

Notes for PRME report-

MGT 465 Transforming Business

- Course description: How business is conducted is undergoing a transformation. Businesses of the twenty-first century are expected to earn a profit while being environmentally sustainable and socially responsible. New business paradigms require leaders and managers to acquire new skills and modes of thinking. This course will lead students through a multi-disciplinary exploration of the emerging approaches to business. Students will acquire the tools and begin to develop the skills and perspectives required to excel in a rapidly-changing world. Students will be prepared to participate in transforming how business is done and in creating businesses that can contribute to transforming society.
- PRME used as central focus of course.
- Had dialogues during class with representatives from on and off campus to discuss sustainability at the university and in business. Final dialogue included mayor of Niagara Falls, NY, and the city's head of community development and members of the NU Sustainability Task Force.
- Students worked with Sustainability Task Force members on:
 - Calculating university's carbon footprint.
 - Better management of waste disposal.
 - Reduction of paper use.
 - Increasing recycling efforts.
- Other students worked with Greenprints, a Niagara Falls effort to plant flower and vegetable gardens in vacant lots within the city. One of the students has become a board member for the organization.
- Students and instructor undertook initiatives to increase their personal sustainability efforts.
- Employed students made recommendations to their employers of ways to implement more sustainable business practices.
- Students wrote reports and presented on articles, documentary films, books, and topics related to sustainability in business.

MGT 271 Management principles

- Class worked with Main Street Business and Professional Association of Niagara Falls, NY. One student team developed recommendations for the start of a farmers market in downtown Niagara Falls.

Myriam L. Witkowski

From: Mitchell Alegre
Sent: Thursday, October 31, 2013 12:44 PM
To: Myriam L. Witkowski; Mati Ortiz
Subject: FW: NEWS RELEASE: NU Senior to Receive Second Community Service Award for Niagara Falls Park Revitalization

Article about one of my outstanding students.

Mitch

From: Michael Freedman
Sent: Thursday, October 31, 2013 10:32 AM
To: Jean Spence; Lisa McMahon; Thomas Burns; Sue Karaszewski
Cc: Mitchell Alegre; Thomas Lowe; David B. Taylor
Subject: NEWS RELEASE: NU Senior to Receive Second Community Service Award for Niagara Falls Park Revitalization

NEWS RELEASE

Office of Communications and Public Relations
Niagara University, NY 14109
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NU Senior to Receive Second Community Service Award for Niagara Falls Park Revitalization

NIAGARA UNIVERSITY, N.Y. (October 31, 2013) – Niagara University senior Joseph Hotchkiss will soon receive his second award based on his ongoing efforts to rebuild and transform Hydraulic Park, located on the corner of Niagara and Third streets in Niagara Falls.

Hotchkiss, a business management major from Binghamton, N.Y., received the Member Award from the Niagara Beautification Commission on Sept. 12 due to his cleanup project at Hydraulic Park, and will be honored with the Main Street Business & Professional Association's Michael A. Brundidge Community Service Award on Nov. 15.

Hotchkiss first happened upon Hydraulic Park before work one day in April. "I was walking down Third St. and just happened to stumble upon the park. I instantly saw the potential and wanted to know its past. It looked like, at one time, a really cool park."

Hydraulic Park was once the site of a portion of a canal system constructed in the 1860s by the Niagara Falls Hydraulic Power and Manufacturing Company, the first company to generate electricity from Niagara Falls. Several decades later, after the canal had been filled in, Hydraulic Park was built on the land. The area, where a community fountain once stood, eventually fell into disrepair.

Hotchkiss was initially inspired to begin working on this project when he began working with Professor Mitch Alegre in one of his business classes. "The class, Transforming Business (MGT 465), taught by Professor Alegre was my biggest influence of inspiration for service toward the park. Through that class, we really learned the value of helping out your surrounding community."

After also learning of the rich history of the area, Hotchkiss soon realized that cleaning up the park was not the only thing in need of repair, but people's view of the park and Niagara Falls in general needed restoration, too.

"I work at a restaurant on Third St. and my biggest complaint from tourists is that the city looks abandoned. I thought that fixing up this park would help get the community excited to change this complaint.

"Hydraulic Park was the perfect opportunity to start a change in the way people view the falls. It was a rundown space in a prime location and no one had done anything with it in years. I wanted to show the residents of Niagara Falls that there are people interested in making a change," said Hotchkiss.

Hotchkiss soon began his quest of revamping the park by starting with the basics. "I started by doing spring cleaning – raking, weed whipping, picking up garbage, trimming hedges, and weeding by hand. After catching the eye of the community development coordinator and the Niagara Beautification Commission, they took me under their wing and I was able to get a donation of \$1,100 from the property owners. This was used to buy flowers, mulch and a trash can."

"Joe approached me to see what we could do to turn the park around," stated Tom Lowe, director of ReNU Niagara and chair of the Niagara Beautification Commission. "His interest in the space led NBC to approach the site owner to ask them to contribute financially to the revitalization of the park. But even before that, Joe spent hours out there weeding, sweeping, trimming tree branches and doing anything he could by himself. He has many ideas for what to do at the park moving forward, and NBC is excited to have him leading the project."

As far as the future goes, Hotchkiss has major plans and predictions for further development of the park that he has been working diligently in. "We plan to put up a mural along the park's shed, get the brickwork on the ground fixed, restore electricity, and host live entertainment in the amphitheater," said Hotchkiss.

While Hotchkiss's professor at NU had the most influence on his success with his major project, the university's Catholic and Vincentian mission also had quite an impact on the way he values and understands the importance of community service.

"After taking the Transforming Business class with Professor Alegre, I have logged probably 50-plus community service hours. This includes joining three different associations and working on multiple projects. Niagara's dedication to its community has definitely come through in my work."

Added Lowe, "I have no problems bragging about Joe and everything he does – he is the very definition of an urban pioneer."

Niagara University

Founded by the Vincentian community in 1856, Niagara University is a private liberal arts university with a strong, values-based Catholic tradition. Its four academic divisions include the colleges of Arts and Sciences, Business Administration, Education, and Hospitality and Tourism Management. The university also maintains an Academic Exploration Program that provides a learning environment for students who are undecided about their major. As the first Vincentian university established in the United States, Niagara prepares students for personal and professional success while emphasizing service to the community in honor of St. Vincent de Paul.

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Myriam L. Witkowski

From: Mitchell Alegre
Sent: Wednesday, April 29, 2015 10:01 AM
To: Myriam L. Witkowski
Subject: PRME
Attachments: Social media-Orlowski.docx; Segrue team.docx; Richards team.docx; Nutter report.docx; Rogers team.docx; Batteries group.docx; Cody team.docx; Think Eco team.docx

Myriam:

Attached are project reports done by the students in MGT 271A. These are relevant to PRME.

Mitch

Group: Matt Braun, Nick Orłowski, Jordan Bender, Zac Sortore, Carson McNinch

Date: Spring 2015 Semester

NU Goes Green Facebook Page

Issue: The NU Goes Green Club is not well known on the Niagara University campus.

Hypothesis: If the NU Goes Green Club created a Facebook presence and reached out to members of the Niagara University Campus using social media, the club's awareness across campus will increase, more members of the community will participate, and more people will be interested in the club's happenings.

Experiment:

- The group conducted a pre-survey
- The group created a Facebook page. (www.facebook.com/greenNiagara)
- The group promoted the Facebook page through the use of the Niagara University Class pages on Facebook.
- The group made several posts on the Facebook page, which included:
 - Green tips
 - Created an event for the Seton Hall Recycling Challenge
 - Promoted experiments other groups in the learning community were conducting
- The group obtained as many "likes as possible."

Results:

- Pre Survey Results: No student awareness of the club.
- The page got 47 likes as of 4/16/15 at 9:00am.
- Several interactions were made on the Facebook page, including posts, likes and shares.
- The base foundation of the page has been created.

What We Learned:

- Social media is a great tool in order to spread awareness of groups.
- Since most students are on social media, a great way to connect with students is via the use of Facebook.
- Working in collaboration with other groups and the NU Goes Green Club was helpful in achieving our common goal.

Recommendation for Future Action:

- The page is now made and will be handed off to the NU Goes Green Club.
- The NU Goes Green Club keeps promoting the page.
- The NU Goes Green Club continues to post regularly to keep members of the community engaged.

Collaboration: We worked in conjunction with Michele, Jenna, Zach, Brooke, and Jessica. Our group will be presenting the results.

Syllabi on Blackboard

Issue: There is a lot of paper being wasted each semester on syllabi

Hypothesis: If the NU Goes Green club and Sustainability Committee encouraged professors to post their syllabi and other assignments on blackboard it would cut down on the amount of paper being wasted each semester.

Experiment: We were not really able to run this experiment because professors are not handing out syllabi right now. It is something that we have set up for next semester. We sent out a survey to each professor asking them four different questions:

1. Why, in the past, have you printed off your syllabi for students?
2. On average how long are your syllabi?
3. On average how many students do you have each semester?
4. Beginning in the Fall of 2015, would you be willing to post your syllabi on blackboard rather than printing it off.

Results/What we learned:

A few of the professors said that they would try printing off their syllabi rather than post it. Other professors said they would not post their syllabi, but they would try to think of other ways to utilize blackboard more. We learned that the professors print out and hand out their syllabi to eliminate confusion and make sure each student knows what is expected throughout the class. In response we sent the professors in the math department some ideas addressing their concerns. Some of the ideas we included were:

- Pulling the syllabus up on the overhead on the first day and going over it with the students
- Have the students sign or send an email saying they have read and understand the syllabi, that way they cannot use this as an excuse in the future
- Show the students where the syllabus is available to them on blackboard
- Allow students to determine if they need a hard copy or not, if they want one they can print it off

Future Action:

In the future, NU Goes Green club should keep encouraging professors to utilize blackboard more.

Collaboration: We worked in collaboration with Zach, Collin, Mike, Richard, and Andy's group. The results we found will be presented by their group.

Dennis Segrue, Joe Smithyman, Mike Burke, Adrian Ignagni, Phil Nasca

Experiment 1: Recycling Competition in Dormitories

Issue:

The overall amount of recycling in the dorms is very low. It is often common to see non-recyclable items thrown into normal trash bins when it can easily be recycled.

Hypothesis:

If an incentive is created to have students in the dorms recycle, then there should be a continuous positive increase of recycling.

Experiment:

First, we set up boxes outside of the elevators on Seton's 3rd floor and O'Shea's 2nd floor. We let the experiment run without pushing the issue too much in order to obtain a baseline measurement. After a few days we then created awareness and basically made the whole process a friendly competition.

Results:

There was a continuous positive trend in our results, as the days went on, students began to participate more and more. We collected an estimated 500 recyclable items over the course of three weeks and a few days.

What was learned?

If an initiative is in place, then it is more likely a task will be accomplished. Friendly competition can be beneficial. Also, it really isn't as difficult to bring a community of students together for a good cause than you may think at first.

Recommendations:

With the success of this experiment for our group, there is not much that could be said to make it better. As a whole we feel that we accomplished our goal that we put forward in an efficient manner.

Experiment 2: Preferred Parking for carpoolers and hybrid cars

Issue:

Many cars on campus that are producing harmful gases. In addition, very few hybrid or fuel efficient cars on campus.

Hypothesis:

If there is parking spaces available for students that car pool and the spots are better parking, then students would have incentive to use these car spaces which will reduce emissions of multiple cars.

Experiment:

Our original experiment was going to take place in all of April. Originally we were going to reserve parking spot in Castellani Art Museum parking lot for students that drove hybrid cars or carpooled that day. We were going to run a baseline the first week and then the actually trails the other two weeks. However, due to constraints this did not work because of collaborations with campus safety. Therefore, our group went onto advocate for preferred parking for carpoolers and hybrid vehicles in the new upcoming parking resolution plan.

Results:

No formal experimental results however, John Barker was seriously considering about making preferred parking a part of the new parking plan which will hopefully be in effect next year.

Recommendations:

Get in contact with people and those you need help from right away. Time was taken from us because faculty and staff did not get back to us in time and took almost a whole two weeks away from us. In addition, really push the faculty and challenge them to help. Come prepared to your first meeting with them and be prepared so they know you mean business and hopefully this will move things along a little quicker.

Zach Richards

Richard Hillman
Colin Huntington
John Diedrich
Andy Tu

Experiment 1: NU Athletics

Issue: Bottles and cans rarely make it to proper recycling centers.

Hypothesis: If we use Niagara University Athletic events to market recycling and offer a reward for doing so, then we will see an increase in the amounts of recycling in our on and off campus communities.

Experiment: For our experiment we contacted the NU Athletic Department and used NU Sport Teams to market NU Goes Green Club to increase awareness of recycling throughout campus. We contacted Tim Shultz of the Athletic Department to execute PA Read. We created a PA Read for all attendees to hear, and we believed the PA read would be a better reminder for those to recycle at games.

Results: At the Softball and Baseball games on 4/18/15 and 4/19/15. Our initial numbers of recycled product at Spring Sport games was 0 due to lack of recycling areas. Our group we brought a container for recycled product to enter at these games and as a result only a few fans ended up recycling, receiving 3 bottles for both days.

What was learned: We learned that our experiment suffered due to lack of attendance, awareness and resources. We believe that if there were more recycle containers at the games, then people would be more aware to recycle, as well as having a PA read as a reminder. If we did our experiment for Revenue Sports (Hockey, Basketball) we would have better success because of the large amount of people attending the games.

Recommendation for future actions: We believe that having the NU Athletic Department on board will increase effectiveness in the future because of the PA reads and the amount of people who goes to the sport games.

Zach Richards
Richard Hillman
Colin Huntington
John Diedrich
Andy Tu

Experiment 2: Blackboard Usage

Issue: On average students receive 40-50 sheets of paper a month. We believe that the amount of papers could be reduced if Professors started to use Blackboard.

Hypothesis: If Professors started using Blackboard actively, then the amount of paper would be reduced significantly.

Experiment: For this experiment we contacted Danyelle Moore to receive data and information regarding Blackboard Usage. We wanted to know how many professors are using blackboard, so then we contacted Professors to increase Blackboard Usage in order to decrease paper usage and printing usage because everything would be on blackboard, like posting syllabi, assignments, and other content on Blackboard for students to use and have easy access. Having more additional courses on blackboard can save thousands of pieces of paper

Results: The results were only 651 out of 1451 courses at NU are active on Blackboard, which means at least 800 course are missing, or aren't even on Blackboard.

- ▶ **Results for the Math Department:** We surveyed various professors on campus about Blackboard. Some of the Math Professors preferred the use of blackboard, while some professors preferred to give students a hard copy. Only 3 professors were willing to solely use electronic syllabi, and only 1 professor preferred hardy copy because the professor said "When students are given a hard copy of the syllabi means there is no excuses from students about assignment due dates, etc."

What was learned: Most professors appear open to the idea of using Blackboard, it's easier and quicker for professors to upload assignments and other content on Blackboard. Instead of having students print out a bunch of papers for assignments, having an electronic submission on Blackboard would help reduce the amount of papers printed.

Recommendation for future actions: In the future they should offer Blackboard training to willing professors who want to learn, or maybe offer incentives to professors in order to get them to use Blackboard more. As well as increase awareness and training for all that use Blackboard and broadcast the benefits of Blackboard to gain interest.

Group: Zachary Nutter, Brooke Briseno, Michele Warner, Jessica Chandler, Jenna McCune

Date: Spring 2015 Semester

NU Tree Incentive Program

Issue: The lack of trees on campus is not environmentally friendly and is an eye sore on campus.

Hypothesis: To help further incentivize community service of clubs on campus, donations of trees will be awarded to those clubs with the highest community service, to be planted on campus to make NU greener.

Experiment: A long term initiative sponsored by NUSGA to have clubs with top community service hours be donated a tree to plant on campus.

- Coordinated with NUSGA for initiative

Results:

- Still working for approval of initiative

What We Learned:

- Coordination with other organizations can be very challenging
- Patience is vital for working on long term initiatives
- **Recommendation for Future Action:**
 - Continue to push forward with initiative and get more support for similar initiative
 - **Collaboration:** We worked with NUSGA to help this initiative

Reusable Water Bottle

Issue: The issue that is being addressed is the efforts to reduce plastic waste. We would like students to start using reusable water bottles and refilling them up with our water fountains on campus. This would help stop the purchase of bottled water.

Hypothesis: Our hypothesis is that by making people more aware of reducing plastic waste by reusing water bottles, we can save more and more wasted plastic.

Experiment: We have been using the water fountain in Gallagher that tracks how many bottles are saved to conduct our experiment. We first took that initial number that was on the fountain then one week later we took the number again to see how many were saved. The following week we hung up flyers on campus promoting to reuse water bottles Then we did the same thing by taking the initial amount saved then the number a week later.

Results: During the first week of our experiment with no advertising, only 248 bottles of water were saved. The following week with advertising, 262 bottles of water were saved.

What we learned: We learned that most people were not concerned with saving plastic waste. The number only increased by 14 from the first week to the second week.

Recommendation for future action: For future action, we would recommend giving out reusable water bottles for our students to use. This would give the student something to refill rather than wanted to just buy another water bottle.

Preferred Parking Experiment

Issue: The issue being address with this experiment is to reduce emissions from car exhausts by carpooling or driving environmentally friendly cars.

Hypothesis: If there were designated parking spots in a high demand area for carpoolers and environmentally friendly cars it would increase the incentive to carpool. By increasing carpooling and environmentally friendly cars it reduces pollution and helps contribute to carbon neutrality.

Experiment: We wanted to run an experiment, which would block off certain spots on Castellani for people who were carpooling and who drove hybrid car. Unfortunately this could take place do to restrictions with campus safety. However, the group decided to talk to NUSGA and campus safety about implicating our ideas into the new parking resolution that is taking place currently.

Results: There were no formal results. We talked with John Barker from campus safety and he really took interest in our ideas and is looking forward to trying to include them in the new parking plan.

What we learned: We learned that campus safety was actually very willing to hear us out on our ideas and really took them into consideration. We also learned that it is very plausible to incorporate some designated spots for carpooling or hybrids. However, the challenges for this idea mostly have to do with how you would designate a carpooling car and if people would ne honest about taking the spots.

Future Recommendations: Keep in contact with campus safety about the new parking resolution. Also contact as many people that are relevant to the experiment because at times it was very difficult to get a hold of faculty/staff.

NU Goes Green Facebook Page

Issue: Students and Faculty members are unaware and uniformed of the NU Goes Green Club here on campus.

Hypothesis: By creating a Facebook page for NU Goes Green we will be able to reach out to a greater majority here on campus and spread the word of the mission of NU Goes Green through social media. Awareness will increase and therefore more people will want to get involved or become interested in the club and its purpose.

Experiment:

- A pre-survey was conducted
- A Facebook page was created (www.facebook.com/greenNiagara)
- The Facebook page was promoted through the Niagara University Class pages already on facebook
- Several posts were made to the Facebook page which included: Green Tips, Created an event for the Recycling Challenge in Seton Hall, as well as Promoted the experiments the other groups within the class were conducting

Results:

- Pre-Survey Results: Little to no awareness of the NU Goes Green
- The Facebook page received 47 likes as of 4/16/15
- Various amounts of posts were added to the facebook page by new followers such as likes, shares, ECT.
- The foundation of the page was created

What we learned:

- On a College campus such as Niagara University, Social media is a great tool for spreading news and awareness regarding events and issues at hand
- Working with others on this experiment was helpful and allowed each group to voice opinions on how to better each experiment, It led to the success of many experiments and ultimately benefiting this campus as well as NU Goes Green which was the goal.

Recommendations For Future Action:

- The Facebook page will now need to be managed by NU Goes Green and will continue to grow, with new posts about how to get involved
- Promotion as well as posts will need to be often in order to keep new followers engaged as well as constantly up to date with new developments and challenges at hand.

Collaboration: We worked in collaboration on the Facebook page with Matt Braun, Nick Orłowski, Zac Sortone, and Carson McNinch. During presentations, their group will be presenting our collaborated results.

Doubled Sided Printing Experiment

Collaboration: Think Eco Be Eco Group

Issue: Amount of paper printed on campus

Hypothesis: Paper would be saved if printers are defaulted to double-sided on campus. Saving paper would result in saving trees. Saving trees would help result in Niagara University's Mission to be Carbon Neutral by 2050. Technology today lends very easily with having paperless options.

Experiment:

- Conducted using two printers in the library over two weeks
- Week One: Readings were taken at the beginning and end of seven days for an initial base amount of printed pages.
- Week Two: John Pastore from COMDOC changed the printers over to double-sided. Readings were taken at the beginning and end of seven days.

Results:

- Week One: 37751 pages were printed
- Week Two: 36747 pages were printed
- Savings of 1004 pages

What We Learned:

- Changing the printers to double-sided saved paper – over two full reams

- By saving paper on campus the student body would be helping the University's Mission of going carbon neutral by 2050

Recommendation for Future Action:

1. Committee feels enough paper was saved:

- Request permission from campus officials to have all printers in the library set to double-sided
- Pursue other printers on campus to also be set to double-sided

2. Committee does not feel enough paper was saved:

- Conduct longer experiment
- On campus there may be weeks that are traditionally either heavier or lighter for printing
- A longer experiment would truly show if paper is being saved

Megan Rogers
Anthony Mittiga
Stephanie Monaco
Nick Walker
Jessica Wylucki

Experiment Reports

Experiment #1: Classroom Electronics and Lights

Issue: Electricity being wasted by leaving electronics on in classrooms that are not in use.

Hypothesis: If we inform the last professors of the day and leave a note, less lights and electronics will be left on. Therefore, less energy will be wasted.

Experiment: First, we first chose a building and floor to conduct our experiment (second floor Vinni's). For two weeks we visited the floor after the last classes let out and recorded which electronics were left on.

From March 23rd to March 28th, we conducted the control experiment and didn't mention anything to the professors.

On April 9th we emailed the last professors of the evening explaining our experiment and asking them to turn off the lights and electronics. We also put notes in each classroom as a reminder.

From April 13th to April 18th, we went around to the classrooms again after the classes were finished to see how many electronics were left on after the professors had been notified of our experiment. We compared this data to our control data.

Results: During our control week an overwhelming amount of electronics were left on by professors after the last class of the day. Once the professors had been notified of the experiment there was a noticeable decrease in the number of electronics left on (see Appendix). From this experiment we learned that small efforts (such turning off electronics) can be easily overlooked and once members of the campus are reminded it can make a big difference.

Future Action: Many professors told us that turning off the electronics was merely something they had never thought of before and now that it had been brought to their attention it is something they would try to make a point of doing. Perhaps a message should be sent to all professors from Father Maher or the Sustainability Committee reminding them of our campus-wide commitment to sustainability since it is something that seems to have simply slipped professors' minds. This experiment could be replicated by the Sustainability Committee on a larger scale, like on the whole campus. Maybe NU could work with the Power Authority to get more exact measures of the amount of electricity used before and after all of the professors are notified. A workshop or seminar-type event could be held by IT to teach professors how to correctly turn off electronics like the projectors since many professors leave these electronics on because they don't know how to turn them off. Also, members of the janitorial crew and Campus Safety can be notified by the Sustainability Committee of the campus-wide effort to reduce electricity usage so when they are going around the buildings in the evenings after classes they can check to make sure that all unnecessary electronics are turned off overnight.

Megan Rogers
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Experiment Reports

Experiment #2: Individual Utensils in Gally

Issue: Packaged utensils (rather than individual utensils) are currently offered in Gally. This may result in more utensil waste as students need to take an entire package for a single desired utensil.

Hypothesis: If individual utensils are offered in Gally, instead of a prepackaged set, less utensils will be wasted.

Experiment: We chose four days to run our experiment in Gally: Monday 13th-Thursday 16th from 10:30am to 2pm. Each day we counted how many utensils were present at the beginning of the day and then how many were left at 2pm. That way, we would know how many utensils had been taken.

On April 13th and 14th we held our control experiment and offered the normal prepackaged utensils.

On April 15th and 16th we substituted the prepackaged utensils for individual ones.

Results: By offering individual utensils instead of bundles we were able to reduce the number of utensils taken (and then thrown out) by almost half.

Monday 13th and Tuesday 14th (prepackaged utensils)- 288 packages taken

Wednesday 15th and Thursday 16th (individual utensils)-

Forks taken- 235

Spoons taken-111

Knives taken-125

Therefore: 18.4% less forks were thrown out, 61.5% less spoons, and 56.6% less knives. What we learned from this experiment is that when individual utensils are offered, there is a significant decrease in the number of utensils taken. This leads to less utensils being wasted.

Future Action: The Sustainability Committee in conjunction with NU Goes Green can look into purchasing utensil dispensers for Gally. Since Sodexo will be leaving and Metz will be taking their place, members of NU Goes Green or the Sustainability Committee can get in touch with the managers for Metz and discuss offering individual utensils right from the beginning.

Megan Rogers
Anthony Mittiga
Stephanie Monaco
Nick Walker
Jessica Wylucki

Experiment #3: Samples Offered in Clet Dining Hall

Issue: The high amount of daily food waste in Clet Dining Hall.

Hypothesis: If samples were offered for the International and Classics stations in Clet (the stations that change daily), there would be less food waste. This is because students would be able to try the food before taking a large portion. A common comment from students is that the food looked good but they then realized they didn't care for it, resulting in more food waste.

Experiment: We chose four days to run our experiment in Clet Dining Hall: Monday 20th-Thursday 23rd. The first two days there would be no food samples and on the last two food samples would be made available. We would compare the weights of the waste to see if the days with samples had a decreased amount of food waste.

April 20th to 22nd- We planned for Monday and Tuesday to be our control days so there would be no food samples offered. However, due to a miscommunication there were no samples offered on Wednesday. We continued to weigh the waste for that day so we would have more control data. The amount of waste for Monday, Tuesday, and Wednesday were 43.8, 31.4, and 42.4 lbs respectively.

April 23rd- On Thursday we were able to offer the samples at the International and Classics stations. The amount of waste for Thursday was 34.0 lbs.

Results: The average of the three days without samples is 39.2 lbs. When samples were offered, the amount of waste was lower than this average. However, since we were only able to collect one day's worth of data with samples this isn't enough data to make any solid conclusions as to whether samples make a significant difference or not. Instead this experiment would have to be rerun, preferably within a longer time period than just four days. Because our experiment didn't run as smoothly as we would've liked, we weren't able to definitively learn much from this experiment but we believe that in the long run implementing samples in Clet will lessen food waste.

Future Action: We still believe this to be a viable option for sustainability that should still be explored. The Sustainability committee along with NU Goes Green could discuss with Metz the possibility of running this experiment but over a longer period of time than just four days. If pursued, when drawing up the contract with Metz, samples can be implemented right from the beginning.

Megan Rogers
 Anthony Mittiga
 Stephanie Monaco
 Nick Walker
 Jessica Wylucki

Appendix

Experiment #1 (lights and electronics) data:

March 23rd- March 28th (Control)					
Monday 23rd	Tuesday 24th	Wednesday 25th	Thursday 26th	Friday 27th	Saturday 28th
(left on) Monitors- 3 Lights- 4 Projector- 3	(left on) Monitors- 5 Lights- 7 Projector- 4	(left on) Monitors- 4 Lights- 8 Projector- 8	(left on) Monitors- 8 Lights- 7 Projector- 6	(left on) Monitors- 3 Lights- 8 Projector- 5	(left on) Monitors- 5 Lights- 5 Projector- 8

April 13th- April 18th (after notifying professors)					
Monday 13th	Tuesday 14th	Wednesday 15th	Thursday 16th	Friday 17th	Saturday 18th
(left on) Monitors- 3 Lights- 4 Projector- 3	(left on) Monitors- 4 Lights- 1 Projector- 1	(left on) Monitors- 1 Lights- 1 Projector-	(left on) Monitors- 3 Lights- 3 Projector- 1	(left on) Monitors- 1 Lights- 3 Projector- 1	(left on) Monitors-* Lights-* Projector-*

*On Saturday April 18th we were unable to access the building to count the electronics, so there is no data for that day.

Megan Rogers
Anthony Mittiga
Stephanie Monaco
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Experiment Reports

Experiment #2 (individual utensils) data:

April 13th- April 14th Packages (control)		April 15th- April 16th Individual	
Monday 13th	Tuesday 14th	Wednesday 15th	Thursday 16th
Bundles used- 417	Bundles used- 447	Forks used: 128 Knives used: 68 Spoons used: 51	Forks used: 107 Knives used: 57 Spoons used: 60
18.4% less forks wasted, 61.5% less spoons wasted, 56.6% less knives wasted			

Experiment 1 –Batteries

Issue: Reducing Hazardous non-biodegradable materials, meaning batteries

Hypothesis: If we set up battery recycling bins, the amount of battery recycling on campus will increase.

Experiment Outline: Small boxes were placed in convenient locations around campus, such as the lobbies of O'Shea and Seton.

-A quick announcement was sent out via email (ex: NU Clue) to raise awareness of recycling boxes.

-The boxes were checked weekly over the course of four weeks to see if recycling had begun/increased.

Results: First two weeks= 0 Batteries

 Last two weeks= 66 Batteries

What we learned: Niagara University students are willing to recycling their batteries.

 Our advertising methods were affective in raising awareness.

Future Recommendations: We believe that this could be a really worthwhile experiment to continue because students were responsive to it.

If there were more recycling boxes places all around campus and even more advertisements placed, such as virtual ones in Gally and the other buildings, battery recycling could potentially become a standard on campus.

Experiment 2- Public Announcement at Game

Issue: Reducing the amount of paper/plastic waste at sporting events.

Hypothesis: If we have a public announcement broadcasted during games, the amount of waste will be reduced.

Experiment Outline: We attended two baseball games, making sure that recycling bins are readily available before each game.

-At the first game we gave extra awareness of the bins and simply observed how much people recycled.

- At the second game we had a small public announcement to raise awareness about the recycling bins as well as the importance of recycling.

Results: At the first game we collected only 0 bottle.

At the second game we were able to collect 3.

What we learned: While these results are not spectacular they are mainly due to both the low attendance at these games and fact that reusable bottles were already being used.

Despite this fact, we still were successful in showing that with some increased awareness people are more apt to recycle.

Future Recommendations: We had originally planned for this experiment to take place in Upper Level Gallagher at either a basketball or volleyball game because of the higher attendance.

We feel that this experiment could go in many different directions as well, such as turning the announcement into a recycling game played at half time.

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MGT271

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Final Project Report

The issues being addressed for this project are food waste on campus as well as poor recycling awareness in our Niagara University community. After initial research by the “NU Goes Green” committee and our project team, it was determined that food waste was a big issue on campus. There is a large amount of food that people would simply throw out before breaks or even going home for the weekend. Why throw it out, when you can donate it? Another issue we introduced was the poor knowledge this campus has on what they can and cannot recycle. Because of this we see that not many people recycle. The goal of this project is to help NU become an environmentally friendly campus and join the green movement to become carbon neutral!

After initial research and planning our team focused in on two main experiments to increase the green movement on campus. The first experiment was to reduce food waste in the residence halls. For this experiment, our hypothesis was that if there was an available option for students to donate their food products, then food waste would be reduced because food that would have normally been thrown out would be saved and then donated. For this experiment, we put a box on the first floor of O’Shea Hall for food products that could have been wasted. We did this for one week total and only received 17 items. We then thought, let’s do it before break and see how much we can collect! We then counted our results Easter recess and gathered 32 items. That is an 88.2% increase! This experiment should be implemented on every floor before breaks to further reduce food waste in the semesters to come.

For the second experiment, we wanted to raise awareness of the students on what they can and cannot recycle. We then could gather results on how much the students knew. Our experiment was to set up a table with a game at Ridgefest. Our hypothesis was that if we promote and inform students on recycling then, more students would be inclined to make the green decision and recycle. On Earth day, April 22, we set up a table at the entrance of the Gallagher center. At this table we streamed a video of Niagara students recycling. We had a game called, “Reduce, Reuse, Recycle.” We had different recyclable objects and had slips of paper that had reduce, reuse, and recycle on them. With the slips of paper, students would guess which item would be classified under each category. After the game was played, the player would receive an “Earth Day Cookie” and also a handout that informed students of some things that are commonly found on campus or in the dorms that can be recycled. After looking at our numbers, we found 76 people participated in our game but only 35.5% of people got a perfect

score. This shows how well people are informed on recycling and that there is a lot more room for improvement here at Niagara University.

Team: Think Eco. Be Eco.

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Experiment 1: Eco-to-go- Takeouts

Although prohibited by Clet Dining Hall and Sodexo Food Services, many students take out food from Clet on a daily basis. Whether they are stuffing food into cups, or wrapping food into napkins, or bringing their own Tupperware to transport food back to their dorm rooms, students are figuring out ways to bring food out of Clet. We do not know how much food Clet waste daily, but at the Gallagher Center they use about 100-150 soups cups and lids a week, as well as 100 to go containers at the grill. Thus, as a group we aim to reduce waste by developing an Eco-to-go takeout program here at Niagara University. By using reusable carryout in both dining halls, containers can be re-used instead of being thrown away. In addition, when students don't finish all their food on their plate, they can use their Eco-to-go container rather than throw food out.

At the end of May, we are changing our food service from Sodexo to Metz. Thus, we are hoping to present our plan to them in hopes that it will be implemented fall of 2015. We would ask students to purchase a to-go container for 10 dollars either at the Gallagher convenience store or the bookstore. Students will be able to bring their containers to either dish room in Clet or Gallagher. They would receive a clean container immediately and the process would repeat itself.

If Clet Dining Hall and the Gallagher Center were willing to adopt the Eco-to-go takeout program, we believe that it would decrease the amount of waste because those students who once were taking out food illegally now has something where they can put their food in. Likewise, the students who never took out food but wanted to also now have a container where they can use on an unlimited basis. In other words this is a win-win situation.

To test our hypothesis, we did a survey asking students whether they purchase a to- go container and if so, where would they like it to be used. Here were the results:

Clet Dining Hall:

	Number	Percentage
Yes/ Clet	19	18.1%
Yes/ Gally	8	7.6%
Yes/ Both	73	69.5%
Total/ Yes	100	
No	3	2.9%
No/ Both	2	1.9%
Total/ No	5	
Total	105 surveys	

Gallagher Center:

	Number	Percentage
Yes/ Clet	6	5.7%
Yes/ Gally	22	21.0%
Yes/ Both	63	60.0%
Total/ Yes	91	
No	11	10.5%
No/ Both	3	1.90%
Total/ No	14	
Total	105 surveys	

In conclusion, we learned that students will be will to be willing to be more environmentally friendly because they would participate in our reusable carryout program. As you see you in both charts, majority of students said they would like to be able to use there carryout for both Clet and Gallagher. Therefore, Niagara University our new food service company Metz should invest in exploring the option of our program. In order for this to be developed and implemented for the fall of 2015, we would like the for the NU Sustainability committee to present our idea to Metz before the beginning of next semester. Time is of the essence and we know that students would appreciate this program very much. If needed, along with the

NU sustainability committee we would be happy to meet with Metz to discuss future plans with them as well.

Experiment 2: Bottle Can Return

Many times students at Niagara University throw away empty cans and bottles instead of recycling them. Even when students do put empty cans and bottles in the blue recycling bins on campus the cleaning staff ends up throwing them in the garbage anyways. Many students don't want to drive off campus or doesn't have a car on campus to go recycle the cans and bottles at the grocery stores because it's not convenient or they only have 1 or 2 empty bottles.

If Niagara University gets a bottle can return machine on campus, we believe there will be an increase in recycling. More students would recycle cans and bottles instead of throwing them away. This is because it is more convenient for students to walk over to the machine then drive to a grocery store. Also not having to drive off campus will result in less pollution in the air, which is another added bonus for getting a bottle can return on campus. Students also will be more willing to recycle because money is the incentive.

Since Niagara University is affiliated with Pepsi, we were looking at the Dream Machine Recycling Kiosk designed by PepsiCo. 65+ colleges/universities in 24 states are the number of participants that are working with PepsiCo. As a result there has been 2.2 million containers collected from college and university campuses to date.

To better understand and become more knowledgeable about the Dream Machine Recycling Kiosk, I contacted PepsiCo Recycling Support via email. Unfortunately, the campus-recycling program is not currently available in New York due to the limitation of equipment. But, they are working on solutions in our next generation program (2015-2016) and hope to extend volunteer recycling nationwide. As a result, we started looking at other alternatives, but we found that all the other bottle returns that were similar to the Dream Machine were out of the country. So, we reverted our focus back to the Dream Machine in hopes that as a long-term goal the Dream Machine would be in the state of New York and Niagara University would purchase one.

Therefore, to test our hypothesis we tried to replicate a bottle return machine. Each machine's reward is money. So on April 22, 2015 from 10:00-3:00pm we sat in the Gallagher Center. Instead of money, each participant would have the chance to win a \$25.00 Chipotle gift card as the reward.

Prior to April 22, 2015, as a group we went to each recycling bin in lower level Gallagher to see how many bottles were recycled without and incentive and we

found that of the 15 recycling bins 32 bottle and cans were recycled. On April 22, 2015, we teamed up with the NU Goes Green Committee. Each participant who brought 10 bottles received a NU Water bottle as well putting their name in a raffle with a chance to win a \$25.00 Chipotle Gift Card. We also asked students who participated if they would be interested in having an on campus bottle return. At the end of the experiment, we collected 955 bottles and cans, which converted to \$47.75, and 72 people said they would be interested.

In conclusion, we learned that students are interested in having a bottle return on campus. Students were making comments like, "that would be great," and "yes definitely." With this type of enthusiasm from students, we know that the bottle return would be a success. We also realized that there is a direct correlation between students' willingness and an incentive. Students saw that we were raffling off a chipotle gift card and a water bottle for every 10 bottles that they brought and immediately went back to their dorm room, gathered their bottles, and brought them back. Thus, this is another reason why we should have a bottle return because college students love fast money, and that's what a bottle return would do as we all getting more people to recycle.