

Cal Poly Printing Use Survey

Printing in the Computer labs across campus in the past was mainly limited to general student assignments that focused on output from word processors and spreadsheets with a small portion coming from specialty software. Handouts and syllabi for classes along with related reading materials and graphics were prepared by instructors, printed in their departments or at places like Second Edition. Some of the materials were simply handed to students and some they had to purchase. Then academia discovered the World Wide Web (WWW) and things have not been the same since.

Many saw the use of the WWW as a convenience (you can't lose materials that are on a server and they're always there to refer to when you need them). Others saw it as a way to save money on printing (if you can read it on a browser there's no need to print and waste all that paper). The WWW was seen as a research tool (just print a page from the site to prove you found it). All these views were correct to a point, but when it came to the effect it would have on printing in the labs no one had a clue.

As the cost of better printing devices came down the labs began to migrate from dot matrix to ink jet to laser printers. At times the cost of the new technology was mitigated by a lab fee or a cost per page charge in the case of the lasers at the beginning. As time progressed it was found that laser printing was the most economical of the formats in the long run and was generally adopted in most labs. This gave students access to quality printing devices and the cost to the labs for equipment and consumables was well within budget limits. Then the use of the WWW by instructors exploded and suddenly budgets that had worked for years couldn't meet the demands being placed on them.

Instead of reading materials on the computer monitors students became engaged in a printing frenzy. If information appeared on an instructor's web site, students printed the site, not the single page with what they needed. When asked to bring a single page from a web site, students would print the entire site with all the unneeded pages going into the recycle bin. Instead of using a photocopier when asked to bring copies of their paper to share with the class, students would print the necessary number of copies in the lab. After all, it was free in the lab and photocopies cost money. Instructors would post

200+ page documentation files in pdf format for students to read. Students would print copies to take home to read. Picture collections of art works and buildings were posted by instructors and students printed the sites to create study books.

As more and more material was placed on the web, as more research was assigned to be done on the web, more and more paper, toner and ink flowed from the printers in the labs. Costs for printing in some labs more than tripled in less than a year due to volume. Supply budgets poured into the printers and flooded out the doors in the hands of students or into the recycle bins. Money for any other supplies became scarce without any hope of replenishment.

From desperation an idea was born. If people were made aware of the volume they were printing and how much of that they were wasting they would behave in a more responsible manner. What better solution for the waste of paper and the draining of the budgets than to switch to a pay as you go format? The cost was shifted from the supply budgets of the labs to the users. If someone wanted to print the equivalent of the Library of Congress, the expense would be born by them and not the lab they victimized. Anyone printing in a rational manner would only bear the actual cost of printing the number of pages they needed.

During spring quarter 1999, a committee was formed to investigate the concept. The goal of this committee was to determine what the cost per page would be for several different types of printers, both black and white and color, and to do a survey of those who would be most affected by a per page fee, the students, staff, and faculty. The committee determined that cost per page should include the cost of the consumables (paper and toner/ink), servicing the printer (filling with paper and maintenance), the eventual replacement of the printer on a three-year basis, and the infrastructure required to provide a standard method of access to the printing service. Using these criteria, the committee found that laser printers were the most economical. With this in mind a survey was posted on the web and an email message was sent out across campus soliciting replies.

The survey was posted during dead week of spring quarter. There were 813 replies with responses coming from 789 students, eight staff and sixteen faculty. Most of the replies came from the colleges of Engineering and Business (39.1% and 32.9% respectively). Only two individuals suggested that printing cease on campus while the majority were willing to pay a fee of some sort whether fee based or on a per page basis. As might be expected, when asked what they thought was a reasonable fee for black and white printing many (21.6%) picked the lowest fees listed (under five cents). Over two thirds of those responding picked fees between five and ten cents per page with the majority (49%) picked five cents per page. When it came to color printing 43% of the respondents were willing to pay fifty cents per page. The rest of the survey dealt with the questions of where, when and what kind of printing was being done as well as where, when and what kind of printing would they like to be able to do.

In general the primary findings of the survey were most respondents would be willing to pay the ten cents for black and white printing and fifteen cents for color. The majority of printing by the respondents was taking place in the business labs and the Library. When asked where else on campus they would like to be able to print, the University Union consistently came in third despite the fact there are no open labs in the Union at this time. The balance of the findings are attached and in general support a willingness to accept a per page fee for printing.