Interactive composting, recycling station shows savings in real time

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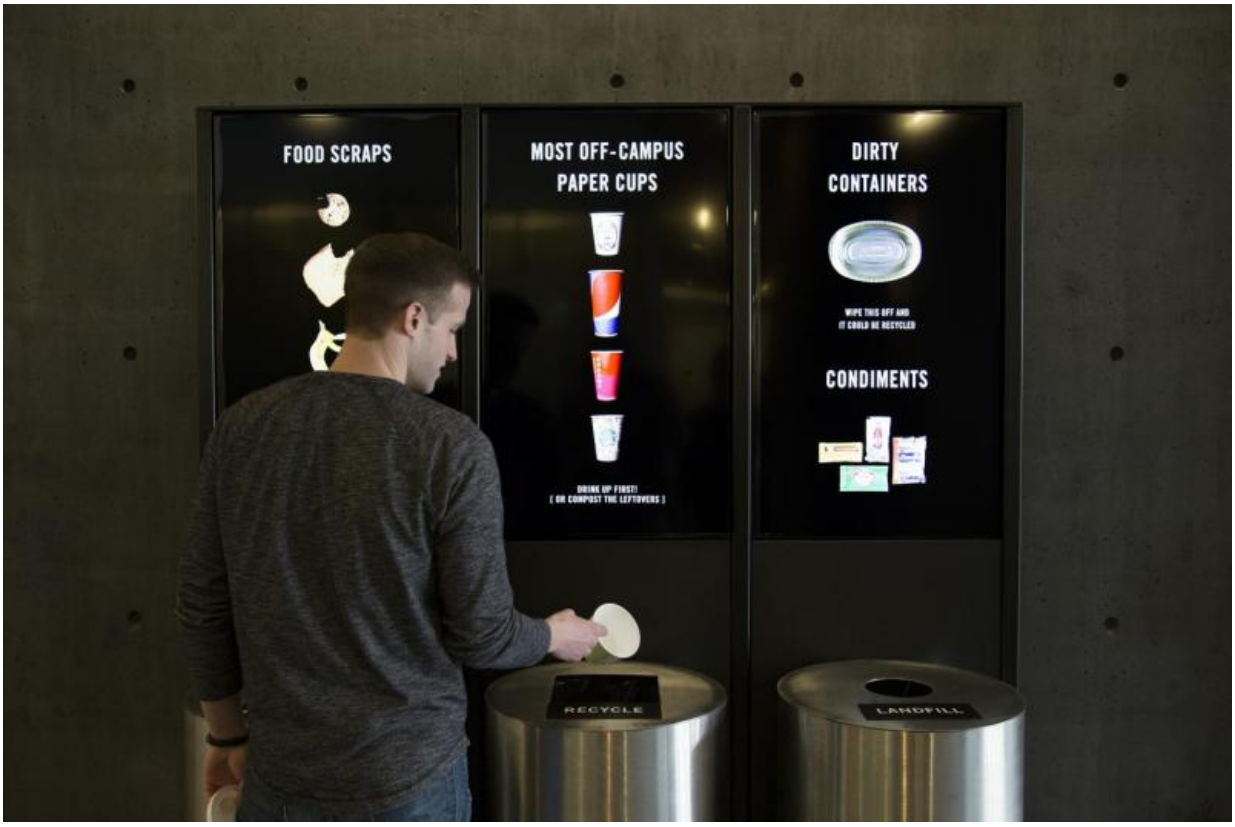

A new installation at PACCAR Hall by design professors Karen Cheng and Kristine Matthews tells users how much money has been saved by correctly sorting items for composting, recycling or sending to the landfill.

"You just composted 2.31 ounces," the screen reads. "If everyone on campus composted this amount today, UW would save $1,181.00."

An interactive recycling and composting station installed this spring at PACCAR Hall is showing the University of Washington community exactly how much money can be saved by composting and recycling correctly. And it seems to be doing its job well.

Installed in early April in PACCAR Hall, the interactive system was dreamed up by an interdisciplinary research group led by Karen Cheng and Kristine Matthews, professor and assistant professor, respectively, of the Visual Communication Design Program in the School of Art + Art History + Design.

Their system consists of three receptacles, each fitted with a weight sensor, microcomputer and digital screen. When people toss items into the receptacles, the screen shows how much money is saved by proper composting and recycling, as well as the hypothetical savings campuswide if everyone did the same.

When the bins aren't being used, their screens remind people which items belong in each category, including items such as bottle caps and foil lids.

Several student and alumni talents went into the project. Four graduate students from the Master of Human Computer Interaction and Design program proposed the initial concept in a course co-taught by Cheng and Linda Wagner, who directs the program. Chen and Matthews collaborated with UW design students and alumni to create the on-screen animations and photography.

Cheng and Matthews collaborated with anthropology professor Peter Lape and doctoral candidate Jack Johnson to study the installation's impact. They found that incorrect sorting of items went down from 48 percent to 40 percent, and that waste correctly diverted to the landfill container rose by 10 percent since the installation opened.

Provided by University of Washington