



# The Green Initiative Fund Funding Application

## APPLICANT INFORMATION

Project Title: Put an End to Single-Use Readers!

Sponsoring Organization (must be part of a campus department): Writing Department

### *Primary Contact/Year*

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### *Secondary Contact*

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Start Date: 7/19/14

End Date: Ongoing

How did you hear about TGIF? Writing Class

## PROJECT DESCRIPTION

(1) Give a brief overview of the project and specifically what the funding would be used for. Please be concise (200 words)

Instead of having a thick hard copy reader for classes, I would like to replace all readers at UCSB with an alternative online PDF copy. Most students try to sell their readers at the end of each quarter, but most of the time the reader is changed/updated and is no longer useful and students end up having a large pile of old readers in their room, not knowing what to do with them. With the new PDF version of required readers, each student would pay for a code to access the text and it would be available through the class page on gauchospace. On average, to create 2-4 readers, it requires a package of 500 pieces of paper that costs around seven bucks. Since the average student takes four classes per quarter and there are around 21,600 students at UCSB, the amount of money wasted on paper specifically for readers is \$907,200.00. With the switch to PDF readers, there would not be nearly as much wasted on paper, as each reader would be only available electronically.

(2) Will this project require ongoing maintenance or servicing? If yes, how will this be continually funded? Who will be responsible for conducting this maintenance/service?

Yes there will have to be ongoing maintenance for the switch to PDF readers since teachers tend to revise and make adjustments to their course texts every quarter. This maintenance will be performed by computer technicians that will be on payroll and it will be continually funded by the money received from students that purchase the online codes for the PDF readers.

(3) How do the project goals meet the TGIF mission statement and guiding principles? (200 words)

This project supports the TGIF mission statement by reducing waste generation as well as reducing the amount of paper and materials that are usually recycled. Recycled materials are usually not fully recycled and some components end up in landfills. There will be a large reduction in the amount of paper the University invests in, and that money can be put towards other sustainability efforts like more recycling bins around campus or even more free pages for printing for each student. According to the EPA, 27% of municipal solid waste in the United States is paper. We can do our part as a sustainable university and help reduce this percentage by switching to electronic PDF readers. This project will also reduce electricity usage as the copy makers and scanners will not be put to use at very high volumes anymore.

(4) What specific environmental impact will this project help mitigate on campus. How will this project help move the university beyond its current programs? (200 words)

There have been very many efforts for recycling and waste reduction at UCSB, and most seem to be working excellently. All printers at UCSB now offer double-sided printing, which reduces

the amount of paper wasted by 50%, and at free printing stations students must enter their ID and they only have a certain amount of pages they are allowed to print per quarter, which makes students more aware and conscious of what they are printing. Along with printer paper used for research papers and reports done by students, a large contribution to paper waste at this University is the paper that is used to make hardcopy readers. Almost every class requires a reader, and most of them are hundreds of pages long. By switching to online PDF versions of these readers, hundreds of thousands of pages of paper will be saved and can be used for other purposes or money that would otherwise be invested in these hard copy readers can go towards other waste management projects.

(5) Is there an example of a similar project that has been completed or is currently being implemented at another institution? If yes, please elaborate. (200 words)

There is a "Paper Reduction Program" at Carleton College in Northfield, Minnesota where they have duplex printing, go-print printer programs, and paperless transactions. Here at UCSB we already have duplex printing available at every printer on campus, as well as our own version of go-print which means we give students free printing that is authorized by a UCSB ID and password. The paperless transactions done at Carleton College are all done online instead of on multiple pieces of paper. Examples of paperwork that is done online at Carleton College are office timesheets for students/campus employees, online work orders, online mailings, and online registration at the registrar's office. UCSB already implements versions of online paperwork, and online readers will greatly reduce the amount of paper that our campus uses.

(6) What materials will you need for your project? Where do these materials come from and what are the plans for safe disposal of any products or byproducts of your project? (200 words)

Materials needed for this project will be computers with programs that can handle mass creations of online PDF readers. Certain software will be necessary as well as the employment of computer technicians to create these PDF's. There will be no byproducts of any kind through since it will be a zero-waste project.

## **PROJECT TIMELINE**

Please append a projected timeline for the proposed project. This timeline will be used by the TGIF Committee and Grants Manager to assess the project's ongoing advancement. You may choose the format of the timeline, but it should be as detailed as possible and include the following:

a) Specific progress checkpoints or achievements that will occur prior to receiving funding (e.g. identification of vendors, permitting preparation, organizing team meetings, etc) AND after funding is allocated (e.g. purchase of supplies, publicizing the launch of the project, hiring employees, data analysis, etc).

The first thing that will need to be access is Adobe, as this is the program that will be used for readers. This can be acquired before receiving funding. Also, careful analysis of the current amount of paper used to create hard copy readers can be done before funds have been received for this project. After funding is allocated, employees will be notified of the discontinuation from the creation of hard copy readers at the Alternative Digital Printing office at the Ucen. This is also when the two computer technicians will be hired and trained to create these digital PDF readers. Once this project has been in place for a quarter, more data analysis can be conducted to see the amount of waste that has been reduced in one quarter.

b) Designations for whom or what entity is responsible for completing each portion of the project;  
please also include their contact information and the person responsible for completing the Project Report and Poster

The computer technicians will be in charge of creating and gathering necessary information for each reader. Student volunteers will be in charge of conducting analysis and gathering data, as well as creating the digital messages that will be displayed in the library and on whiteboards around campus that contain the data from the analysis.

c) When do you anticipate the project will be completed?

This will be an ongoing project that will continue on for years, as with each quarter there will need to be new PDF's made for the new content/material that is added or deleted from course material.

## **EDUCATION AND PUBLICITY PLAN**

(1) Please give a brief overview of your educational and publicity program (i.e. who is your audience and what do you hope to communicate?).

First we will conduct an analysis of how much paper is wasted through the current system of all hardcopy readers, and then conduct an analysis on how much paper waste we would be saving when we switch over to only PDF versions of the readers. These statistics and results can be displayed on the digital screens within the library, as well as on whiteboards in order to not encourage the use of large amounts of paper.

(2) How will you engage UCSB students in the education and publicity components of your project?

The purpose is to inform UCSB students about how much paper is wasted every quarter because of the creation of hard copy readers. Tables can be set up in the Arbor as well as library and Ucen with facts and short videos about how much paper is wasted every quarter and/or yearly. These will be run by students as they will get hands on experience by educating

their peers about paper waste. This information will not only get students on board, but will also show teachers why wasting this amount of paper is bad for our environment. One thing that the faculty likes about readers is that students can bring them to class, and the students in charge of the table will offer alternatives to teachers like putting a copy of the page up digitally at the board so all students can see or have class in a computer lab where each student can have access to the class assignment.

## **PROJECT INDICATORS**

(1) How will the success of the project be measured? Consider both quantitative and qualitative measures.

Success will be measured from the difference between the amount of paper used per quarter using hard copy readers, and the amount of paper used per quarter using PDF readers. This will include campus wide paper usage per year and per quarter, as well as paper use specifically for class readers.

(2) Can you provide or develop a quantitative baseline prior to beginning the project and then reassess these measurements after its completion in order to show the impact of the project? If yes, please explain the methodology.

Yes, there will be an analysis to establish how much paper is wasted through hard copy readers within one year at UCSB. This will be the baseline, and another analysis will be conducted showing the reduction of paper usage after PDF readers are implemented.

(3) Do you anticipate the project will result in greenhouse gas reductions? If yes, use the CO2 calculation spreadsheet available on the TGIF webpage and include it with your application.

N/A

(4) Can you provide quantitative or qualitative data or reports demonstrating the success or achievements of similar projects at other institutions?

At Carleton College, where a similar paper reduction project was implemented has quantitative data as a result of their analysis of "Student Waste Habits in Carleton Residence Halls". On their website they have qualitative information on how the projects have been going and other ongoing processes in the fight against paper waste.

[https://apps.carleton.edu/sustainability/assets/StudentWasteHabitsatCarletonFall2013\\_3.pdf](https://apps.carleton.edu/sustainability/assets/StudentWasteHabitsatCarletonFall2013_3.pdf)

(5) Describe the projected cost savings to the University and describe which entities on campus will benefit from these savings. (200 words)

The average cost of printer paper is seven dollars for 500 pieces of paper. On average, a reader is between 50-200 pages long, so a pack of 500 pieces of paper will create around four readers. Multiply this by the amount of students in each class, then by the amount of classes offered each quarter. This is the projected cost savings the University will receive and this money will be able to help fund other sustainability projects.

(6) What is the estimated return on investment or payback time in years? Please provide details on how you calculated this ROI.

An employee on minimum wage makes around \$15,000.00 a year, and considering the massive amount of readers that need to be compiled from each teacher in each department on campus, a total of around 2 employees will need to be hired and will need to work year round in order to create new readers for each new quarter. The average price for an online PDF reader would be around six dollars, and if there are around 21,600 students attending UCSB and each quarter each student takes an average of 4 classes, that means that \$1,555,200.00 will be made through online PDF readers. This means that with two employees that make a total of \$30,000 a year, there will still be a profit of \$1,525,200.00. I calculated this using the number of students at UCSB, the average wage salaries of workers on minimum wage, and the average cost of a reader cut in half.