

Save [1/2] the Trees

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How can Santa Clara University alter its habits of paper consumption towards a sustainable future through education and available resources?

INTRODUCTION

The Problem: Even environmentally conscious students don't often use or understand double-sided printing options at Santa Clara University.

The Purpose: We wanted to look further into educating ourselves and others on double-sided printing.

Existing Resources:

- SCU installed a new printing system during Winter term 2011 capable of duplex printing
 - We were not clearly informed of this
 - The printers with this capability are primarily in the Learning Commons

The Goal:

- Understand the options
- Educate students about the availability and help them understand how to use this feature
- Find the best ways to reduce paper use for all in the University

METHODOLOGY

1. We began our project with high hopes for setting duplex as the default on all printers.
2. Next, our group created two surveys, one for students and one for faculty.
3. The next step was to send a duplex document from a PC (because Macs can't print duplex on our network) to the CyPhi Residence Hall printer and the document printed on two separate pages.
4. The idea for a SLURP pilot program became our focus. The idea was that a duplex printer would be in the SLURP lounge and we would test if a duplex printer was a feasible option for implementing in the CyPhi Residence Hall.
5. Next, we met with the manager of Student Technical Services. We found that duplex default is not widely supported because if we make duplex default, students would not know it's duplex, throw the duplex paper away and reprint the document as single sided which wastes paper.
6. Ron Danielson, the Vice Provost of information services, informed us that a SLURP pilot program was not feasible as a duplex printer and would cause too many network problems for the number of staff available for support. In addition, buying another printer would require a Smart Print control panel which costs \$1000.

“Duplex printing should be an academic standard.”

-Student Survey Response

Student Printer Usage

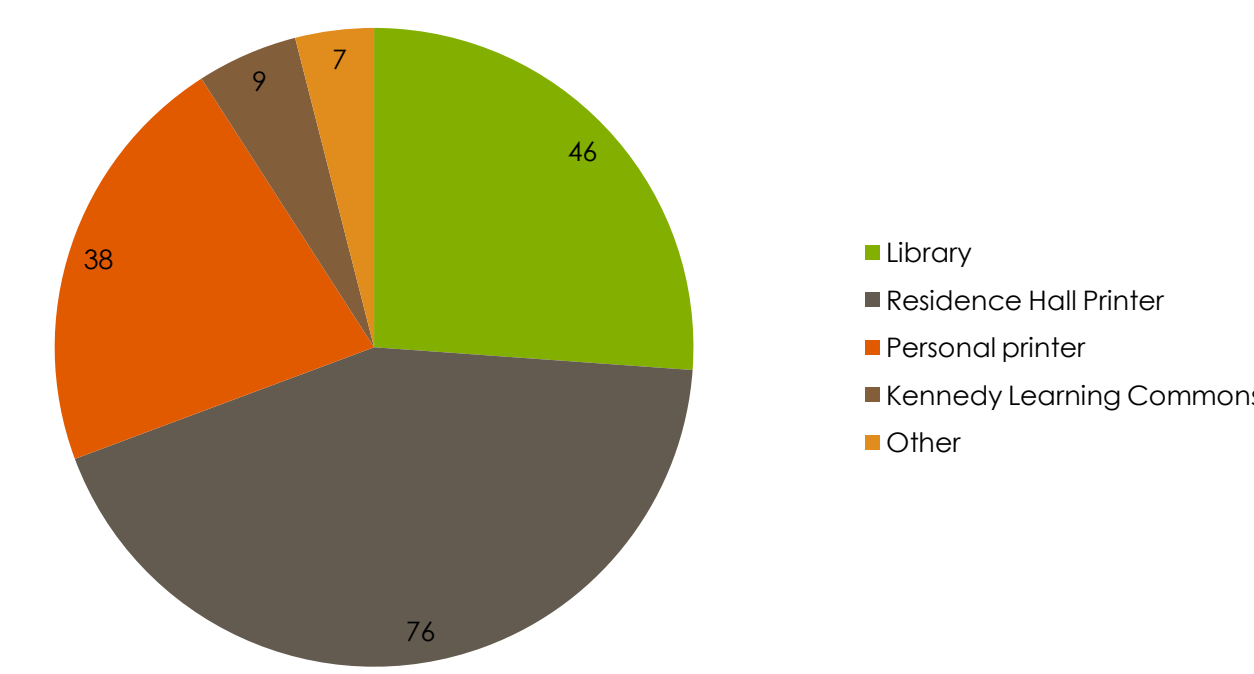


Figure 1. Survey sample response count for student printing preferences on campus (n=176).

Faculty Attitude Double-Sided

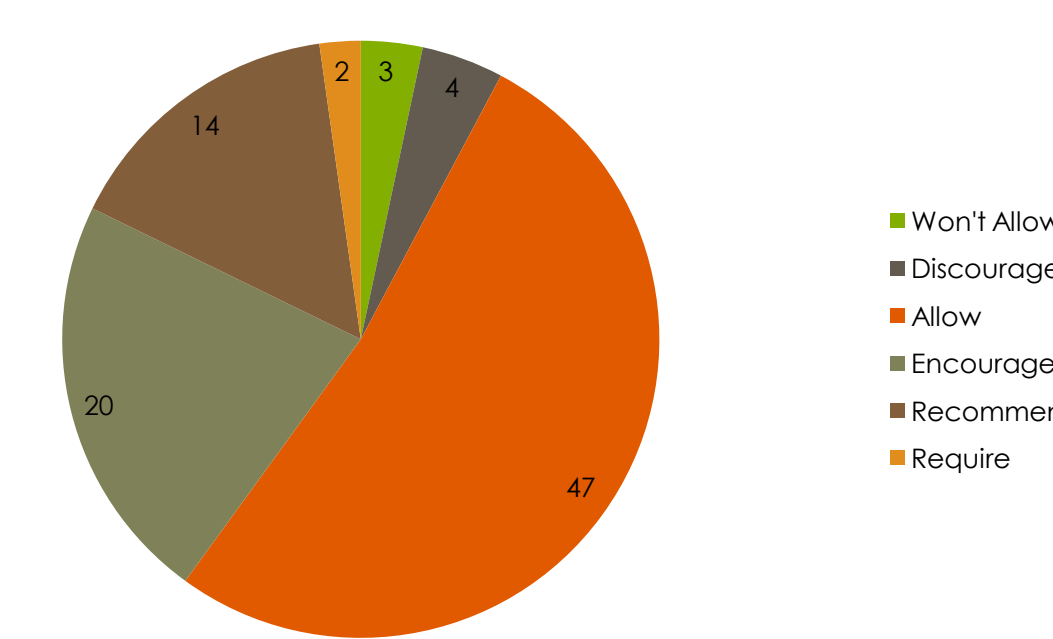


Figure 4. Faculty survey sample response count on allowing students to print double-sided for class (n=90).

Double-Sided Printing

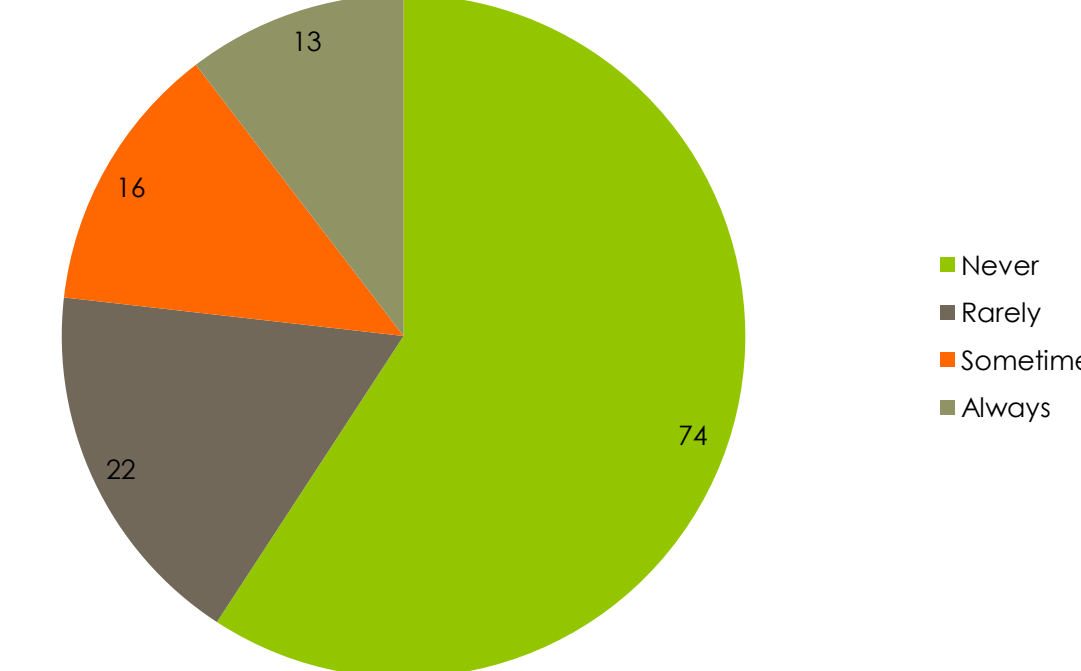


Figure 2. Number of people in survey sample who print double-sided (n=125).

Faculty Use of Camino

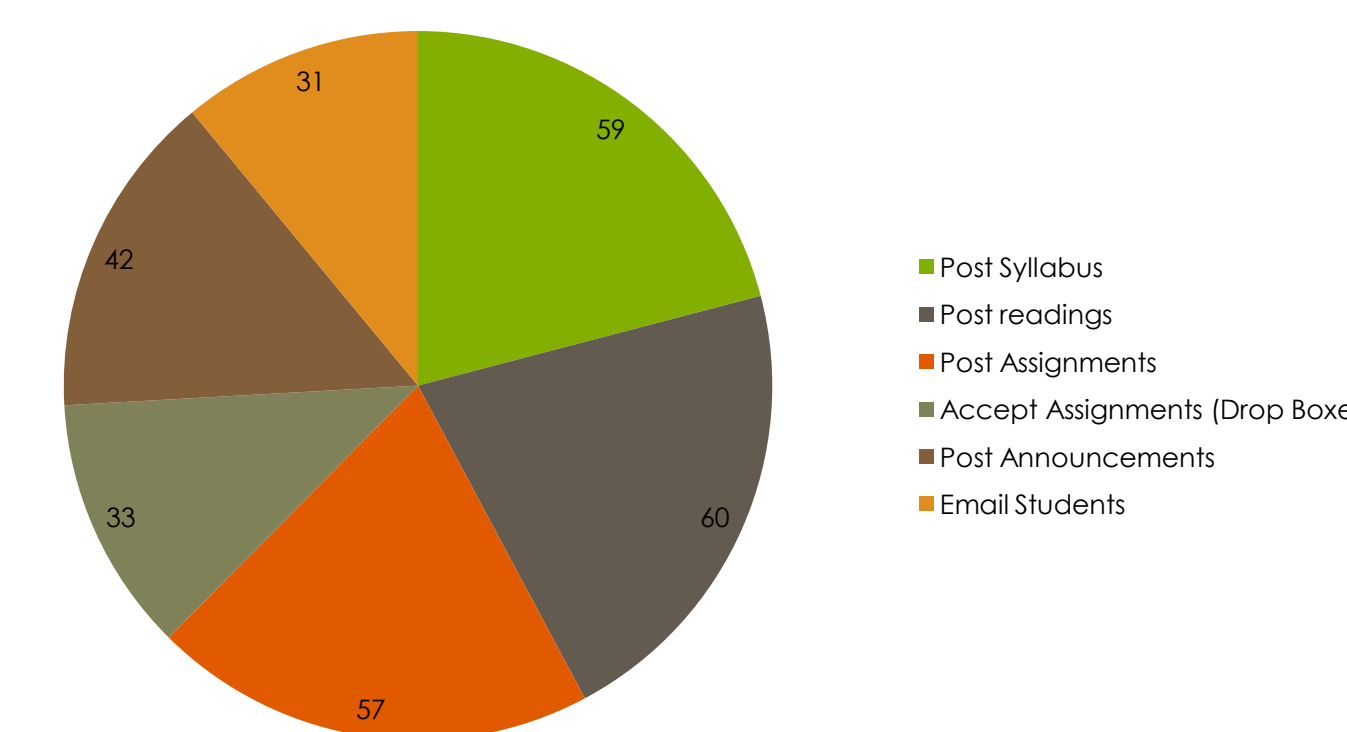


Figure 5. Various uses of Camino by professors at Santa Clara. (n=282).

% of Student's Using Macs vs PCs

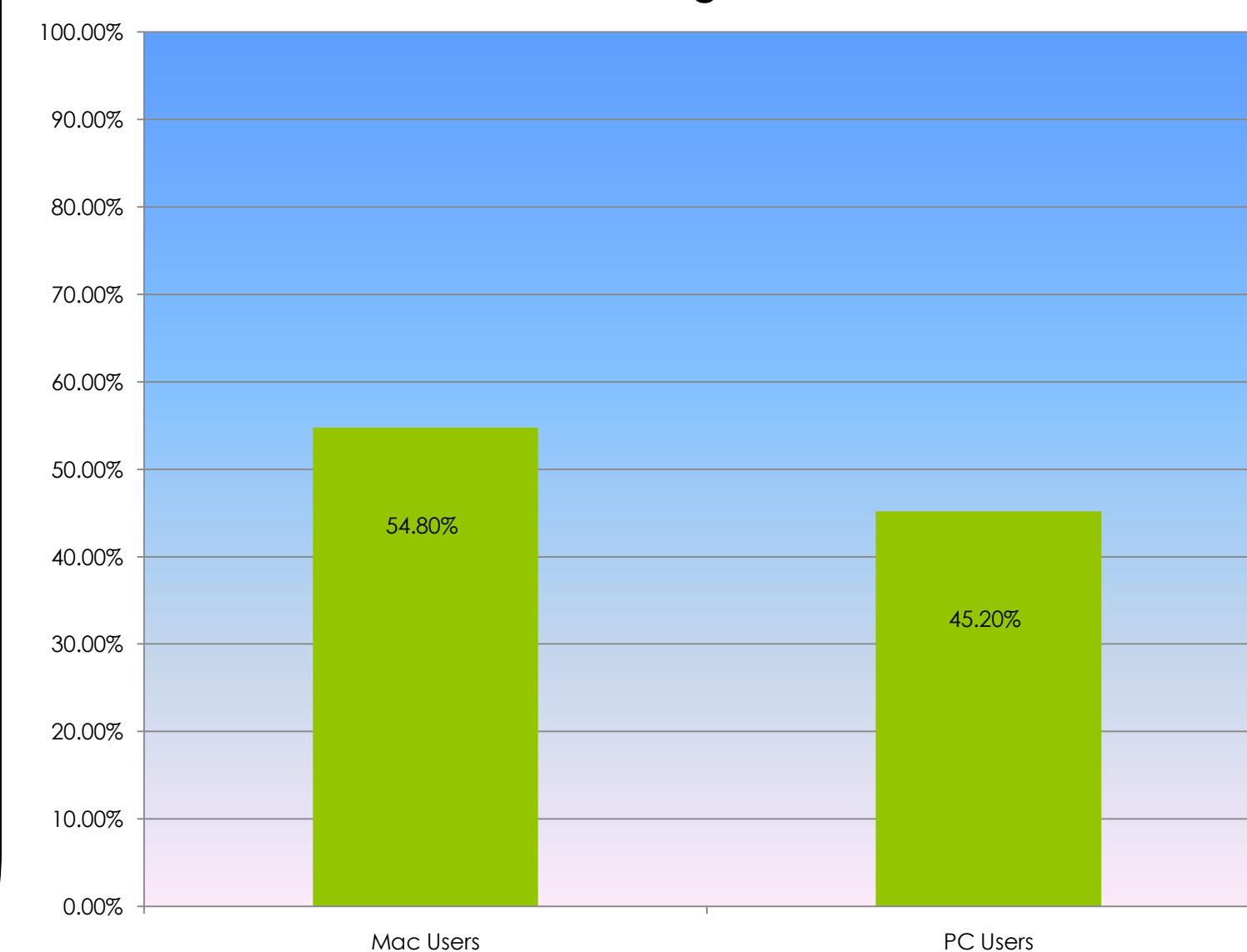


Figure 3. Percentages of students in the library using Macs or PCs, on days May 18th (n=125) and May 22nd (n=156), Overall: (n=281).

Student Use of Camino

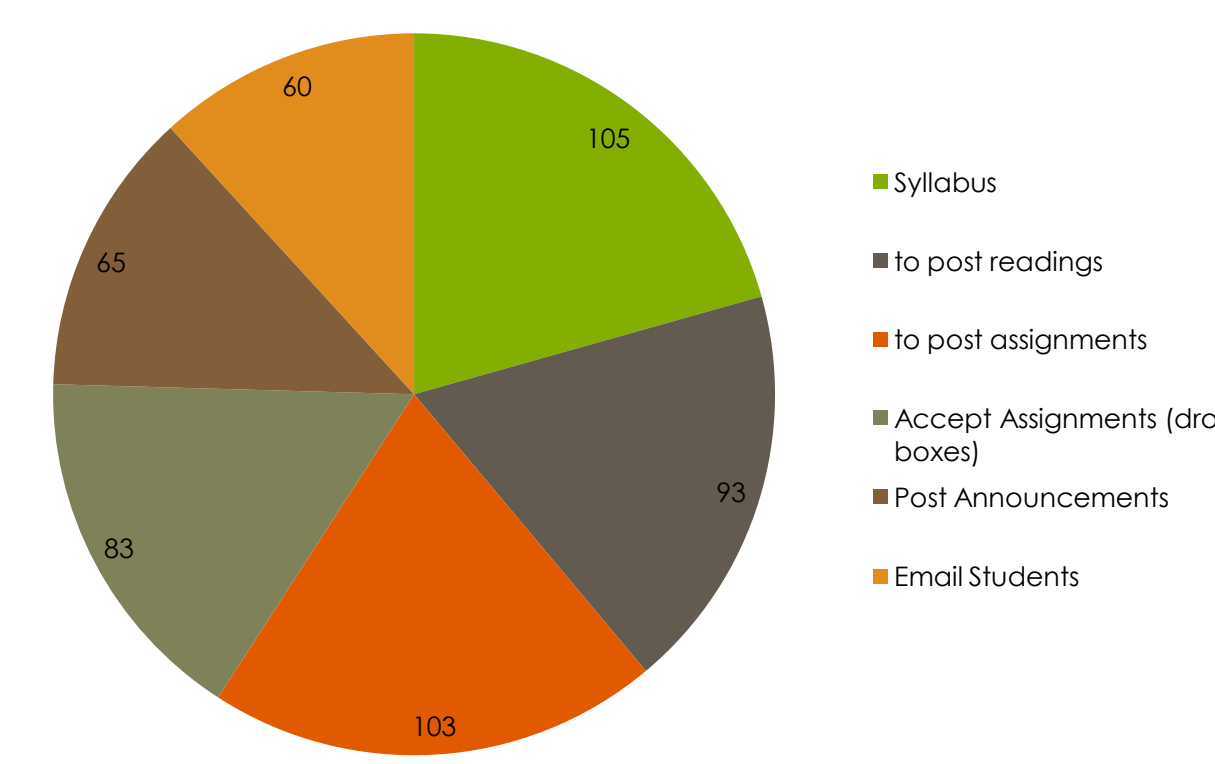


Figure 6. Various uses of Camino by students. (n=509).

ANALYZING THE RESULTS

Analysis: We realize that despite SCU's efforts towards a sustainable future, paper consumption far exceeds its necessary limits. The institution spends \$120,000 each year on paper; that is the equivalent of 28,000 reams of paper (14 million sheets). With an undergraduate population of about 5,000, Santa Clara University exhausts roughly 2,800 sheets per undergraduate student, per year. While significant efforts have been made to abate the carbon footprint of our paper consumption, they have been largely ineffective. Hypothetically speaking, if duplex printing were the default option for the entire university, the potential maximum saving would be \$60,000 and 7 million sheets; this cuts our paper consumption by half. While making duplex printing the default setting school-wide is not a realistic vision, these numbers are indicators of the potential savings the University has yet to achieve (both financially and environmentally).

It became evident that in order to explore Santa Clara University's printing options, we must master the art ourselves. But printing a duplex document (double-sided) was not as easy as IT had led us to believe.

Obstacles Encountered When Printing Double-Sided:

- Instructions were often difficult to locate (online, residence halls, & Learning Commons).
- SCU's current network does not support duplex printing from Mac computers.
- Swig Residence Hall printer does not have the duplex capabilities we were informed it had.
- Simplex printing is the more convenient option.

The results are strong indicators of the CyPhi community's need for change.

Of the polled students, 43% frequently print from the Swig printer provided by the University. 59% of respondents never print double-sided.

However the students communicated through their responses a willingness to explore this aspect of sustainability.

The greatest deterrence for students wanting to turn in duplex assignments was uncertainty as to whether or not the professor would accept such a format (it breaks the conventional MLA format). The faculty survey showed, however, that over 90% of the faculty that responded they would be willing to allow, encourage, recommend, or even require students to turn in duplex assignments (Figure 4). Other constraints students mentioned when considering duplex printing include neatness, readability, room for notes, and the convenience of printing.

We explored student and faculty support for Camino as an alternative way of reducing paper consumption. Students' preferences showed high support for Camino (Figure 6); they asked that more and more paper work be distributed virtually. Faculty expressed varying degrees of preference (Figure 4). Many expressed frustration with Camino and this method of communicating with students.

If the university made efforts to bridge the technology gap between students and faculty (through printing habits, Camino, Drop Box, etc.) paper consumption would significantly decline.

RECOMMENDATIONS/CONCLUSION

While the university may not be ready to make duplex documents the default on campus, we believe a smaller scale initiative would be more realistic and effective.

We recommend that the printer Kennedy Learning Commons will get this summer have duplex printing as the default option. Kennedy Commons is an icon of how Santa Clara University can do things differently and better; duplex printing is the next step towards its goal of sustainable education. Our results indicate that only 5% of respondents print in the Kennedy Learning Commons. **We recommend that Orientation Leaders and Community Facilitators for the 2011-2012 academic calendar year encourage their residents to leave their personal printers at home,** and instead advertise the brand new printer in Kennedy Learning Commons. If the printer has duplex printing as the default, these efforts should increase its use.

In conclusion, our research has revealed that Santa Clara University's sustainability movement is undermined by its lack of access to duplex printing.