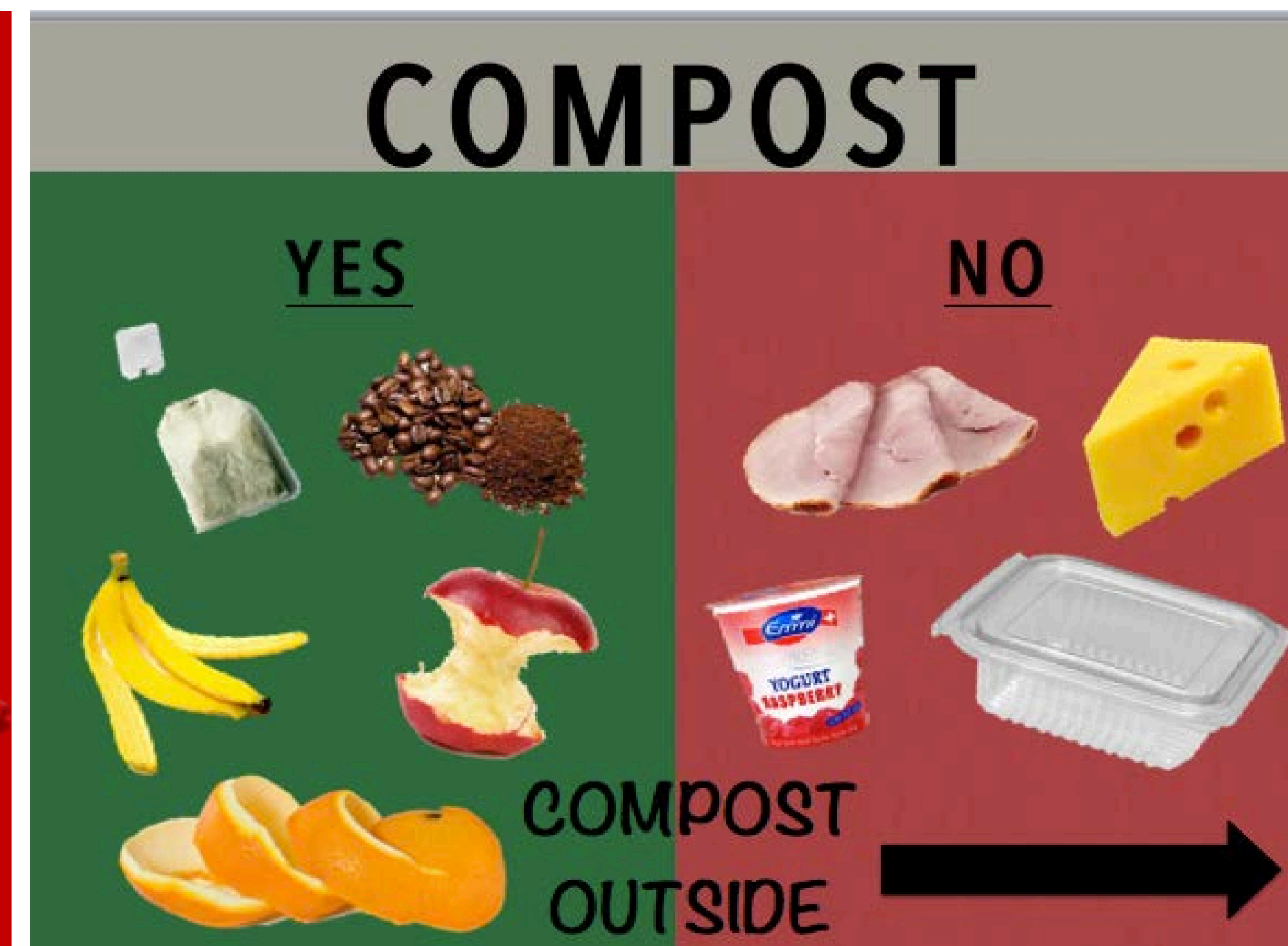




# Sorting Waste at The Pub/Grab & Go

Andrew Braker, ENST450: Applied Sustainability Practicum  
Dr. Barry Muchnick, St. Mary's College of Maryland

SMCM  
Sustainability



## Abstract

In an attempt to promote a more sustainable St. Mary's, I will increase the organization and efficiency of waste disposal practices at the Pub/Grab & Go on campus. Through the use of effective signage, I will promote greater organization of waste by separating student food waste into three categories: compostable material, recyclable material, and trash. The separation of these materials will increase the amount of compostable and recyclable material produced on campus, as well as decrease the college's total garbage output.

## Outcomes

Signage has only recently been implemented, but is already showing noticeable differences. In comparison to receptacles lacking proper signage, the new and improved receptacles are bettering organization between the various waste types. The volume of waste in each respective waste category has increased, and contamination between bins has changed drastically.

However, the amount of contaminated materials within receptacles is still considerable. The recycling receptacles show visual evidence of greater amounts of paper and plastic material, but still contain some amount of contaminated items. Food waste, as well as granola bar wrappers, and plastic bags are some of the main culprits of contamination.

The landfill bin also improved its organization—presenting less recyclable material than the receptacles outside of the three-way system. However, due to the fact that the recycling is not completely organized, all of the waste is still being discarded as trash.

The compost bin has yet to be introduced to the system. Once it is in place, the amount of organic contamination in the recycling and landfill receptacles may decrease, and overall organization may increase.

## References

Nola Wiersma, Carolyn Noack, and Katherine Binder. "Bernard Center Waste Receptacle Signage Pilot Study." *Western Michigan University*. [http://wmich.edu/sites/default/files/attachments/u159/2014/BHC%20Signage%20Study%20Review\\_Kate's%20Edit.pdf](http://wmich.edu/sites/default/files/attachments/u159/2014/BHC%20Signage%20Study%20Review_Kate's%20Edit.pdf).

Greg Kennedy. *An Ontology of Trash*. Albany State University of New York Press, 2007.

Carrol M. Werner, Mark U. Rhodes, Kimberly K. Partian. "Designing Effective Instructional Signs with Schema Theory." *University of Utah*. (2013). doi:10.1177/001391659803000506.

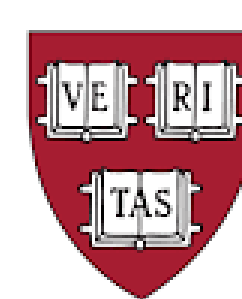
John Austin, David B. Hatfield, Angelica C. Grindle, and Jon S. Bailey. 1993. "Increasing recycling in office environments: the effects of specific, informative cues." *Journal of Applied Behavior Analysis*. (1993);26(2):247-253. doi:10.1901/jaba.1993.26-247.



The University of Maryland increased their landfill diversion rate from 17% in 2003 to an impressive 78% in 2013.

Since 1989, Harvard has increased the amount of recyclable items in their waste stream from 5% to 53%, and has decreased per capita trash from 660 pounds to 361 pounds.

HARVARD  
UNIVERSITY



ST MARY'S  
COLLEGE of MARYLAND  
*The Public Honors College*

St. Mary's College of Maryland, a pioneer among green institutions, increases organization and efficiency of waste disposal to reach climate neutrality by 2020.

## Methods

- I constructed effective signage to attract and inform patrons on proper waste disposal. The signs are laminated and hung at eye level. Signs also include minimal wording, easily identifiable pictures, eye-catching colors, and schema-sensitive language in order to influence patron participation.
- I rearranged the location of the existing receptacles in the Pub so that both trash and recycling are paired together. Having the two bins within close proximity of each other promotes greater waste organization.
- A compost bin is also introduced to the system in order to remove organic waste that would otherwise be tossed in the trash.
- The three-way waste disposal system is set up in a specific order that promotes greater efficiency. The landfill section is located to the right of the recycling and compost so that organic waste, paper, glass, and plastic materials are disposed of in their respective categories before reaching the "Landfill" bin.

## Conclusion

This system has proved that there is potential in the improvement of waste organization at the Pub/Grab & Go, as well as campus wide. The system has evolved a great deal from when it first started, and will continue to be updated in order to maximize its efficiency. By introducing the compost bin, altering signage in a way that better influences patrons, and informing more people about the initiative, the organization of the waste will only continue to improve. As the waste disposal initiative continues to evolve, physical improvements will be made to increase the amount of compostable and recyclable material produced by the campus and minimize garbage output, but it will also educate students about the impact they have on our community and the greater world.

## Acknowledgements

Dr. Barry Muchnick  
David Sonsotta  
Megan Rigby  
Sophia Caradine-Taber  
Kia Blum

