**A Solution to the printing system for Iowa State University**

1 Introduction

*Proposal*

I propose that the printing credits system for students of Iowa State University should be changed; through implementing the system in an identical fashion as the Dining Dollar system, the printing credits system would be better as students are able to buy the amount that they actually need for the semester and it will also be more cost effective for the parties involved.

*Background*

Currently, printing credits are allocated unevenly in such that students from College of Engineering would get 4000 credits at a higher cost, but students from College of Human Sciences only get the bare minimum of 500 credits. This is very inefficient because students from College of Engineering are most likely not using up all their printing credits, and students are unable to bring over the remaining printing credits to the next semester which causes them to lose the resources that they had to pay an additional fee for. On the other hand, students with minimum credits will be charged an additional amount if they have already used up their printing credit. “I think it’s pretty dumb...that we aren’t giving students enough printing credits to make it through the semester.” (Jeanette.VanZomeren, 2016) As one of the student states that for the six semesters he has been with the university, there has been countless times where he ran out of printing credit halfway through the semester.

*Scope*

In this document I will propose a method to improve the current printing credit system implemented in the university. I will also discuss how this will benefit many students and be more cost effective for all parties involved. This method will maximize the amount of credits needs for each student, while making sure that no resource goes to waste as well. It does not account for printing credits that will be allocated to students at the start of the semester.

2 Discussion

*Approach*

I believe the current system can be easily transferred over to the Dining Dollar system. This is because both systems work similarly. With the current Dining Dollar system, students can bring over their current remaining Dining Dollars over to the next semester, given that it is within the same school year. I hope that this upgrade can be completed as soon as possible so that students will have a new system by the next semester. Doing so, the current system will not clash with the work.

*Result*

My method will result in a cost-effective improvement to use the student’s printing credits. By porting over the Dining Dollar system, this allows students who have not use up their printing credits to still able to use it in the next semester. This is because the printing requirements of students may vary as per their semesters. This solution may cost some money to be built, but in a long term, it will give many benefits to the students. Also, this method can be done in a short amount time since the university already has its current system and its server base implemented, so the work needed to implement this will mostly be on the front end. For example, the webpage for the student to buy their printing credit will need to be revamped, but everything else regarding the backend systems and servers will remain the same.

*Statement of Work*

To build the system successfully, the following work must be done correctly:

Task 1: Build a new tab on Accessplus that allows users to buy their additional printing credits. (1 week)

Task 2: Work together with PaperCut in order to provide a page where users can buy their printing credit and does not necessarily require users to pay through their U-bill. Instead, users will be able to pay through their desired payment method. (1-2 weeks)

Task 3: Update the server base and desktop to be able to work together with the new functionalities. (1-5 days)

Task 4: System testing and stress tests (2 days)

3 Resource

*Personnel*

Short Term: 10 or more Iowa State University intern employees

Long Term: 5 Iowa Student University part-time employees

Short term employees will only be working on the project during the break to build the system. However, the long-term employees will be working on maintaining the system and fix any bugs.

*Facilities and equipment*

Required hardware:

10 computers from the IT department from Iowa State University

4 Cost

*Fiscal*

* Computer: $1,000 each, so it will be 10 \* $1,000 = $10,000
* Labor at $11 per hour or short-term employees, it will be around 10 students \* 20 hours \* 3 weeks \* $11 =$6,600
* Labor at $10 per hour for long-term employees, so it will be around 5 students \* 10 hours \* 4 weeks \* $10 = $2,000 per month

*Time*

The system can be built right after the Spring semester and can be completed before the Summer semester commences. The whole project would require around three weeks to be completed, including system testing. Preparation of the project and the server will probably take less than a day to be completed, and 1 day per week to discuss about the project progress. Long term employees will work around 10 hours a week to maintain the services and fix the bugs whenever necessary.

5 Conclusion

*Summary*

This proposal will provide Iowa State University students to have a more cost-efficient printing system that they can use around campus. By using the new system, students will be able to bring over their current printing credits to the next semester. This allows students to save more money by not wasting the old credits, and the new system will encourage students to buy more credit as they know the credit they bought will be able to be brough over and they do not need to use it all up within the semester.

For more information regarding this proposal, please contact Leonard Lim at [wxlim@iastate.edu](mailto:wxlim@iastate.edu), or (515)-555-5555.

# Works Cited

Jeanette.VanZomeren. (2016). *Iowa State Daily (April 25, 2016).* Ames: Iowa State Daily .