



Free/Subsidized Printing Report

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Introduction

Courses require students to print materials, but cumulative printing costs burden students and disproportionately affect those who are low-income. Yale provides students free access to library books and computers because they are necessary for classes and accommodate low-income students who may otherwise not have access to online research or technology. Printing should be no different. Printing has become a source of disparity and inequity in the student experience, with many students opting for a personal printer instead of using the university's services.

Background

Yale Printing and Publishing Services (YPPS) is responsible for on-campus printing services. YPPS is essentially an independent business operating inside of Yale University, formally unaffiliated with Yale. YPPS sells printing services and collects the revenues from those sales. Revenue is then used to cover its expenses, such as those related to equipment, supplies, and maintenance. YPPS's directive is to break even, not make a profit. Currently, YPPS charges for printing in black-and-white, as well as in color. Peer universities, however, have much more accommodating pricing models and policies regarding printing. Many universities supply free printing quotas, which allow a student to print a specified number of pages in a certain time period (i.e. semesterly), or printing credits, which give a student a specified dollar amount to use for printing in a certain time period. Yale's pay-to-print model is detrimental for students in comparison to printing credits or printing quotas found at peer institutions.

Peer Institutions

Schools	Printing					Costs of 600 b&w sides per year, 300ds, 300 single, and 5 color single sides
	B&W	B&Wds	Color	Color ds	Quota?	
Princeton	\$ -	\$ -	\$ -	\$ -	2700BW, 200C	\$ -
MIT	\$ -	\$ -	\$ -	\$ -	3000 any type	\$ -
Brown	\$ 0.07	\$ 0.10	\$ 0.25	\$ 0.42	\$ 30.00	\$ 7.25
Dartmouth	\$ 0.06	\$ 0.09	\$ 0.49	\$ 0.49	\$ 20.00	\$ 13.20
Harvard	\$ 0.05	\$ 0.06	\$ 0.15	\$ 0.16		\$ 24.75
Upenn	\$ 0.07	\$ 0.10				\$ 36.00
Cornell	\$ 0.09	\$ 0.09	\$ 0.35	0.35 [estimate]		\$ 42.25
YALE	0.1	0.12	0.25	0.25		49.25
Columbia	\$ 0.10	\$ 0.10	\$ 1.00	\$ 1.00		\$ 50.00
Stanford	\$ 0.12	\$ 0.24	\$ 0.32	\$ 0.64		\$ 73.60
Uchicago	\$ 0.13	\$ 0.25	\$ 0.18	\$ 0.35		
					average	\$ 29.63
					average w/o Yale	\$ 27.45

As evidenced in the peer institutions data (shown on next page), Yale tends to charge much more for printing than its peers. It has the 3rd highest estimated printing costs out of 10 institutions researched. The data ultimately reflects peer institutions' more accomodating pricing models and policies (quotas and print credits) that allow students to save money. The peer institutions data justifies why the Yale administration should take next steps to reduce or eliminate the printing costs at Yale.

*B&W = black and white; ds = double-sided

Recommendations

1. Freenters
 - i. Started in 2013, Freenters is a software company that aims to make black-and-white printing free for students up to a monthly limit of 80 pages. It is the only company active in the campus-printing space. Freenters would install its proprietary software at Yale printing stations.
 1. Freenters has been utilized by about 50% of the total undergraduate population at the University of Chicago (its birthplace) and Northwestern University. Freenters is also present on about 20 other campuses.
 - ii. Freenters makes money for itself by printing ads between the pages of students' documents, and these ads are generally for local businesses and may come with coupons.
 - iii. Freenters partners with a certified third-party reforestation platform called PrintReleaf that measures the printing activity associated with Freenters and reforests its paper consumption.
 1. This helps to counter potential detriments to the environment.
 - iv. Yale Printing and Publishing Services would pay zero dollars for the service but would lose four cents on every black-and-white single-sided page. Yale currently charges ten cents per black-and-white page, but Freenters would pay Yale six cents per page of black-and-white printing, which actually just covers the average six-cents-per-page cost of black-and-white duplex printing.
 1. However, Yale Printing and Publishing Services has stated that the original motive behind the price difference between single- and double-sided printing was environmental. It has indicated that it would be willing to adjust the pricing to suit the revenue provided by Freenters. This would result in true all-around, free printing.
2. University Allotment of Print Credits or Decreased Printing Costs
 - a. Having spoken to YPPS, its mandate and business model make this recommendation highly unfeasible. However, YPPS has stated that it is open to rebalancing the costs of single-sided and double-sided printing, as mentioned above.

3. Printing as a Part of Tuition Costs
 - a. Printing could be covered by financial aid without the hassle of requesting refunds or using a limited stipend.
 - i. However, this could be controversial because some majors require more printing than others, and students are generally opposed to tuition increases.

Progress

- Spoke with the CEO of Freenters and maintained electronic communications.
- Met with Dean Burgwell Howard.
- Met with Dean Burgwell Howard and members of YPPS, Yale IT, and Yale Student Technology Collaborative.
 - Connected them with the relevant representatives of Freenters.
 - Discussed the locations of a potential pilot program, informed them of how printing could be changed to improve the student experience, and brainstormed alternatives to Freenters.

Challenges

- Concerns about sources of funding for subsidized printing, since Yale and YPPS operate independently.
- Concerns about technical security and the advertising content of Freenters.
- The break-even mandate of YPPS and the lack of university funding for YPPS.

Next Steps

- Continue to correspond and meet with critical printing personnel (next big meeting will be at the beginning of the second semester).
- Stay in contact with Freenters to guarantee its support and flexibility.
- Implement a pilot program in Bass Library as the ideal location, after talking with Bass personnel.
- We aim to have a pilot program in place by early March in Bass Library, but the state of Freenters is still subject to review by YPPS.

Conclusion

Despite the fact that printing at Yale is highly structured and institutionalized, we made significant progress in increasing the awareness of those in charge of printing about the challenges that printing costs pose for students. Dean Howard's impetus to level the playing field for low-income students, the strong factual evidence of Yale's high printing costs, and our in-person explanations of how printing currently detracts from the student experience were successful in generating interest from the service's providers in changing the current system.

There was general enthusiasm about Freenters in our group meeting, and it remains a very promising and viable solution. We hope to see a pilot for the service in Bass Library as early as next semester.

Environmental and technical considerations remain the largest obstacles to implementation: we expect the latter to be resolved through collaboration between Yale IT services and Freenters's technical consultants; the former is mitigated to a certain extent by Freenters's green policies and Yale's use of 30% recycled paper (a little known fact), but the true extent to which printing affects the environment requires empirical measurement. In the event that Freenters is not ratified, we are confident that the cost differential between single-sided and double-sided printing can be reduced after we talk with YPPS. Other cost-lowering solutions will require further investigation and administrative contact. Overall, we look forward to meeting anew with the de facto printing committee at the onset of next semester and hearing its verdict on Freenters.