinsic motivation. The competition was co-managed by a student class and two teachers, who also conducted awareness sessions in all participating classes. This peer-led structure promoted student protagonism and strong engagement. However, engagement among teachers varied, and some janitors supported the action informally. Family involvement was limited, and extending engagement to more stakeholders remains a challenge.



Connections

The intervention connected environmental education with citizenship and science curricula. It built on students' prior knowledge of recycling and expanded it into hands-on school-level action. The initiative was entirely managed within the school, without links to external municipal services or waste management companies. However, it created opportunities for internal collaboration between students and staff and helped raise awareness about the school's internal waste management limitations.



Change

The competition sparked behavioural changes in some students, who became more attentive to waste separation. Some reported replicating these practices at home. Stronger behavioural shifts were observed in classes more involved in awareness activities. However, structural limitations and inconsistent participation between classes affected the long-term systemic effect.



Action

A school-wide competition was created to promote correct waste separation. Students earned points by sorting waste properly within their classroom bins. Eco-bags and dedicated bins were placed in all classrooms. A selected student class monitored the process and awarded scores based on clear, shared rules. Teachers and students co-designed the system. Although generally effective, some issues arose, including challenges in maintaining consistency and follow-up beyond the competition period.