

STARS SUSTAINABILITY ANALYSIS FOR THE UNIVERSITY OF VIRGINIA SCHOOL OF ARCHITECTURE

Buildings / Dining Services / Purchasing

Global Sustainability, Fall 2011

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TABLE OF CONTENTS

Project Statement

Timeline

Budget

Ranking

 Buildings BMPs

 Dining Services BMPs

 Purchasing BMPs

STARS Rankings

Future Work / Dissemination

Appendix 1: List of Local Sustainable Vendors

PROJECT STATEMENT

Our project addresses several issues related to the operations of services in the School of Architecture at UVA. The purpose of this project is to analyze how the School of Architecture may become more sustainable in accordance to the guidelines set forth by the Sustainability Tracking, Assessment, and Rating System (STARS). Specifically, our group is focusing on the “Building, Dining Services, and Purchasing” categories which includes the operations of the Fine Arts Cafe, the purchasing and allocation of computers and paper supplies, and the use of cleaning supplies on the premises. Our community partner, Dean Tanzer, and several other faculty and staff from the School of Architecture are interested in pushing the Architecture School to become more sustainable so it can serve as an effective model for other schools/departments on grounds.

The long term goals of this project are to implement composting and food donation programs in the Fine Arts Café, centralize paper purchasing, make the switch from regular office paper to recycled content paper, and develop a public and comprehensive green purchasing policy that encourages the purchase of green products throughout the school. One of our main short-term goals is to create a database of sustainable businesses, materials, and food that can be acquired in the Charlottesville area. This will act as a useful tool in the regulation of purchasing methods and urge people to take advantage of the local resources available in the city.

After further investigation and research we have ranked our Best Management Practices (BMPs) based on our Indices of Performance. Additionally, we have done a preliminary STARS rating assessment of the current sustainability levels of Campbell Hall and a potential sustainability level estimation, assuming the implementation of our BMPs.

The next phase of our project will involve more in depth research and data collection to obtain more accurate STARS sustainability ratings. We will also further analyze the annual facility summaries of Campbell hall, from our community partners, to determine consumption trends and identify unsustainable areas that can be improved.

Finally, we plan to publicize our findings through extensive advertising so that we can increase sustainability awareness and in turn, hopefully increase the support of sustainability efforts.

TIMELINE

We have included a project timeline for our team to reference and follow in order to keep ourselves organized and on-track for project deadlines.

Task Description	Due Date	Team Participants	Completed/Notes
Project Definition	09/21/11	All	Yes.
Conceptual Design	10/05/11	All	Yes.
Meetings with Dick Smith, Kendall Singleton and the Business Office	11/01/11	Aneesha Henry Regina	Yes. Found out a lot of information about current purchasing practices and composting at the Fine Arts Café
Follow up on what happens to cleaning supply waste, on grounds composting, and find out where recycled paper can be bought in Charlottesville.	11/15/11	All	Partially. We still need to find out where recycled paper can be bought.
Evaluate the current STARS rating of the A-School's Buildings, Dining, and Purchasing categories and brainstorm ideas for improvement	11/30/11	All	Yes
Create a database of sustainable business in and around Charlottesville	12/1/11	All	Yes
Review/Revise report	12/1/11	All	Yes
Submit the draft of our final report to the group coordinator, Hannah Silver. Add our research and new data to the wordpress website, and create slides for the presentation on the 12 th .	12/7/11	All	Yes
Final Project Due	12/10/11	All	No.
Final Report Presentation	12/12/11	All	No.

BUDGET

Our project this semester will not require any funding because it mainly consists of us compiling our research into a usable database, which people can reference in the future. However, if any of our ideas are taken into consideration by our community partners, there are some potential costs involved in the implementation of our ideas.

The Fine Arts Café is already the most sustainable dining facility on UVA grounds, but a key recommendation we have is to make the first steps to start using the UVA student-run gardens to supply food to the Fine Arts Café. The café could even start composting the daily leftovers so that the food waste could eventually be turned into fertilizers for the garden organization. The costs associated with this venture would amount to the cost of building and maintaining the composting garden/compost pile. Compost gardens are typically very easy to set up and maintain, therefore we don't think this initiative will be a huge cost to the Café. Ideally, the Café should end up spending less revenue on food purchasing and trash collection and/or disposal.

The current cost of office paper purchasing is unknown because there is not a centralized location for paper purchasing. A low estimate for only administrative paper use is about \$3000 per year. If there could be a centralized purchasing policy implemented, the costs could be better tracked and cost efficiencies could be investigated more fully.

Currently, all of UVA's cleaning products are purchased via Turner Cleaning, whose products are Green Seal certified, which falls in line with the STARS initiatives. Since the product is filled when needed by Turner Cleaning, UVA has no accountability for product usage and thus, has no way to really measure the amount of resources that are being used. A recommendation would either be to start purchasing our own supplies and monitoring the usage, or establishing stronger line of communication with the external cleaning service. These steps would require funding, so the costs of each method should be weighed against the amount of resources used.

RANKING

Please see aforementioned Indices of Performance table in Executive Summary for scoring guidelines.

The following tables detail each BMP, its score for each Index of Performance, and the reasoning behind said scores.

Building BMPs

We do not have any building BMPs because it is not feasible to make any changes to the physical , built infrastructure of Campbell Hall at this time.

Dining Services BMPs

1. Implement composting of leftover food		
Currently in the Fine Arts Café there is no composting policy in place. Any food that is not consumed is shipped to the Amelia Landfill. However, there are composting machines located in the grounds of UVA where the food is pulped and then transported to a local farm, Panorama Pay-Dirt, to compost. It is possible that the Fine Arts Café could use this composting model for its own food waste.		
Index of Performance	Score	Reasoning
STARS Rating	1	Pre-Consumer Food Waste Composting counts for 0.25 in the STARS rating. Post –Consumer Food Waste Composting counts for 0.25 in the STARS rating.
Cost	4	Cost should not be significant because a pulping machine is already available at UVA.
Feasibility	4	The transportation of waste would cause some problems because the leftovers need to be transported to Newcomb Hall. Once that is taken care of it would be moved with the rest of the food to the compost farm.
Infrastructure	5	This would not interrupt any part of the infrastructure.
Total Score	14	

2. Implement a food donation program		
Food donation could be set forth to donate leftover food to local food banks in Charlottesville. This course of action would help reduce waste in the Fine Arts Café. Any leftover food could also be served at events that the University sponsors. This keeps the food within UVA while cutting back on costs that would have been spent on food anyway. If donating food would not be a possibility, then selling meals to students at a reduced price could be an option. This option still allows the café to make a profit while reducing the leftover food waste.		
Index of Performance	Score	Reasoning
STARS Rating	1	Food Donation counts for 0.25 in the STARS rating.
Cost	5	There are no costs associated with food donation and redistribution.
Feasibility	4	This should be very feasible because there are other donation systems through the university.
Infrastructure	5	This would not hurt the infrastructure of the building.
Total Score	15	

Purchasing BMPs

1. Computer purchasing options		
The A-School already does quite well in computer purchasing, buying largely energy efficient machines. However, because the School needs to preference performance over energy efficiency, this area cannot be improved significantly. Energy use by computers is already being monitored. The only thing the School should consider are 'peak usage' times, at which all computers and computer rooms are available, and 'non-peak usage' at which only a smaller percentage of computers is available to students.		
Index of Performance	Score	Reasoning
STARS Rating	3	Computer Purchasing accounts for 2 points in the STARS rating system.
Cost	5	Implementing a 'peak usage' would come at no additional monetary cost. In fact, we anticipate a cost savings.
Feasibility	2	There could be a large amount of opposition from students claiming to use the computers at all times. Hence, the School should study computer use patterns during normal times (i.e. not during charrette, which would be considered 'peak usage').
Infrastructure	5	A peak usage policy could easily be implemented by simply locking off certain computer zones.
Total Score	15	

2A. Cleaning supply purchasing pledge		
Currently there is no explicit pledge stating that the School of Architecture should purchase green cleaning products wherever possible. Within the Architecture School, the cleaning service is contracted out and the company, Turner Cleaning, does use all green products. While the unofficial motto, or goal, of the school is to go green, it needs to explicitly state the School's goals on a public and easily accessible platform.		
Index of Performance	Score	Reasoning
STARS Rating	1	Implementing an explicit green policy accounts for 0.25 points in the STARS rating system
Cost	4	We identify that in lieu of a monetary cost, there will be a time cost due to several administrative decisions and approvals that would have to go through to get a University-wide policy approved and implemented. Potentially, in the long term, revenue spent on cleaning products may increase if the entire University goes green.
Feasibility	5	Extremely feasible and will probably result in non-fiscal benefits for the University.
Infrastructure	5	The infrastructure to set this policy up already exists at the University. Though several different organizations will need to make a comprehensive pledge, it presents the opportunity for students to also get involved, thus creating increased awareness.
Total Score	15	

2B. Website launch for cleaning policy directives		
Launch a website where the green cleaning product purchasing policies, directives, or guidelines are posted. Making the information easily available to the public will not only generate a higher level of awareness but will also make UVA's sustainability goals more transparent.		
Index of Performance	Score	Reasoning
STARS Rating	1	Launching a website and posting the URL accounts for 0.25 points in the STARS rating system.
Cost	5	Setting up a website and posting the URL will cost a minimal amount of revenue, if any.
Feasibility	5	Relatively easy to accomplish. Would only involve someone to create the website and potentially someone to monitor and occasionally update it.
Infrastructure	5	A pretty strong IT base already exists at the school, so the addition of another website should not pose a problem.
Total Score	16	

2C. Use exclusively Green Seal or EcoLogo products.		
While the School of Architecture already uses green cleaning products, it is not exclusive in its usage. The external cleaning service, Turner Cleaning, supplies the cleaning product. Products from 'Daycon Products Company' are used on the floors and are Green Seal Certified. However, because supply and usage of the products is not monitored or controlled by the University, other cleaning products like those used on windows for example, might not be green.		
Index of Performance	Score	Reasoning
STARS Rating	3	Exclusive usage of green products accounts for 1.50 credits in the STARS rating system.
Cost	3	Green products do increase the overall monetary cost to an institution. According to the STARS website, several institutions found that green cleaning products can actually cost less than regular product.
Feasibility	4	Extremely easy to commit to. Since the external cleaning service already seems to be green orientated, the University, or at least School of Architecture, could simply take on a more responsible role by documenting what is actually used in the School.
Infrastructure	5	Since this initiative would be mainly administrative, it should be relatively easy to implement and maintained.
Total Score	14	

3A. Reduce office paper purchasing		
<p>Currently, at least three people in the School buy paper from at least three different sources. Since costs are handled in the Business Office, there is ample confusion as to who pays whom for what paper. One person should be responsible for all paper-related purchasing, thus keeping track of how much is being used and spent. That way, they can make recommendations for buying less. In addition, the School should seriously consider avoiding the thousands of copies of syllabi printed every semester by training professors to construct the kind of syllabus offered in Arch 2150 - online, with no need to print.</p>		
Index of Performance	Score	Reasoning
STARS Rating	3	Office Paper Purchasing accounts for 2 points in the STARS rating.
Cost	5	Currently, the School spends at least \$3000 per year on office paper alone. Centralized paper purchasing could easily be picked up by one of the people already doing it.
Feasibility	2	There might be initial resistance to the change because people aren't used to the system but ultimately it should work well. In addition, getting professors to switch to online syllabi could be a difficult transition for some.
Infrastructure	3	A new 'central paper purchasing officer' would need to be trained, but that could be done with existing administrative staff.
Total Score	13	

3B. Charge students for paper use and buy recycled-content paper		
<p>Currently, students aren't charged for using paper when printing, only for the cost of the ink. The School also does not have a stated policy or preference in regards to recycled paper. Students should be charged at least a nominal fee for printing paper, say two cents a paper, to discourage overprinting. The School should also have a clear policy towards buying recycled materials.</p>		
Index of Performance	Score	Reasoning
STARS Rating	3	Office Paper Purchasing accounts for 2 points in the STARS rating.
Cost	5	Charging students for paper use would bring in revenue that far outpaces the cost of buying recycled paper.
Feasibility	2	There might be some resistance from students initially, but phasing in the cost over time will lower this significantly.
Infrastructure	3	A new algorithm to add in the cost for paper would have to be added to the printing system. However, given that the School already charges for paper this should not prove too difficult.
Total Score	13	

4. Implement a vendor code of conduct		
A vendor code of conduct would comprehensively state the purchasing priorities of the School. By making potential vendors sign a code of conduct, or pre-screening potential vendors on their codes of conduct, the School of Architecture can support sustainable businesses that use fair employment practices. This Code of Conduct should be easily available on the website.		
Index of Performance	Score	Reasoning
STARS Rating	2	Vendor Code of Conduct accounts for 1 point in the STARS rating system.
Cost	3	The cost isn't easily quantifiable since we don't know the current contract structure, but we'd guess because the School already contracts with many sustainable, local vendors there wouldn't be too much change.
Feasibility	4	There would only be a few people needed to implement this, including the Business Manager and Dean Tanzer.
Infrastructure	5	A Code of Conduct could easily be copied from other institutions and then modified appropriately.
Total Score	14	

STARS RATINGS

Buildings				
Credit Number	Credit Title	Points Available	Current Score	Potential Score
OP Credit 1	Building Operations and Maintenance	7	0	0

Campbell Hall is not certified under LEED or operated and maintained under policies that monitor its impacts on the surrounding site, energy consumption, use of environmentally preferable materials, indoor environmental quality, and water consumption.

OP Credit 2	Building Design and Construction	4	0	0
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This credit is not applicable to the School of Architecture as the construction of Campbell Hall has already been completed.

OP Credit 3	Indoor Air Quality	2	0	0 - 2
	<i>Total</i>		0	0-2/13

To achieve full points on this credit, an institution needs to ensure that its buildings are covered under an Indoor Air Quality Management policy. Partial points are available based on the percentage of occupied building space that meets the criteria. Currently Campbell Hall has no known policy in place. It does use two types of air filters, one of which is paper based and recyclable and the other is disposable. Due to insufficient information, we do not know whether or not they work with any green strategies. However, building management is in process of completely renovating Campbell Hall's heating and ventilation system, and is keeping sustainable practices in mind. Re-evaluation of this credit will be necessary in the future.

Dining				
Credit Number	Credit Title	Points Available	Current Score	Potential Score
OP Credit 6	Food and Beverage Purchasing	6	6	6

Currently, more than 50 of food and beverage purchases of the Fine Arts Café are grown and processed within 250 miles of the institution or are third-party certified (USDA Certified Organic, Marine Stewardship Council Blue EcoLabel, Food Alliance, Fair Trade, Certified Humane Raised and Handled). Some local farms include, the Farm at Red Hill in North Garden, VA and Twin Oaks Community Foods in Louisa, VA. UVA Dining also has a partnership with the Local Food Hub, which gathers produce from local farmers and distributes it across the state of Virginia.

Tier Two	<i>Dining Tier Two Credits</i>			
2-3	Tray-less Dining	0.25	0.25	0.25

The Fine Arts Café currently has a tray-less dining policy

2-4	Vegan Dining	0.25	0.25	0.25
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The institution offers diverse, complete-protein vegan dining options during every meal?

2-5	Trans-Fats	0.25	0.25	0.25
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The Café uses frying oil that does not include trans-fats and seek to avoid foods that include trans-fats in its dining operations.

2-6	Guidelines for Franchisees	0.25	0	0.25
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This credit is not applicable because the Fine Arts Café is not a food service franchisee and does not offer opportunities for franchising.

2-7	Pre-Consumer Food Waste Composting	0.25	0	0.25
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In the Fine Arts Café there is no pre-consumer composting or food donation availability for leftover food. Any food that is not composted is shipped to the Amelia Landfill. However, there are composting machines located in the grounds of UVA, where the food is pulped and then transported to a local farm to compost. Composting rather than throwing away leftovers would help in a possible Zero Landfill initiative, furthering the environmental practices set forth in the Fine Arts Café.

2-8	Post-Consumer Food Waste Composting	0.25	0	0.25
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In the Fine Arts Café there is no post-consumer composting or food donation availability for leftover food. Any food that is not composted is shipped to the Amelia Landfill. However, there are composting machines located in the grounds of UVA, where the food is pulped and then transported to a local farm to compost. Composting rather than throwing away leftovers would help in a possible Zero Landfill initiative, furthering the environmental practices set forth in the Fine Arts Café.

9	Food Donation	0.25	0	0.25
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Food donation could be set forth to donate leftover food to local food banks in Charlottesville. This course of action would help reduce waste in the Fine Arts Café. Any leftover food could also be served at events that the University sponsors. This keeps the food within UVA while cutting back on costs that would have been spent on food anyway. If donating food is not be a possibility, then selling meals to students at a reduced price could be an option. This option still allows the café to make a profit while reducing the leftover food waste.

10	Recycled Content Napkins	0.25	0.25	0.25
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The institution uses recycled content napkins in its dining service operations.

11	Reusable Mug Discounts	0.25	0.25	0.25
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The Café does provide a reusable mug option to its customers.

12	Reusable To-Go Containers	0.25	0.25	0.25
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The Café does provide a reusable to-go container option to its customers.

	<i>Total</i>		7.5/8.5	8.5/8.5
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Purchasing				
Credit Number	Credit Title	Points Available	Current Score	Potential Score
OP Credit 10	Computer Purchasing	2	1	1

Currently, the Architecture School has no set standards when it comes to purchasing computers. The computers are not required to have Energy Star ratings because of the large amounts of space required by architectural modeling programs and subsequent heavy usage by students. In addition, the computer screens do not have preset brightness settings, simply because those are manually adjustable. However, the school does implement so-called 'sleep' settings, which go into effect once the computer hasn't been used for 20 minutes. The energy use in this mode has been monitored, and the increased energy use compared to an 'off' mode is negligible.

Given these constraints, computers shouldn't be a major concern for the A-School in its sustainability efforts. The School is already monitoring the energy use of these computers, and as long as the need to preference performance over energy savings is justifiable, buying more efficient computers with lesser performance is not an option. However, there might be some opportunities in the area of server cooling. Moreover, the School should consider 'peak usage' times, at which all computers and computer rooms are available, and 'non-peak usage' at which only a smaller percentage of computers is available to students.

OP Credit 11	Cleaning Products Purchasing	2	0	0.25 - 2
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Based on the purchasing guidelines listed under the STARS credit checklist, to achieve a full score, an institution has to purchase and use Green Seal, or EcoLogo certified cleaning products. The institution must also have a number of policies in place so that usage can be monitored. A website must be set up and contain information about the current policies and directives.

The strong focus put on Green Seal and EcoLogo products is due to the toxins found in traditional cleaning products that harm not only humans, but also the environment. Exposure impacts are also pronounced for the cleaning staff and individuals with chemical sensitivities. Green Seal certification is administered by an independent, non-profit organization that develops science-based certification criteria specific to several product categories and services. The certification system recognizes products that improve health and wellbeing, reduce toxic pollution and waste, conserve resources and habitats, and minimize global warming and ozone depletion.

Currently the school does not buy their own cleaning products. An external company, Turner Cleaning, supplies the cleaning supplies and bins to collect disposable waste. All the cleaning supplies are 'Daycon Products Company' products and are Green Seal certified cleaning products. In particular, the company uses the Spectra System Oxysmart line of products, which are oxygenated and green. The products are stored in dispensers that are mounted to a wall, and are filled when needed. The cleaning products are brought in as a concentrated liquid and are mixed with water on site, so instead of using multiple small bottles, the cleaning staff uses reusable buckets daily. What happens to the disposable waste after it has left the school is currently unknown. A representative from the company, Jeff Hines, is present daily and is a resource for questions about the company's procedures.

One strategy to increase sustainability might be to improve the records of what is being used on a weekly or monthly basis. Since the product is filled when needed, and is done by Turner Cleaning, the School of Architecture has no accountability and thus has no way to really measure the resources being used. A

recommendation would either be to start purchasing our own supplies and monitoring the usage, or establishing stronger communication between the external cleaning service.

OP Credit 12	Office Paper Purchasing	2	0	2
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Currently, paper is purchased from a variety of sources, including the UVA Copy Center and Ivy Road Printing Services. There are at least three people who buy paper, including Jake Thackston, John Vitter and Patty De Courcy. The latter alone purchases around 78 boxes of paper per year, at a cost of \$36-\$40, which comes out to almost \$3000 just for administrative paper use. Since costs are handled in the Business office, there is ample confusion as to who pays whom for what paper. Students aren't charged for using paper when printing, only for the cost of the ink. The School also does not have a stated policy or preference in regards to recycled paper.

The first thing the School should do is centralize paper purchasing. Ideally, one person should be responsible for all paper-related purchasing, thus keeping track of how much is being used and spent and can make recommendations for buying less. Because of the larger volumes of paper we would be buying centrally, cost efficiencies could then be investigated. Students could be charged a nominal fee for printing paper to discourage overprinting. The School should have a clear policy towards buying recycled materials. Lastly, the School should seriously consider avoiding the thousands of copies of syllabi printed every semester by training professors to construct the kind of syllabus offered in Arch 2150 - online, with no need to print.

OP Credit 13	Vendor Code of Conduct	1	0	1
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The cost of implementing a vendor code of contact isn't easily quantifiable since we don't know the current contract structure, but we'd guess because the School already contracts with many sustainable, local vendors there wouldn't be too much change. There would only be a few people needed to implement this, including the Business Manager and Dean Tanzer. A Code of Conduct could be copied from other institutions and then modified appropriately.

<i>Tier Two</i>	<i>Purchasing Tier Two Credits</i>			
1	Historically Underutilized Businesses	0.25	0.25	0.25

The A-School seeks to support historically underutilized businesses, minority-owned businesses, and women-owned businesses.

2	Local Businesses	0.25	0.25	0.25
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The A-School gives preference to local products and businesses in its purchasing decisions.

	<i>Total</i>	1.5/7.5	5.5/7.5	
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FUTURE WORK / DISSEMINATION

One of the main initiatives completed was creating a database of sustainable businesses, materials, and food that can be acquired in the Charlottesville area, thus allowing for an easier way for consumers at the A-School to make sustainable choices when purchasing goods. We plan to publish this database online for easy access for all people to utilize. Hopefully this website can also be linked to the SustainaUnity website for greater exposure to UVA students and others in the Charlottesville community.

The Building section of the STARS rating system had many requirements that could not be applied to the A-school, and we were not able to make any recommendations for improvement due to lack of information and lack of ability to change the infrastructure of the building. However, some recommendations for ways in which the A-school can improve their STARS rating in the Dining section include developing a composting system and a food donation program in the Fine Arts Café in order to maximize the STARS score. In the Purchasing section, we recommend developing a public and green purchasing policy that states directives to purchase green products throughout the school, creating a vendor code of conduct, centralizing paper purchasing in order to find out current costs of paper purchasing, eliminating or reducing the prevalence of printed class syllabuses, and making the switch to recycled content paper.

LESSONS LEARNED

The main barrier to success that we overcame in creating the project design was the limited time frame we were working with. It took more time than we expected to figure out our plan of action and decide who we needed to contact about Buildings, Dining Services, and Purchasing. What we felt was initially feasible to accomplish quickly turned into an overwhelming amount of work that we ended up having to scale back. We tried to resolve the problem of time limitations by getting in touch with our contacts such as Kendall Singleton, Dick Smith, and Jake Thackston as soon as possible to see what their thoughts and recommendations were about the initiatives we were trying to accomplish. What we found was that some of the initiatives were easier to accomplish than others. For example, because the Fine Arts Cafe is already the most sustainable dining location on grounds, the people involved in food sustainability were eager to share what they had already accomplished and were very helpful when working with us. However, the task was slightly harder for purchasing simply because there was no centralized purchasing department in place. It was difficult to find information on the existing budget, and it was difficult to find definitive answers to our inquiries. To resolve this problem, we just had to compile information from different sources and adjust our initial strategies.

Our goals from the beginning of the semester were to figure out the current STARS rating of the Building, Dining, and Purchasing aspects of the School of Architecture and then make necessary recommendations and changes. We succeeded in compiling a list of local sustainable vendors in Charlottesville in order for purchasing in the A-School to become more sustainable, but our other initiatives did not go as smoothly. For example, our recommendations to develop composting and food donation systems for the Fine Arts Cafe and to centralize office paper purchasing are still only recommendations. We were not able to implement most of our recommendations simply because of time constraints. Hopefully, if the STARS system is a topic in the next Global Sustainability class, the students from next year will be able to pick up where we left off to actually transform our recommendations into reality.

We learned that creating change is a long process and the end result may not be exactly what you pictured in the beginning. Sometimes, people may not be willing to change their habits, or they might not have the budget to do so. One important lesson to take away from this project is to not get discouraged when a plan doesn't happen as originally intended. It's ok to feel confident in the small steps that are being made and to hope that the initial small steps will grow to something larger and maybe even better than you might have initially have thought.

If our group were doing this project again, we would probably work a more closely with each other. This semester we divided up the project and each tried to work on one or two initiatives, but we think that maybe if we would have worked together more closely we could have bounced ideas off of each other and it might have made our project stronger. Also, we didn't find out until a few weeks into the project that another section in the class was performing audits on dining hall waste that would have been of use to us. Collaboration definitely played a large role in this project and we all wish that we had started that collaboration process earlier in the semester.

APPENDIX 1: LIST OF LOCAL SUSTAINABLE VENDORS

TRANSPORTATION

Go Green - <http://www.gogreentransportva.com/>

“Go Green is a hybrid transportation service located in Charlottesville, VA serving the surrounding areas. Our transportation service differentiates itself from competitors because of our desire to promote awareness for the environment by driving hybrid vehicles.”

Serves Washington Dulles, Richmond, Regan National, BWI, Roanoke & Lynchburg Airports, Harrisonburg, Lexington, Norfolk

OFFICE SUPPLIES

Myriad Greeyn - <http://www.myriadgreeyn.com/Wholesale-Recycled-Multi-Purpose-Copy-Paper-Bulk-Green-s/63.htm>

“Myriad Greeyn LLC strives to be the world’s premier green company for environmentally friendly sustainable products for businesses and individual consumers who have sustainability in mind. As the world begins a dramatic shift towards equilibrium between the Earth and consumption, Myriad Greeyn’s goal is to lead the way in providing environmentally conscious products in a convenient and affordable manner”
This company provides bulk supplies of paper, ink cartridges, pens, staplers, etc...

BUILDING MATERIALS

Nature Neutral - www.natureneutral.com

“Nature Neutral is your earth-friendly source for green building materials and natural cleaning supplies. We offer environmentally preferable products such as low odor paints, non-toxic wood stains, sealers and strippers, bamboo flooring, natural carpet undyed wool and natural cork without volatile organic compounds for green, chemically sensitive people or those with multiple chemical sensitivity syndrome. “

FOOD

Charlottesville City Market Farmers and Vendors

<http://vendors.charlottesvillcitymarket.com/>

“The Charlottesville City Market is another popular place to find local food, from produce to delectable cinnamon buns drizzled with icing. Pick up some beautiful locally grown flowers, try the arugula and microgreens, and find fresh-baked breads, honey and jams from food artisans. You can also shop for locally raised meat, including grass-fed beef, farmstead cheeses and eggs from chickens across the region. The City Market is open through November on Saturdays, from 7am to noon, at the corner of Water and South Streets, located in our charming downtown. Several other local markets offer their own unique flavors of the region through the end of September, the Tuesday afternoon farmers markets north of town at Forest Lakes or at Pen Park, perfectly situated near the playground for families of little ones, to the Wednesday Farmers in the Park market at Meade Park. West of town, stop in for delicious produce on Saturdays at the charming Crozet Farmers market through the end of October. When you visit Charlottesville you’ll discover fresh, local food waiting for you - enjoy!”

Rebecca's Natural Food - http://www.rebeccasnaturalfood.com/retailer/-store_templates/shell_id_1.asp?storeID=D43E02C520184EEDB5666E0988873F0F

“For over 20 years, Rebecca’s has been offering the Charlottesville community personalized service in choosing the highest quality natural supplements and bodycare items, specialty food, and organic bulk spices. Our friendly, knowledgeable staff will provide you with the most current and comprehensive information on a wide range of carefully selected merchandise from large, small, and local companies. Come see why we’re voted Charlottesville’s favorite health food store!”

Smoothie King - www.smoothieking.com

“Smoothie King located in Charlottesville, Virginia providing nutritious fresh blended smoothies and other healthful and organic products such as Energy Bars, Granola or Soy Chips. “

Whole Foods Market- www.wholefoodsmarket.com

“At Charlottesville's full-service supermarket you'll find a complete selection of the highest quality natural and organic food, helpful supplements and gentle, environmentally friendly household and body care products. We also offer a gourmet deli filled with many delicious items to grab on the go, as well as full-service meat, seafood, bakery, floral and food service departments. Learn more about our departments. Unsurpassed Quality: Our rigorous criteria for product selection meets the highest standards in the natural foods industry. Because of this we carry products that do not contain any hydrogenated oils, artificial colors, flavors or preservatives.”

Sunergia Soyfoods - <http://www.sunergiasoyfoods.com/index.html>

“Sunergia's 'more than tofu' line of organic seasoned tofu is available in 10 varieties including Indian Masala, Peanut&Ginger, Garlic Shiitake, Savory Portabella, Spinach Jalapeño, Italian Herb, Pesto, and Spicy Thai. More than Tofu is a unique product with added mixed in ingredients that yield a unique very firm texture which many people enjoy.”