Establishing a Student Flea Market at WPI

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Establishing a Student Flea Market at WPI

An Interactive Qualifying Project Report submitted to the Faculty of

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the Degree of Bachelor of Science

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Date: May 5th, 2010
Abstract

In order to celebrate the 40th Earth Day, the 1st Annual 3R (Reduce, Reuse, Recycle) Student Flea Market was held on the campus of Worcester Polytechnic Institute (WPI). The project team planned and implemented this event, which aimed to help promote a sustainable lifestyle among the WPI community. The Student Flea Market was a place where all WPI students could sell or trade stuff which they no longer need. An evaluation of the event outcomes served as the basis for suggestions for improving the event next year.
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Introduction

The environment of our world is getting worse and worse nowadays. Everyone makes their own effort to save our home world. Green energy has been raised as a global issue, and it appears in President Obama’s agenda. Green is also the color of environmental protection and mother earth. In order to celebrate the 40th Earth Day and help people to enhance their awareness of environmental protection, we came up with the idea that we would like to hold the First WPI 3R Flea Market, a place where people could trade items with other students campus-wide.

The idea of a student Flea Market came from our homeland, China. In China it is common to see students lingering around campus and putting their items on a blanket to sell them. Most of the students are seniors and they can’t carry all their belongings back home with them, so they decide to turn their stuff into money. Since they can hardly find somewhere to settle down and sell, they usually just go to random places, like their dorms or a restaurant or a street. The price they offer is usually much cheaper than normal and the condition of goods is almost excellent. Therefore lower class students would love to buy books or electronics or furniture that they need from seniors instead of bookstores or shops. In most universities, this activity isn’t considered as an official school event. They do not have a time or a specific location for those sellers. Seniors who want to sell their stuff just go out and bring a blanket with them, and put their stuff on the blanket on a meadow or somewhere near a street.
People may never realize what they can contribute to our society in order to make a better world. For example, a typical book is about 400 pages, and a typical tree can make 81,430 pages, which is roughly 23 books. One tree absorbs 2.6 tons of CO$_2$ a year. So every time we purchase a used book, we reduce more than 0.1 tons of carbon dioxide.

The nice thing about this idea is that the cost for those students is zero. They do not need to pay any fee for selling and they get revenues from other students. Students benefit from the market a lot as they get their ideal goods at very low price. The university benefits from these events as well. The whole environment of the school will be kept cleaner and they do not need to worry about the trash that is generated by those outgoing seniors. As far as we can see, it’s a win-win-win event.

At first when we came up with this idea, we were really excited about what was going to be done. As far as we can tell, this kind of event has only been held before by some ECE students who want to have their circuits exchanged on campus. It’s not an official school event, and the number of people who have participated was less than 5. We thought that this event would be both pro-environmental and attractive since people prefer the cheap rather than the expensive. Students, especially lower class students, would love to have a talk with these outgoing seniors and buy some “souvenirs” from them. Also, since environmental protection has been more and more important nowadays, we believe that under and the banner of Reuse, Recycle, Reduce, and we could attract a lot of students participated in our event.

The final and ultimate goal of our event is to raise people’s awareness about environmental protection and help them understand how easily they could contribute to
our home world. Rather than yelling those catchy market slogans and doing nothing, our event helped the world from what we can accomplish. We believe that the environment is affected by not only carbon dioxide but a lot of factors, and we can promote our daily living by doing something small. By doing those small things every day, the result would not be small anymore.

In this project, our goal was to foster sustainable lifestyle within WPI community. To meet this, we needed to first design a detailed plan for the student flea market, implement and adjust our plan, and at the end evaluate the event.

**Background**

**College Student Flea Markets in China**

The idea of holding a student flea market originates from China. This type of event has been widespread throughout China’s universities. From news articles as well as an interview with two students who went to Chinese colleges and participated in their schools’ senior student flea market, we can see more detailed information about China’s college student flea market. One article from Loudi News reported that senior student flea markets are very popular in Chinese colleges. When it was the graduation time, senior students would come out with items they did not want any more and start a flea market on their campuses. The things they sold included textbooks, magazines, radios, clothes etc. and many students and people from outside campus stopped by and traded. The
journalist found that products in college flea markets were very cheap, such as textbooks were only 1/10 of the original price and the radio was only several Chinese yuan. One of the student sellers told him that she was going to leave her college soon, but she had too many things she could not take away, so she came to the market and tried to sell or give her stuff to lower classmen. “Earning money is not the reason I’m in this market, but having some useful and interesting experience” she told the journalist.

The two invited interviewees were from different universities in China. We chose these two friends because one of them went to a college in the North, while the other went to the South; one went to a top college and the other went to a normal one. During the interview, we asked all the questions and any detailed facts we could think of, such as when the market usually started in their colleges and why, how they heard about this event for the first time, etc. We also asked their help to recall as many memories as possible about their college’s student flea market. The following is the summary of the interview:

In China, this kind of event was generally held and overseen by no one or if there was any management, it would be student governments. In most cases, each year, student flea markets started in colleges automatically one to two months before the graduation date. Before the week the flea market occurred, some schools would advertise for the event by sending out emails to the community and posting posters on campus. A section of a street or a short street was usually chosen as the location for the flea market. The operating hours for each day of the market were quite flexible. Students could come out and set up their spots and left the market whenever they wanted. The event could last from three weeks to two months. Student flea markets in China’s universities were very free-styled,
from our interviewees’ statement. Students did not need to register for the event; there was not any agreement for student sellers or buyers to obey (at least in our interviewees’ universities); there were not any student government officers walking around or checking every booth during the event time; only students could be the sellers but anyone including students, faculty and staff and people from outside campus could be buyers; almost everything could be sold or traded on the market. All the Chinese students were very willing to participate in the student flea market and student sellers had to get up early to get the better selling spots. If there were any fights, the campus police would deal with it directly, without informing the student organizations first.

From the interview we can see that Chinese students have treated the student flea market as an indispensible part of their college life. They do not need any people to convince or encourage them to take a part in the event. There has been tradition and group thinking in China’s student flea market, as this kind of event has existed for many years and spread out into almost every university in China. There might have been many rules and student organizations involved in at the very beginning of the formation of the event when it first appeared in China. However, after years of development, the student flea market has become very influential and students would automatically start the market each year.

Community-Based Social Marketing (CBSM)

To encourage WPI students to become involved in WPI’s first annual student flea market and to spread the idea of living a sustainable life, community-based social
marketing (CBSM) is a good tool to promote the environmental friendly event. It helps to have people committed to participate in the flea market as well as helps people to understand the importance of and persist in taking sustainable actions.

To alter people’s attitudes and behaviors towards sustainability is not an easy issue to address. Community-based social marketing is regarded as an effective way to foster sustainable behaviors in the society due to its pragmatic approach. This approach consists of four steps as follows:

1. Identify internal barriers and external barriers to behavior change. Only when all the barriers are identified can corresponding CBSM strategies can be developed.

2. Promote sustainable behaviors by CBSM strategies. Gaining commitment, using prompts, developing community norms, effectively communicating with people, utilizing incentives and removing external barriers are the major six strategies community-based social marketers have used.

3. Pilot on a small scale and then carry out CBSM strategies in the whole community. In this way, the strategies can be refined to be well workable before they are broadly implemented. On the other hand, the most cost-effective CBSM methods can be identified through piloting. Finally, a pilot study is an important way to demonstrate the worthiness of conducting a CBSM program to the funders.

4. Evaluate after a program is implemented. An evaluation is conducted to measure the behavior change in the community as well as used to improve the implemented strategies. An evaluation can also be evidence of that a program needs more funding.
Six Behavior Change Strategies

Commitment: Turning Good Intentions into Action

People intend to behave consistently. Several studies show that people are much more likely to take an action after they have said they would do the action. This is because when individuals agree to a request, they alter the way they perceive themselves. This agreement causes a psychological implication that they are the kind of people who perform this action. However, commitment should be conducted in effective ways. First, committing should be voluntary. Commitment is used only when people show an interest in engaging in certain sustainable actions. Research demonstrates that commitment with pressure will not work. Secondly, research indicates that making a public commitment has greater enduring effect than a private commitment, such as asking people’s permission to publish their names in a local newspaper, rather than just asking them to make a private pledge. Thirdly, written commitments are more effective than verbal ones.

Prompts: Reminding People to Act Sustainably

It is human nature to forget to do things that should have been done. Prompts are a simple way to remind people to do sustainable behaviors on time. According to the founder of CBSM, “A prompt is a visual or auditory aid that reminds us to carry out an activity that we might otherwise forget.” “No Paper Product” on the top of a trash
container or “Turn off the Light” besides the light switch are examples of prompts. This is an effective tool to remind people to engage in the behaviors they want to do but often forget. It is not a strategy that attempts to increase people’s awareness and motivation to support sustainability or alter people’s attitudes.

A prompt helps to enhance one time and repetitive actions. A one time action could be installing a clock thermostat and a repetitive action could be turning off computers when leaving the office, composting, or recycling paper. As it needs a certain period of time to obtain a sustainable lifestyle, prompts particularly play an important role in having people continuously take actions towards sustainability.

When using prompts, several things should be noted in order to effectively apply prompts. They should be noticeable; they should be self-explanatory through simple words or pictures to tell people what to do; prompts should also be ones that encourage people to conduct positive, sustainable actions rather than prohibit them from doing environment-harmful actions.

**Norms: Making Use of Community Standards**

The saying “Belief, like any other moving body, follows the path of least resistance” well represents the meaning of norms. A community norm is a common consensus on certain views existing within a community. The alteration of behaviors may be not because people think the behaviors are right to engage in, but is more likely due to the fact that others are doing so and what others are doing can be observed. This happens
especially when people are not sure of what to do and how to act and observing others provides people important information. Using people’s preference of conformity with those who live around you and behaving as what others are doing can make long-lasting effects on promoting sustainable actions.

How can sustainable behaviors be easily visible? Methods like attaching a sticker onto a recycling container or somewhere noticeable, which indicates that this household comports, creates a community norm of composting.

Norms are often combined with prompts, and as with prompts, norms should be encouraging sustainable behaviors.

**Communication: Creating Effective Messages**

Much of human communication involves persuasion. The aim of persuasion is to influence people’s attitude or behavior. The transition to a sustainable future will require that the vast majority of people be persuaded to adopt different lifestyles. Therefore, we need to effectively persuade people to adopt lifestyles supportive of sustainability. That is why we need better communication as a useful way to change people’s attitude.

How can we persuade people effectively? Well, there are a lot of ways to improve our skills. We can use captivating information, because it is likely to stand out against all the other information that is competing for our attention and it is easy for us to remember at a later time. We need to know our audience and tailor your message so that it will be slightly more extreme than the beliefs of the audience, making the message easily to be
embraced. In general, the more credible the person or the organization delivering the message, the more influence there will be upon the audience. We need to frame our message, to present it positively. We also need to carefully consider the use of threatening messages; those which emphasize losses that occur as a result of inaction are consistently more persuasive than are messages that emphasize savings as a result of taking action. Making it clear and also making the message specific. A message which is easy to remember would be very helpful to our program, since all actions that support sustainability require reliance upon memory. We shall have personal or community goals provided, which can be effective in reducing energy and water use and increasing waste reduction. Another thing is never forgetting to emphasize personal contact, as the major influence upon our attitudes and behaviors is our contact with our people. Last but not least, provide feedback at both the individual and community levels about the impact of sustainable behaviors.

**Incentives: Enhancing Motivation to Act**

Incentives, whether financial or otherwise, can provide more motivation for individuals to perform an activity that they have already engaged in, such as recycling. On the other hand, incentives can also provide motivation to begin an activity that people would not perform, such as composting. The evidence of the impact of incentives can be found everywhere, but to improve people’s awareness of environmental conservation is the true goal behind using incentives.
How can we create effective incentives? We can closely pair the incentive and behavior, as the incentives are usually most effective when they are presented at the time the behavior is to occur. We use incentives to reward positive behavior, as we know from the research that when sustainable behaviors such as recycling, were rewarded with lower garbage disposal costs, the likelihood that people would recycle in the future increased. Making the incentive visible is important as an incentive will have little or no impact if people are unaware of its existence. Be cautious about removing incentives because many individuals engage in sustainable activities because this makes them feel that they are making a positive contribution. Also, we need to prepare for people’s attempts to avoid the incentive. The last thing we need to consider is the size of the incentive and the non-monetary forms of incentives.

\textbf{Removing External Barriers}

If the behavior is inconvenient, unpleasant, costly or time consuming, no matter how well you address internal barriers, the strategy will be unsuccessful. Therefore, it’s important for us to remove the external barriers.

The first step to removing external barriers is to identify them. It’s also important to assess whether it is realistic to overcome the barriers you identify. Next, determine whether you have the resources to implement similar initiatives. Then, making the activity you wish to discourage less convenient and more expensive can increase motivation for the behavior you wish to encourage. Finally, it is very important to note that some external barriers, such as inconvenience, are to some extent a matter of
perception. In summary, because the nature of external barriers can vary dramatically across communities, strategies for removing these barriers will have to be tailored to each situation.

CBSM tools were applied throughout the whole process of the first WPI 3R Student Flea Market. During the event planning and preparation, our IQP team members first tried to identify all the possible internal and external barriers of students, such as barriers which prevented them from hauling their stuff to the quad and selling to other students. When advertising for the market, our team used various methods to encourage students and student organizations to commit to participate in the event. For instance, we asked students who had an interest to sign and return the market agreements to reserve primary selling spots on market. Face to face communicating with the presidents of student organizations and persuading the residential committee to help distribute our market flyers to all the residential assistants and residential halls were an important step of our event planning and implementation. The idea that we distributed flyers in Campus center and dining halls and sent reminding emails to the whole WPI community everyday before the event started was right from the strategy of using prompts in the CBSM tool. After the student market was over, we conducted oral surveys and evaluated the whole event and the data we obtained from surveys to make further suggestions for the next flea market. Moreover, we used incentives, the polo t-shirts, to attract more students to volunteer to be our market managers.

In the first student flea market, we did not utilize the community norms very well, as we did not successfully get as many student sellers as we thought to participate, even though
we did get many students who were willing to buy some stuff to stop by and check if there were more sellers. To more clearly identify the barriers that keep students from selling stuff in our market, pre-event surveys may be a good choice.

More detail about applying CBSM strategies into the whole process of student flea market such as in preparation, implementation, and analysis are discussed in the following sections.

**Events Held By Environmental Groups at Other Universities**

Oakland University has held Recycling For Charity on Earth Day. Here is their event introduction.

“It is that time of the year again; time to clean out your dorm room and move back home for the summer. Most likely you have come across something while packing up that you had completely forgotten about. Maybe a cell phone you dropped in a puddle while rushing to class. Or an iPod that’s battery is more drained than you are after finals week. Why do not people do something positive with these electronics that you aren’t using anymore?

Recycling for Charity has partnered with the Sustaining Our Planet Earth organization of Oakland University to celebrate the 40th Anniversary of Earth Day. As a non-profit charity, Recycling for Charities (RFC) defends the environment and supports other worthy non-profits through recycling, donating the money raised to over 800
charities nationwide. On April 15 the two organizations hope to prevent nearly 50 TONS of electronic waste, which can leak harmful chemicals, from entering landfills while celebrating the environmentally-friendly holiday at Oakland University’s campus.

From 11:30 a.m. until 1:30 p.m. students, staff, and members of the community will have the opportunity to donate broken and used electronics such as cell phones, iPods, digital cameras, pagers and PDAs. RFC, stationed with their eco-friendly Smart Car at the Oakland Center, will be accepting electronic donations to be recycled. Every donor will receive an entry into a contest to win prizes, such as a Kodak Digital Camera or Digital Photo Frame, simply for donating their used e-waste! If you are planning on being on campus April 15 remember to keep your old electronics with you and head to the Oakland Center where all the fun will be! All funds raised from the recycling of the e-waste collected will benefit the Hospice of Michigan, a charity chosen by SOPE.

Attendees will be able to participate in other ‘green’ Earth Day activities on campus as well provided by Reverb, including organic t-shirt screen printing and seed planting, and can grab an organic bite to eat while listening to a live DJ from a local radio station spin the newest hits. As a part of Reverb’s Campus Consciousness Tour, rapper Drake will also be performing on April 15 at the Meadow Brook Theater.”

We learned from their event that they have a lot of events on the day. All the events together will certainly raise people’s awareness of environmental protection. We know that the more events that we have, the more interest we will attract. We were glad to find
that they are many more events during the week of Earth Day at WPI, and they certainly made contributions to each other. Being as one of them made us proud.

What we could apply from RFC to our project also includes everyone who participated in the event would receive an entry into a contest to win prizes. We know that free stuff always gets people’s attention. And something that is environmental would be our first choice. Originally we were agreed to distribute small prizes to all those sellers who contributed to our market. But, since we had insufficient time and budget to make this happen, we abandoned this idea.

**Methodology**

**Preparation**

**Agreement**

To ensure everything in the event was in order and to ensure the theme of our market remained to be building a sustainable campus by reusing, reducing and recycling, we designed the “WPI 3 R Student Flea Market Agreement” (as shown in the Appendix). All the sellers had to agree to be bound by all terms and conditions of the agreement by participating in the student flea market, which was indicated in the emails to all WPI students.
This agreement was necessary as we did receive emails from a WPI student who was a seller on Amazon. She wanted to sell her items on our market and was denied.

**Event Planning**

**Before the event**

Advertising is a most important factor for a successful event. The event would be nothing without people. We can attract people by provide free or cheap goods, interesting performances, a good atmosphere, and nice service. Other factors include specific planning, a popular theme, and sufficient funding (if applicable) and nice conditions (such as good weather)

**During the event**

During the event, the most important factor is to satisfy participants’ needs. You might encounter problems that you never thought of, or there could be certain emergencies which require immediate attention. The job for hosts is to solve these problems as soon as possible. Furthermore, a welcoming atmosphere, patiently answering questions and flexibility is also necessary for hosting a successful event.
After the event

Of course, it’s time for us to get feedback from people. Make a questionnaire that contains not only multiple choice questions, but also those subjective questions. The host of an event needs to figure out what they did well and what they need to improve next time. Making a successful event is not easy, it requires sacrifice. The only way to improve tomorrow is to know what we did wrong today. So, we should collect feedbacks much as you can.

Advertisement

To advertise our student flea market, we used several methods at the same time.

Poster and Flyers

We wrote the text for the poster and asked WPI’s Marketing Department to help with the design and formatting. (Refer to Appendix)

The posters were printed in the Student Activities Office and the SocComm office. They were posted in main buildings on campus including Founders, East Hall, Daka, Campus Center, Library, and Atwater Kent.
Our flyers had the same design as our poster and were distributed in Campus Center, Daka, and the mailboxes of all the fraternities and sororities’ (in student activities office) and RAs’ (in East Hall)

**Signage**

As our event location was chosen to be held on the quad, which is right next to Bartlett Center, they asked us to put several signs around the quad. In this way, visitors would understand what was going on at the quad. (Refer to Appendix)

**Communication**

We invited fraternities and sororities to come to our student flea market by either emailing the presidents or talking to them face to face. We also contacted the vice president of the Residential Committee to ask them to mention our event at the regular RA meeting and committee meeting.

Besides contacting student organizations, we also tried to have personal contact with friends and colleagues to encourage them to join our event as well as help us to advertise the event.


**Advertisement by Emails and Reminding**

One week before the market occurred, we sent out an email to all WPI students and employees to introduce our first student flea market and to announce the information about it, such as the planned date and location. In the rest of the week before the market dates, we sent emails in the morning of each day to remind the whole WPI community that the flea marketing was approaching.

**Media**

We requested the weekly “Event Digest” to include flea market information. We made a one-slide Powerpoint and asked SocComm to show it before playing the weekend movie. We also asked WPI radio station’s help to mention our event every day in their radio programs.

Another media advertisement we thought about was publishing a short article for our market in “Towers”, the WPI student newspaper. Many WPI students and staff read the Towers, but advertising an event in Towers would cost money so writing an article and asking Towers to publish it is a better choice. At the end, due to time constraint and the shortage of our IQP group members, this idea was not applied.

**Gaining Commitment**

To raise the number of student sellers in our market, we used one of the CBSM (community-based social marketing) behavior change strategies: asking for commitment.
As mentioned before, people are more likely to take a certain action after they make a commitment, especially a public commitment. When we sent out emails to the WPI community, the 3R Student Flea Agreement was also attached. In the emails, we encouraged students to reserve primary selling spots by signing and returning the agreements to us.

**Seeking Help from Others**

We realized that the influence of our 2 students is not enough to accomplish this huge event. Therefore, we also did some advertisement aimed at campus leaders. We e-mailed the president of every fraternity and sorority to inform them about our plans and ask them to forward it to their members. We also put our advertisements in every RA’s Mailbox and asked them to put our poster in their floor. Soccom made the poster for us and the campus center helped us to print out our flyers.

**External Barrier Removal**

To remove the possible external barriers for students to participate in our event, we provided a change box and packing boxes. In the change box, there were quarters, one dollar, five dollar, ten dollar and twenty dollar bills, so that if any buyer needed change, he/she could ask market managers for change. Packing boxes were provided for students who needed to move stuff from and back to their apartments.
Location Reservation

We chose the Quad as the place to hold the event and reserved it for five days in the Student Events Office weeks before the event started. We also thought about the possibility of inclement weather, for which the market would have to continue indoors. However, we did not actually reserve any indoor place for our market. This caused some problems later during our event, when two of the five days were rainy. We could not find an available indoor place to move the market as all the appropriate locations had been reserved.

Survey

We planned to conduct surveys during and after the student flea market. One survey was with open ended questions only. They were planned to be distributed and collected during the market, so that we could ask sellers and buyers at the market to fill the surveys. Another survey consisted of five multiple choice questions only. These surveys were planned to be posted on MY WPI.com, where many WPI students would be willing to answer some short multiple choice question surveys.

From the surveys, we tried to get an assessment from the WPI community of which aspects of our first student flea market were successful and which needed to be improved. Moreover, we tried to collect some data from surveys, such as which years of students
were more active in the market, and which years of student were most among all the sellers etc.

At the end, the open-ended surveys were not printed and distributed as the student participation rate was too low in the first student flea market. Instead of the distributing paper survey, we did interviews. The student sellers and buyers in the market were randomly chosen and asked questions from our survey. Their answers were recorded on a piece of paper and recognized by our IQP group member.

Also due to the low participation, we cancelled the online surveys on MY WPI, which we did not think we would obtain much valuable data.

**Market Manager Recruitment**

Because this year was WPI’s first 3R student flea market, something unexpected or an emergency could happen and people on the market may need help. Therefore, we thought it was a good idea to have market managers manage the event and walk around during the event time. In our opinion, WPI students were the best choice to be our market managers. However, our event was five hours (10am -3pm) per day and lasted for five days. Since all of our IQP group members, which are only two students, have classes either in the mornings or afternoons of D term, we were unable to manage the event for the whole event time. We planned to recruit some students to be our managers and since the event had five hours per day for five days, we thought ten market managers would be enough. The work for market managers included event management and cleanup after the event,
so that for each day, we needed five managers to be at the event and around three to do the clean and wrap up. In this way, each manager contributed approximately four hours in the event week, which was reasonable.

To cooperate with student organizations and recruit from their members was the way we chose at the beginning and the first student organizations coming into our minds were Green Team and Alpha Phi Omega (APO) fraternity. Green Team is a student club whose goal is to promote a green campus and sustainable student lifestyle within WPI and they have around 40 to 60 members, so we thought that they might be interested in helping us with our event. APO is a community service fraternity, which has at least 100 members and one of our project members is in this fraternity. Members in APO are required to complete a certain number of service hours each month to keep their active member positions, so we thought that they might be interested in counting in our student flea market to be one of their service events and have their members become our event managers.

Our IQP group went to talk to the presidents of Green Team and APO and they both showed interest and sent sign up sheets to their members. To encourage more students to sign up for our event, we decided to give a free t-shirt to each market manager. When signing up for the student flea market a student would get a free t-shirt. When this was announced in APO’s weekly member meeting, its members looked very excited and many of them showed great willingness. At the end, only two members from Green Team and two from APO signed up, which was unexpected. Green Team does not have many active members, and the time we negotiated with them was right during their officer election time, which might be the reason for the low signup numbers. For APO, at the
time our service event was displayed, an APO annual event “FORMAL” was displayed too, in which a romantic and free dinner in a fancy restaurant was offered to its members and the only requirement was to dress up formally and nicely and bring a party mate. This attractive service event might be the reason that we only got two students in APO.

After recruiting some of our friends and classmates, we ultimately got ten market managers.

**Market Manager Training**

Before the 3R student flea market started, we prepared a training session for market managers. All of the managers attended the training session and the session lasted about 1 hour. This training consisted of three parts. We first introduced the significance, motivation and the background story of WPI’s first 3R student flea market. Then, we explained every term on the Student Flea Market Agreement to the managers. Finally, they were informed about the other tasks they would be in charge of on the event and what the process would be in the event. More detail of the three parts was described in the following.

**Training I - Significance and Origin of Student Flea Market**

To celebrate Earth Day and to help promote a sustainable college lifestyle, we developed the idea of a 3R Student Flea Market. In the market, WPI students can sell or trade stuff
they no longer need and turn them into cash and at the same time, other students can get what they want by paying much less. What is more important, in the reuse and recycling way, the total waste generated by the WPI community would be greatly reduced. This benefits our environment and awareness of an environmental friendly lifestyle is sent to WPI students through this event.

The idea of a 3R Student Flea Market comes from China, where almost all of the higher education organizations would hold this kind of event one–two months before the graduation of their students. This event is very popular in China and most seniors participate in this event actively and sell stuff they do not want to or cannot take away with them on the market.

Training II - Agreement Explanation

We read through the student flea market agreement with our market manager together and some terms were explained as follows:

“1. Only WPI students are allowed to sell items in the market (seniors are encouraged to participate).”

The managers were told that if they saw some sellers who did not look like WPI students, they could ask for their WPI ID cards.

“3. The market is restricted to secondhand goods; entrepreneurs are not allowed to sell new items.”
This event aims to green the campus by reusing, recycling and reducing, so entrepreneurial behaviors are not allowed or the purpose of the student flea market would be changed.

“6. Food or beverages are not allowed to be sold.”

Selling food and beverage is treated as entrepreneurial behavior.

“7. Goods may be sold and/or traded only between 10am and 3pm.”

At 3 o’clock in the afternoon, all the student sellers would be asked to leave the market with all of their items, as market managers need to clean up the quad.

“8. If there is any emergency, you must notify the Student Flea Market manager.”

All of our managers are required to be familiar with important phone numbers, such as the campus police phone number, health center phone number, campus center phone number and cell phone numbers of the IQP team members who are in charge of all the managers.

Training III - Other Tasks and the Process of Student Flea Market

In the second part, we talked about the following aspects:

1. The function of the change box and how each manager was required to have the box with them anytime and make sure to pass the box to the next manager before leaving.
2. The function of packing boxes, which was for the convenience of student sellers to move their items.

3. All the managers’ phone numbers were given, so that they could contact each other.

4. If there was any emergency which managers did not know how to deal with, they needed to call either me or my IQP partner.

5. Managers scheduled for Thursday and Friday would also be responsible for distributing and collecting open question surveys, which we did not do as the sellers are few. Instead, we did survey by orally asking sellers and buyer directly.

6. One of our advertising methods was to invite students to reserve the primary selling spots by signing and sending an agreement back. Therefore, if there was any spot reserved during any manager’s working hour, the manager was responsible for saving primary spots for them and assigning spots by checking their IDs. This was in case of too many sellers competing for good selling spots.

**T-shirts**

We decided to purchase uniforms for market managers so that it was easy for people to recognize them. Based on the 200 to 300 dollar funding obtained, we decided to buy t-shirts. Because our event was aimed to foster sustainable life, the color of the t-shirt was chosen to be green; to fit the position of manager, the t-shirt style was chosen to be polo shirt. The manager t-shirts were distributed during the training session. We originally planned to print a slogan and the information of our event on the back of the shirt and the
words “Market Manager” on the front. However, due to time constraints, we did not make it and purchased ten green polo shirts from the Greendale Mall instead. In one of our meetings with Liz Tomaszewski, she mentioned several places where we could have t-shirts printed in Worcester. They are Wilson’s, Guertins and Olympic Trophy.

**Implementation**

The Market

Monday, April 5th

On the first day of the market, we finished the set up of the Quad by 9:45, and our first manager arrived at 9:50. It was a nice day, and we thought it was perfect for the flea market. However, our first seller didn’t show up until noon. A sophomore who lives in Founders Hall became the first seller in WPI flea market history. By the end of Monday there were three sellers who had come to the Quad. The total revenue for the market on its first day was $120. It’s a good start for a market in which a mouse costs one dollar.

Students,

A, Sophomore, $10 (some numbers in this column is not that accurate)

B, Sophomore, $13

C, Sophomore, $97 + a video iPod (in exchange for one mainframe)

Feedback and suggestions from Monday
We agreed that the observation from the first day would be the most important one. So we did value the feedback and suggestions we received. At the beginning of the event, a lot of students stopped by and asked us questions like, ”what you guys doing here?,” or, “How could I sell/buy stuff in this market?,” which means they haven’t heard of our event. We thought that we did a good job of advertising the event, but the outcome shows that 7 days of advertising is not enough. We should have started our advertising 2-3 weeks ahead since people need time to consume the information, to arrange their schedule, and to make decisions. As far as we are concerned, the worst outcome for an event is that no one knows about it until the beginning. Also, we noticed that people were rushing through the Quad even though they were interested in some items. They can’t stop and buy things because they have mid-terms in front of them. We realized it when we were about to take our own exams. The time that we chose is bad, so next time we should pick a better time rather than the week of mid-terms. At the end of today’s event, a student asked whether he could stay there for a little bit longer since people started to wander around the Quad in the afternoon, which we thought was a good suggestion to extend the time for next year’s market.

Tuesday, April 6th

The second day of the market

Based upon what we learned on Monday, we decided to do some advertisements around the Quad to make people aware of what we were doing. So we borrowed 6 stands from the Campus Center and printed 6 posters and then put them at every entrance of the Quad. Our first manager was there even earlier than yesterday and sometimes we even
got 3 managers on the Quad at the same time. But, unfortunately it was cloudy all day, and rained not continuously but frequently, which made it very difficult for us to hold the event and also hard for sellers to come out and sell. We ended Tuesday up with so much depression and hoping a better day for tomorrow.

Our wonderful market managers were the only students to stay on the Quad that day.

Feedback and suggestions from Tuesday

First things first: no event on rainy days! The biggest lesson we learned from today! People don’t like to go outside if it rains. And of course, people wouldn’t go out to sell things on such a bad day. A market without any sellers is pointless. So that’s how our market crashed on Tuesday. Moreover, we decided that we won’t hold the flea market on Friday if it rains. But, the good news is, we found our advertising boards around the Quad were very helpful, when a swarm of people stopped by to look at them. We were so happy about it and we believed that tomorrow we would have an ideal day.

Wednesday, April 7th

The third day of the market

We really looked forward to today’s market since after the rain on Tuesday, we had a sunny day which was perfect for the flea market. Like yesterday, we borrowed the stands from the Campus Center and put them at every entrance of the Quad. The first
seller arrived before 10:00 a.m and we helped him to set up his own blanket. There were six students in total that came to our market on Wednesday, and the sellers’ revenue increased to nearly $170. However, one of the student sellers who came to the market got $0 at the end. Since Wednesday is a day that most students have labs instead of classes, the number of students (sellers and buyers) who came to the market was much higher than on Tuesday.

Students

A, Sophomore, $40
B, Sophomore, $80
C, Freshman, $3
D, Senior, $15
E, Junior, $0
F, Junior, $30
G, Junior, $6

Feedback and suggestions from Wednesday

The good weather on Wednesday really had a significant impact on our event. That day was so warm that many people were enjoying the sunshine on the Quad. We found that people came to the Quad and greeted their friends first, and then while hanging around they found the market and some of them surprisingly discovered something that they have been looking for for a long time. And also we noticed that among the people
who came to the Quad to sell their stuff, half of them had got their agreement back to us during the early-bird sale, which was our advertising period. These people were really interested in our market and they really wanted to get rid of some of their stuff. We found that people who have a special interest, such as collecting electronics or things like XX star, would have a large personal collection. Once they found that they no longer need it all, they would try to sell their stuff or simply just give them away. So our flea market is potentially a great resource for these kinds of people. And from the buyers’ view, it’s easy to figure out that electronics is the most popular category. At first we didn’t know why, and we couldn’t really tell why people would be interested in second hand electronics even if they were out of date. However, we learned that in the ECE department there are students who commonly sell their electronics and circuit wafers. But, whatever had happened, the truth is that electronics were the best selling items. We thought it might be useful for us to put this into next year’s advertisement, because students are very interested in trading these kinds of goods.

Thursday, April 8th

The fourth day of the market

The fourth day was the most successful, because we had company on the Quad! The Soccom and Sexual Assault Awareness groups were on the Quad at the same time, which means we got 100 people on the Quad for free! Even better, they played music on the
Quad! Good weather, good atmosphere, and nice sellers, made Thursday a successful day for the flea market. We had nearly 200 (or over 200) potential buyers on a single day. We also made the video of our market on that day. This was a one minute long video which we talked about the idea of our event, how it works, and a sample of trading in the market.

Students

A, Sophomore, $31

B, Sophomore, $70

C, Senior, $20

D, Graduate student, $60

E, Graduate Student, $14

Feedback and suggestions from Thursday

Irrespective of the weather, Soccom, or other external criteria, we expected that it would be a good day for us, since we’d been doing it for almost a week. There should be more and more students aware of the event now and more students stopping by and selling stuff. Our number of sellers became kind of stable. The two sophomores and the senior in attendance on Thursday had been there on Wednesday. They made great contributions to our market and we expressed our gratitude to them at the end of the market. The guy who helped us to make the video possible mentioned some of his observations in the video. He said he’s definitely going to return if we do it again next year. Though there were not as many students as he thought, he indicated that if we could
get a few more sellers, then we could have exponential growth, and we agree with him. In fact, from the very beginning we realized that the sellers are the most important part of this event. Next year we should start advertising earlier and contact these old sellers since they have participated and they know how much they could benefit from our program. We should also invite other clubs or organizations to share the Quad with us. The contributions brought by them are significant: people, music, atmosphere, and more. And also, we noticed that books are very popular, both textbooks and others. Next year we should definitely have the Campus Center Bookstore involved, have a table for them to buy books from students.

Friday, April 9th

The fifth day of the Market

Since it was raining on Friday, we canceled the event on that day as we previously discussed.

Discussion and Analysis

The Time to Hold the Market
For the first 3R Student Flea Market, we did not do well on selecting the dates for the event. The week we chose was right during WPI’s midterms, which, we think, affected the number of student sellers (seniors) who participated in the event. There are two reasons that we did not notice the importance of timing. First, we did not thoroughly assess every factor (such as, the time of the event) for this event during the preparation stage. We should have put more attention, thought, or research to look for the best choice for every factor for our event. We should have been more considerate for the students, such as which time and which location was more convenient for them. We should have surveyed a little bit within our community before we made the decision. Second, the concept of a student flea market was from China, whose education system for higher education organizations is different from the States’, especially the 4-year curriculum arrangement for college students. In China, most colleges adopt the semester education system, which leads to more activity time and much less stress to Chinese students, compared to WPI students. In addition, most Chinese students would barely have classes in senior year. Senior year is a time of relaxation for the students. They have abundant time to do what they want to do, such as doing an internship for half a year, watching TV series, as well as participating in the student flea market, which can both make money and benefit the lower classmen. The student flea market event planners have fewer restrictions on deciding which week is appropriate to hold the market. During our preparation stage, we did not consider these differences between China’s and the States’ colleges.

Things that worked in China do not have to work in the States. If the market were held again next year, to avoid this issue, the organization responsible for the market should
make more modifications from the Chinese style college student flea market and count in more WPI college life factors, such as our quarter academic system, the different course schedule of senior students in WPI and then make the final decision. Moreover, the event holder could probably conduct a survey on campus to understand WPI students’ preferences. To know our target students’ preferences directly from them is more reliable than to guess what they prefer.

**Communication**

In this year’s flea market, we contacted all the fraternities and sororities. Many of them said this was a great event and they would definitely encourage their people to join it. However, none of them actually showed up. Moreover, through email, we obtained around ten agreements signed and returned, but only three of them came to our market. The time the market was held, which was right in the midterm week, might be one of the reasons why students did not turn their promise into actions, but our communication skills were probably the major issue. We should have put more effort and pushed them to participate in the event harder, such as going to talk to the fraternities and sororities face to face and building a friendship with them after sending out email invitations; and calling them if they did not show up at the time they promised. We should also set up a sort of competition of fraternities and sororities so in that way they might do a better job to set up a place for themselves on the Quad.
Incentives

As discussed with Prof. Doyle, if the flea market is going to be held next year, trying to add some incentives into the event may be a good idea, such as giving free ice cream and playing music. In this way, at least we will gather many people and form some kind of norms. We should also play music to make a better atmosphere for students and we did find that more students came to the market on Thursday this year, the day that other organizations were providing free food, playing music and having a lot of their members stay on the Quad. We can also attract more students by making a more beautiful poster, providing better service, inviting more people to come, putting more fliers campus-wide and etc. The more incentives we have, the more successful market we will have.

External Barrier Removal

From this year’s flea market, we can see that we did not fully understand what prevented students from coming out and selling their items. We didn’t realize the event would be heavily jeopardized by rain, and we anticipated many more sellers would come than the actual number. We didn’t think about what other students thought and what they really want from the market. For the next time, distributing some open ended question surveys before planning the event might help to understand what students are thinking, what their concerns are and how they could be helped. Also, collecting feedback from
students who are not coming and ask them why would be helpful for us to make this event better.

**Suggestions for Future Events**

If we hold this event again next year, we will have the following aspects improved. We will set the time after the Final. Everyone is packing their stuff after finals and they must find something that they no longer need. So they will come to the market to sell their items. Also, it’s time to move to a new apartment for some students. When they are considering the furniture and necessities for their new home, they may realize that they know a place where the stuff are in good condition and price is reasonable. Also, we will pay attention to the weather forecast those days since the weather condition is crucial and fundamental for us to hold this event successfully. We will start advertising much earlier, probably 3 weeks ahead. In that way everyone can have enough time to prepare to sell. We also should advertise through more media. Not only by our own posters, but also the Towers, the campus radio, SGA and all other organizations. We should also invite faculty and the campus center to participate in our event. Last but not least, since this year is only a beginning, next time we will have a much stronger preparation team, and we will have more people to help carry out our event. We will provide better service to students by distributing surveys first to ask them what they expect us to do to make this event an event that they like, and their advice and suggestions. We’ll also bring those incentives into reality, such as free ice-cream, free pizza and soda and etc. We should invite the campus Pop Band to play for us on a particular day, and play music from the beginning to
the end. It is people that make an event great, so the management team next year should ask their friends to come to the event, and let their friends to ask those friends of friends. They can also invite faculty members, staff and every employee to come to the events. The success of the event grows exponentially as the number of people who come to the event zooms. And the contributions that the market has bought to our community and our mother earth will become incredible. We believe WPI needs our event, as our campus is becoming more and more green and sustainable and beautiful.

Conclusion

We have an acceptable result from our first Flea Market. We are proud of our previous works, but we also notice that we have a lot more to be improved in the following years if the Flea Market will become an annual event for WPI.

The 3R Student Flea Market faces two challenges in the future: providing better service to students and community, and attracting more and more students to participate in the event. The market managers are well positioned to assist those sellers and buyers through its current role, but they may face more challenges in the future as well. Our findings and recommendations include doing advertisements earlier, using diversity ways to advertise such as radio, other student organizations and faculties as well, encourage students to sell by providing more service and convenience, uniting other events like the one held by some ECE students, choosing a good time, not rainy or during the mid-term or finals, inviting other organizations to hold the vent together, or share the Quad with
other student organizations. We also suggest that the event may be put into the academic calendar as an official annual event; letting the Environmental Studies Program get involved will also benefit the event a lot.

We list in our Appendix one interview from a student seller, who had the highest revenue during our event to share his opinion and suggestions for our event. We believe those experienced sellers will bring this event out and makes it better and better in the future.

Works Cited


Appendixes

Picture of market manager t-shirt

Poster
Our poster designed by WPI Marketing Department is as follows:

Signage on the quad
The signage, requested by Bartlett Center, was designed as following:

1st ANNUAL WPI 3R (REDUCE, REUSE, RECYCLE)

STUDENT oFLEA MARKET

On the Quad

10am- 3pm, April 5th-9th

To celebrate Earth Day, WPI’s 1st Annual 3R Student Flea Market is held on the quad. The Student Flea Market is a place where all WPI students can sell or trade stuff which they no longer need. Instead of throwing it away, it would be beneficial to both the environment and the WPI community to have things traded and sold within the community.

The idea of 3R Student Flea Market was originally focused on seniors, who will leave the community soon and may have a lot of stuff which they probably do not want to take with them.

By selling and trading, students can turn their stuff into cash. At the same time, others can get things they want by paying less than half the price. Only WPI students are allowed to sell and trade, but all WPI community members and people from outside WPI are welcome to participate!

Agreement
Any student seller participating in our student flea market is required to obey all the terms in the Agreement. A copy of it is as the following:

WPI 3R Student Flea Market Agreement

PLEASE READ THE FOLLOWING AGREEMENT CAREFULLY

BY SIGNING BELOW YOU AGREE TO BE BOUND BY

ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT

1. *Only* WPI students are allowed to sell items in the market (seniors are encouraged to participate).

2. Tables *are not permitted*; goods may be sold on blankets or tarps.

3. The market is restricted to secondhand goods; entrepreneurs *are not allowed* to sell new items.

4. Explosive, toxic, chemical, and dangerous goods *are not allowed*. 
5. Sellers must remove their items and pick up any litter when they leave the area.

6. Food or beverages *are not allowed* to be sold.

7. Goods may be sold and/or traded *only between* 10am and 3pm.

8. If there is any emergency, you must notify the Student Flea Market manager.

I hereby agree to abide by the terms and conditions as provided above. I understand that any violation of the aforesaid terms and conditions may result in the revocation of my privileges to participate this event and/or disciplinary action may be taken. I further agree to report personally any misact* by other individuals to the Student Flea Market manager and/or supervisors.

*Misact: any violations of this policy, or any inappropriate action that is not included in the policy but has the effect of causing harm to another or to his/her property.
I attended the Flea Market on Monday (~4 hours), Wednesday (~4 hours) and Thursday (45 minutes). I made about $285 in cash and I received a video iPod and an Xbox with 17 games in trade for some of my things.

I love trading old junk that I have a habit of accumulating, I like meeting people that have similar interests in electronics and I truly value the learning experience that the whole flea market/yard sale event brings about. I find that the ATC's annual computer/electronics yard sale in the Odeum is much more efficient in terms of getting people involved (both in the selling and buying sense, and particularly people from off-campus) although having the flea market on the quad did bring in a lot of unsuspecting customers that I ended up doing business with. I think that putting up signs is crucial in getting the word out. It was wise to use the quad because of the lack of upfront advertising, so the maximum number of people were reached mostly through spontaneous collision as they were walking toward Morgan Commons and they happened upon a yard sale. Two of the days that I was selling things, many students asked what I was doing and I attribute this to the fact that most students probably don't read their e-mails, not to mention that I was the only one out on the quad other than the proctors on those two days (Monday and Tuesday), so I definitely looked a bit odd. I hope that the yard sale comes back next year. Although it didn't receive much attention overall, I think that my success with it should serve as a testament to all of those who did not participate, several of whom expressed their regrets to me for not having done so themselves after they saw how lucrative of an experience it was for me. I am very grateful for having had the opportunity to participate.
I think that because WPI is so inclined toward computers and electronics, marketing the yard sale toward those markets would have been wise. For next year, I would certainly take into consideration the marketing tactics of the annual "ATC Swap Meet" here at WPI and definitely the popular "Flea at MIT" which occurs every month of the summer.

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**The Poster on our Signage**
WPI First 3R Flea Market

Recycle  Reduce  Reuse

A PLACE WHERE YOU CAN SELL ITEMS AND TRADE ITEMS!