

# Memo

To: Reeta Roy  
From: Dacia James  
Date: 8/18/2006  
Re: Recommendation Report

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## Key Characteristics of the Reader(s)

This document is aimed toward the Computing and Network Services Department at the Illinois Institute of Technology, Main Campus to provide information and potential alternatives for dealing with excessive printing in the CNS computer labs. Furthermore, this document is also intended for the students at IIT as well, since they are the ones who will be effected the most by the CNS decisions in dealing with this issue. IIT students deserve a right to help in making the final decision on printing in the computer labs, because the students are for whom the labs were created for.

## How the Report was Shaped

The report was shaped by adding a title page with an abstract to give the reader a brief outline of the key points within the report. Furthermore, a letter of transmittal preceded the table of contents to further inform the reader what is to be expected in the report and if time should be taken to read the whole report. Also, a table of contents was added to let the reader clearly know what sections are in the report and where they can be located. Overall the paper was redesigned with sections being numbered so that they correlated with the table of contents. Moreover, in the recommendation section, the recommendations given are separated and numbered for greater emphasis.

Thanks for your help.

November 29, 2001

Michael Hites  
Chief Technology Officer  
Office of the CTO  
Stuart Building, IIT  
Chicago, IL 60616

Dear Michael Hites:

I present you the enclosed report, "Alternate Choices for New Printing Policy for IIT Students in the Computing and Network Services Computer Labs," that would give you an idea of other alternatives for helping with the printing increase in the CNS computer labs. The report contains my recommendations about implementing an effective printing policy that will benefit the students of IIT as well as the CNS department.

After the new printing policy went into effect, I contacted the CNS department head, requesting the reasoning behind the policy. I also polled some of the students of IIT for their opinions regarding the new policy that went into effect last month. And I monitored the current printing rate and compared it to the previous printing rate in order to evaluate the effectiveness of the new printing policy.

I recommend that the CNS department execute a revised printing policy that creates printing accounts for each student with a given amount of pages that they can print. If the student approaches their account limit, they will be notified and charged a fee per page printed. I hope you find my report efficient in presenting other alternatives for the CNS printing policy that would be effective for the students and the CNS department. If you have any questions or if you would like to discuss any of my recommendations, please contact me at the following information below:

Sincerely,

Dacia James  
5155 W. St. Paul Ave.  
Chicago, IL 60639  
(773) 622-7410  
Email: [msdacia@hotmail.com](mailto:msdacia@hotmail.com)

# Alternate Choices for New Printing Policy for IIT Students in the CNS Computer Labs

Prepared for:  
Michael Hites  
Computing and Network Services  
Illinois Institute of Technology

Prepared by:  
Dacia James  
Illinois Institute of Technology Student

November 26, 2001

## Abstract

This report examines Computing and Network Services' massive printing problems in the computer labs by IIT students. The report provides two possible alternatives to the increase printing, but recommends creating printing accounts for each student at the beginning of each semester, allotting a set number of pages to print, and when the student approaches their limit, they receive a warning notification that their account is approaching its limit and either purchase more pages or the account will be put on hold until the next semester when a refreshed account is established. Creating a printing account will allow the student and CNS to be aware of who is printing what, the quantity, the frequency of the printing, and the type of document being printed. Also, notifying the student of approaching their printing limit will give the student a chance to reevaluate their printing necessity and give CNS a chance to make a profit that would contribute to purchasing more paper, toner, and printer repairs.

The Computing and Network Services department needs to provide a practical strategy for their new printing policy because students need to be treated fairly and CNS does not need to be taken advantage of.

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## 1. Background

Illinois Institute of Technology's Computing and Network Services (CNS) department provided IIT students with unlimited printing in the computer labs. CNS paid for all the printers and the supplies needed to print. However, a dramatic increase in printing among IIT students has caused CNS to reevaluate their position on free printing. CNS implemented a new printing policy that will charge students 7¢ a page to print from their labs. Students have gone without printing documents. They also print at other places, such as work, student organization computers, and home or dorm rooms to avoid paying for printing.

The Computing and Network Services department needs to provide a practical strategy for their new printing policy because students need to be treated fairly and CNS does not need to be taken advantage of.

## 2. Problem

The problem is students have increased printing in the computer labs by 400% from last semester to this semester. The previous semester, students printed a total of 45,000 pages. That averages out to be 5,000 pages a month in a nine month academic year. The beginning of the semester up until mid-October, printing by students in the CNS labs equaled 40,000. As a result of this massive printing, CNS has depleted more than half their semester allotted budget on purchasing more supplies for printing.

## 3. Effects

In the past 4 semesters, CNS has spent an average of \$750 on paper, toner, and printer repairs each semester. They were given \$2,000 for their total annual budget for those things. However, this semester, Fall 2001, CNS has spent \$600 on paper, toner, and printer repair from mid-August to mid-October. That is 60% of their budget already spent. If this rate of printing continued through to the end of the semester, there would be an 80% increase in printing from previous semesters. Apparently, as the Illinois Institute of Technology aims towards becoming a paperless community, the students have increased their paper usage, which conflicts with the paperless objective.

## 4. Causes

Two factors contributed to this increase in printing among IIT students: a growth in student population and more coursework, important document, and assignments being placed on the computer by professors.

First, the IIT student body grew by 20%, not including the 400 incoming freshman class. IIT's student population was 2,100 undergraduates and 1,500 graduate students without the transfer students and the freshman. And if each student used the CNS computer labs during the previous semester, each student would have printed 12.5 pages for the entire semester. With the increase in students totaling 4,720 students, each student would average 9.5 pages. Unfortunately, the average would increase to 76.3 pages a year per student.

Second, IIT moved towards a paperless community, more and more professors were placing their important coursework and documents in websites, in emails, and with Internet courses. As a result, students would view these documents and print them for the sake of having a hard copy to view even when they are not in front of a computer.

## 5. What Is Currently Being Done

In order to gain control over this increase in printing, CNS issued a new policy that charges students 7 cents per page printed. Therefore, they implemented a new printing policy. This policy required students to log onto the Windows server with printing accounts setup for each student. If the students activated their printing account before a certain date, they were given 100 free pages to print on, and if they purchased \$10 worth of printing pages, they would receive an extra 100 free printing pages, resulting in 200 free pages plus the \$10 purchased pages. Each page costs the students 7¢.

## 6. Need

The Computing and Network Services department needs to provide a practical strategy for their new printing policy because students need to be treated fairly and CNS does not need to be taken advantage of.

## 7. Solutions

### *7.1 Monitored Printing by Lab Assistants*

Monitored printing by lab assistants is an alternative for gaining control on the printing problem. Each computer lab use the services of a lab assistant whose job requires them to be aware of what is going on in that particular computer lab. Currently, in each computer lab, the lab assistant sits at the computer in front of the lab. This computer can have a program installed on it that informs the lab assistant of the print jobs sent to the printer and from what computer the print job was sent from. The printer can be made accessible only to the lab assistant in order to monitor the quantity of printing, useless printing, education printing, or personal printing. For instance, if the student is printing the same document over and over again wasting paper, that student can be charged a specified amount for each sheet wasted. Some of this need to print documents are unnecessary and can lead to abuse, but others are completely necessary. CNS computer labs are created to give students access to computers out of convenience, but at the same time, if a student is printing a mass amount of documents on information about a cell phone they plan on purchasing, that could be personal use and that student needs to be charged for printing. However, if the person is printing notes from the course lecture that the professor placed online, then the use of printing would be for educational purposes and the student should not be charged to print those important documents.

### *7.2 Setting Up Printing Accounts*

Setting up printing accounts for each student will establish a way of insuring that students do not exceed the given amount of pages to print. The printing accounts keep track of everyone's individual printing. Whenever that person approaches the printing limit, an email with a warning will be sent to them and/or place a hold on that account so that the student can not print beyond the amount given. When students get to that point, they can purchase more printing ability. CNS receives a chance to make a profit that would contribute to purchasing more paper, toner, and printer repairs.

## 8. Recommendation

Setting up printing accounts for each student is recommended. These accounts will inform the student each time they send something to the printer the amount of pages previously printed, the amount currently being printed, and the remaining balance of pages to print. The program will automatically recognize when a student has approached 5 to 10 remaining pages. When the program recognizes this, it will send the student an email indicating their printing status and offer them a chance to purchase more pages for a set price per page.

## 9. Implementation

Implementing the recommendation should be done as early as the beginning of the upcoming school semester. It will require CNS to create a program that keeps records of each student printing records. That will prove to be easier, since CNS already has accounts set up for each student. CNS decides the amount of pages given to students initially for each semester. As a result, CNS will have a running record of the amount of printing done in the computer labs. Also, CNS will save money on the printing, because they will know the maximum amount that entire student body can print. CNS can evaluate the budget based on that number, and if the allowed printing exceeds the budget, CNS will receive revenue, because the students will be paying for those pages. Overall, CNS and the students will benefit from the new printing policy. Both parties will be treated fairly, and no money will be lost.

## 10. List of Sources

Creative inspiration.