

Name of Program: Upcycling and Creativity in Environmental Protection

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Target Audience: All students, Grades 10-12th

Strategy for Implementation: This program can be implemented easily by RCs in individual wings or for the entire hall at once. The initial part is a discussion-centered presentation and the latter part is an interactive group activity.

Relevant Learning Goal: Goal 1: Social Responsibility

Specific Lesson Outcomes:

1. Learn the importance of recycling and sustainability
2. Find ways to make recycling fun and entertaining
3. Inspire creativity and teamwork amongst the wing to facilitate bonding

Timeline: First few weeks of school, hold this session within the first quarter (Fall season, preferably in September or October)

Purpose

Students will collect any recyclable materials they have discarded to create wing decorations in conjunction with everyone in the wing and learn about sustainability, including statistics and lifestyle guidance.

Necessary Materials

1. Art materials include scissors, tape, glue, paint, markers, etc.
2. Ample space in the wing commons
3. Decorative materials like colored paper, fabric, cloth, small lights, etc.

Program Agenda

1. Presentation (15 minutes)
 - a. What types of materials can be recycled? Examples listed below
 - i. Paper products, including newspapers, magazines, office paper, and cardboard
 - ii. Glass bottles and jars
 - iii. Aluminum cans and foil
 - iv. Steel and tin cans
 - v. Plastic containers, including water bottles, milk jugs, and food containers
 - b. What do you usually use in your everyday life?
 - c. Why does it matter?
 - i. Explain the importance of recycling and the harms of landfills

1. Landfill leachate is the residue liquid in landfills, consisting of water and other chemicals that it picks up from the landfill. This leachate could seep into local water systems and cause pollution
 - ii. Time it takes for plastic to decompose in landfills, dangers of landfill leachate on water supply and soil
 1. Plastic can take 10 to 1,000 years to decompose in the landfill
 2. Clothes can take 40 years to decompose
 - d. How to recycle at IMSA
 - i. Everything students need to know about recycling cans at IMSA, location of dumpsters, guidelines for recycling, etc.
 - e. Upcycling, Recycling, and Downcycling - explaining the difference
 - i. Upcycling is creating something of greater value from recycled materials, and downcycling is creating something of lesser value. Both are considered forms of recycling, which is the broad definition of reusing materials
2. Students work together to upcycle using recycled materials from their rooms
 - a. Make sure to tell students to prepare them beforehand
 - b. Make sure they are sanitized (ie. no grease stains, no mold, etc.)
3. Have students work in groups to build individual wing decorations
 - a. Use art supplies, and make sure that proper measures are implemented for spray paint and painting in general to keep the working environment clean
 - i. Cardboard can be made into paper/folder organizers, with different levels/sections for different course or academic materials
 - ii. Cardboard can also be turned into wall decorations, an example would be large cutouts of your initials.
 - iii. Plastic bottles and soda bottles can be turned into lanterns or candleholders and placed in wings or individual rooms
4. Arrange new creations and reflect on the event

Assessment

1. Year-long assessment of student recycling at IMSA
 - a. Do they know what to recycle?
 - b. Do they actively participate in recycling and sustainable lifestyles?
 - c. Are they actively promoting sustainability through clubs or organizations?
2. Resident Counselors and Resident Student Leaders will implement an assessment of wing culture after the event
 - a. Is there improved collaboration between students?
 - b. Is there improved understanding between students?
 - c. Is there a greater willingness between students to interact with each other?
3. Optional Google Form on reflections of the event would basically contain the same questions as listed above
 - a. Optional because the bonding is qualitative and hard to analyze with Google Form responses

Supplemental Materials

For presentation purposes

- <https://us.pagouroupcycle.com/blogs/news/101-upcycling-ideas-the-ultimate-list>
- <https://lbre.stanford.edu/pssistanford-recycling/frequently-asked-questions/frequently-asked-questions-benefits-recycling>
- <https://www.colorado.edu/center/2021/04/15/hidden-damage-landfills>
- <https://www.conserve-energy-future.com/how-long-does-it-take-to-decompose.php#:~:text=28..less%20time%20to%20break%20down>
- <https://8billiontrees.com/carbon-calculator/>
- <https://theyearsproject.com/latest/10-ways-college-students-can-live-more-sustainably>
- <https://brightly.eco/blog/sustainability-tips-for-college-students>

For upcycling inspirations

- <https://www.pinterest.com/menefeejames/cardboard-upcycling/>
- <https://www.salvagesisterandmister.com/35-diy-upcycled-cardboard-boxes/>
- <https://www.treehugger.com/creative-ways-upcycle-your-plastic-bottles-4864134>
- <https://www.pinterest.com/mcguckins/upcycle-plastic-bottles/>

References

Developing a habit of recycling for schools: 5 ways to make recycling fun. (2022, August 16). Return It. <https://www.returnit.com.au/wa/for-schools/developing-a-habit-of-recycling-for-schools-5-ways-to-make-recycling-fun/>

LeBlanc, R. (2013). How Long Will It Take That Bag of Trash to Decompose in a Landfill? LiveAbout. <https://www.liveabout.com/how-long-does-it-take-garbage-to-decompose-2878033>

Science X. (2021, March 24). Dangerous landfill pollutants ranked in order of toxicity. Phys.org; Phys.org. <https://phys.org/news/2021-03-dangerous-landfill-pollutants-toxicity.html>

Trash and Recycling Reference Guide. (n.d.). City of Aurora, Illinois. <https://www.aurora-il.org/DocumentCenter/View/1446/Trash-and-Recycling-Reference-Guide-PDF?bidId=>

Unique ideas for reusing and recycling items in your classroom. (n.d.). ThoughtCo. Retrieved April 10, 2023, from <https://www.thoughtco.com/classroom-materials-for-recycling-at-school-2081440>

Upcycling, recycling, and downcycling—What's the difference? (2019, March 7). MaterialTrader.Com. <https://community.materialtrader.com/upcycling-recycling-and-downcycling-whats-the-difference/>