

# Sustainability U:

## A Sustainability Literacy Marketing Plan

Created by the TH Committee

Harry Ehrlich

Daniel Kaplan

**Ryan Samuels** 

**Dean Simms-Elias** 

Alex Praschma

April 5<sup>th</sup>, 2013

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#### **Executive Summary:**

Issues surrounding sustainability are often pushed to the periphery of society because there is a lack of holistic understanding about sustainability. Cornell's Atkinson Center for Sustainable Future states "Sustainability education transcends individual disciplines while resting on a foundation of disciplinary understanding." This quote speaks to the multidimensional nature of sustainability. Commitment to sustainability must be a lifestyle choice that people from every business industry, university, and region must embrace to have any chance of generating a significant collective effort to address sustainability education to mold future leaders into sustainability leaders. We believe the initial push to implement sustainability education as a normative goal in higher education must occur freshman or sophomore year when future leaders are the most malleable. The molding of young, eager minds through a first year multi-faceted seminar in sustainability is essential. Each student will bring an understanding of sustainability to their major, internship, campus life, and eventually their professional industry.

A persistent issue surrounding sustainability is the lack of a centralized force to coordinate the efforts of the many "green", sustainable, and environmentally conscience organizations that have similar goals. This is no different in higher education, especially on campuses across a diverse state such as New York. Through our marketing, communication, and educational efforts, *Sustainability U* (*SU*) will become the force that fuels a coordinated, collective effort to shift sustainability literacy from the periphery to the forefront of higher education.

#### **Sustainability Literacy: Defined**

- To be able to recognize, analyze, and think critically about sustainability issues.
- The ability to act in favor of sustainability.

### **Target Market:**

- Initially, our target market will consist of undergraduate students from our 6 pilot institutions across New York.
- Eventually, we will expand our target to undergraduate students from all four-year institutions of higher education in New York.

#### **Freshman Seminar**

#### **Overview/Structure**

The freshman "seminar" class titled *Sustainability U* will be the central mechanism that helps ensure sustainable literacy for every student on each campus it is launched on. While the actual seminar may be located in a large lecture hall, the seminar will be anything BUT a "lecture" based course. On the contrary, the class will serve as a meeting point for students to gain rudimentary understanding of sustainable concepts, collaborate with peers, and collaborate with administrators. The structure of this one semester required, not-for-credit seminar would include minimal lecture by the faculty to ensure freshman students have a basic foundation of knowledge in sustainability that will allow them to be successful when using sustainability theory; with the rest of the semester devoted to executing a successful group sustainability project described below. Each seminar will be led by a single or group of sustainability "experts". We give recommendations in our appendices about how to find experts to lead the seminar for little cost and for potential sources of funding.

## Customization

The *Sustainability U* program will be "customized" to each campus it is launched on. Customization is a key facet of the seminar because it will allow sustainability to move from an abstract concept to a concrete reality in a way most students have yet to experience. Students will be encouraged to pursue a group topic that is relevant to their area of study, community, campus,

or future industry. This will provide the foundation for each student to recognize and analyze issues surrounding sustainability in his/her area of study. Customization of *Sustainability U* will also encourage institutions to implement the program under terms that fit the unique circumstances of each school. We give recommendations in our appendices on how to apply the "skeleton" *Sustainability U* program to each of our 6 pilot schools.

#### **Group Project**

The central task for every *Sustainability U* freshman student will be to organize a team of 2-7 students in the seminar to analyze, investigate, or actually conduct a project related to sustainability that is pertinent to the campus, community, town, city, or area of study the student is engaged in. While the seminar will "mandate" participating in a group that tackles a real life issue, the mandate will end there. It will become the duty of each student group, in consultation with faculty, administrators, and others, to find a topic that relates to the campus, community, or area of study the students have just started to immerse themselves in for the next 4 years. There is symbolic meaning to the idea that the first project assigned in college involves sustainability. It sends the message that sustainability education is a priority and "sustainability literacy" is a vital aspect that will be stressed in undergraduate education. *SU* will be the educational impetus that gets previously indifferent students open to the messages that the NY State Sustainability Education Working Group wants to send. The seminar will also serve the impetus for students to get involved in the *Sustainability U* app and all the functions it features.

#### **Potential Roadblocks**

We understand that an undertaking with the lofty ambitions of the NY State Sustainability Education Working Group ("to identify and implement ways that will ensure that every person who graduates from one of the 150 private and public colleges in New York is knowledgeable and literate about sustainability, its relevance and importance") cannot be accomplished overnight. It takes a commitment from stubborn universities with varied missions, from current students, and by society in general to destroy the stigma that sustainable issues can be passed on to the next generation of leaders. The stigma that sustainability awareness is a secondary issue that deserves to operate on the periphery of higher education is a significant roadblock in the battle to gain the critical mass of awareness that spurs change.

#### **Ideological Disconnect**

We believe the buck can stop with *Sustainability U*. The combination of a freshmen seminar (working group) with other marketing and communications strategies centered on the brandnamed "*Sustainability U*" will begin to move the needle in a system of higher education that appears to be satisfied with sustainability education as is. This "resistance, hesitancy, and inaction" is in part due to the fact that the overwhelming majority of society, media, and industry leaders do not have a foundation in sustainability education. Business leaders have been engrained in revenue maximizing practices for far too long, media conglomerates do not consistently cover "non-sexy" sustainability topics, and the tendency to revert to the status quo in society leaves future generations saddled with enormous problems.

#### **Top-Down/Bottom-Up**

The beauty of *Sustainability U* is that it has both top-down and bottom-up principles that will help address the two main roadblocks that inhibit innovation in sustainability. The top-down aspect of *SU* will be that it serves as a centralized force that coordinates the many "green" sustainability groups, initiatives, programs, forums, and conferences that have similar goals. Leveraging the power of many sustainability groups will provide the lobbying power and collective force that can overcome stubborn systems of higher education. The bottom-up aspect will address the stigma that sustainability education is not as important as revenue generation and other "normative goals". The goal is to deeply engrain principles of "sustainability" in students. Students will be empowered to think critically about sustainability issues in their area of study through the values imparted by *Sustainability U*.

#### Sustainability Infrastructure

We believe the "infrastructure" to start a top down campaign such as *Sustainability U* has never been better. We have reached a "tipping point" in society due to the critical mass of dissatisfaction with sustainability education to institute a program such as *Sustainability U*. The niche groups of students, faculty, and universities such as the Bainbridge Graduate Institute that are currently leading the charge in the world of sustainability have gained a strong enough foothold in communities, college campuses, and media influence to leverage the necessary supplementary help to implement *Sustainability U*. This leads in perfectly to the bottom-up

aspect of Sustainability U because the lifeblood of the program lies in the 18-22 year old students that we are targeting so specifically. A program such as *Sustainability U*, which is perpetual by nature, is best fit for meeting the rapidly changing needs in sustainability because it expands at an exponential rate if instituted correctly. 18 year old freshman, aka future leaders, will gain awareness and understanding of sustainable issues that most directly influence their community, school, area of study, eventually their career or industry. Here in lies the "trickle-down" effect of Sustainability U. At first, it appears to be a mandated program that a student simply wants to "get through". But, it becomes, the foundation of understanding in sustainability that gives each student the unique ability to think critically about the sustainability issues in the area of study, industry, or professional world they will eventually thrive in. The key is that these freshman students embrace the lifelong task of considering sustainability in aspects of their education, internship; job, career, and industry that previously have been ignored. We believe students will embrace Sustainability U because it can be customized so well to the unique and moldable minds that enter institutions of higher education across NY. As Sustainability U expands and endures over the years, graduates of *Sustainability U* will rise to leadership positions in higher education. The principles engrained in students during our SU seminar will hopefully organically trickle "down" and come to be accepted as the status quo in higher education.

#### Sustainability U Brand

We envision *Sustainability U* evolving into a separate entity, "University", all students in NY identify with. Entrance into the *Sustainability U* classroom will symbolize entrance into a larger "community" of graduates, current students, business leaders, professional leaders, celebrities, policymakers, professors, and people of all likes that have one main thing in common: the engrained commitment to sustaining sustainable literacy triggered during *SU*. This may sound lofty, but we believe years down the road, *SU* will become status quo, in that it is not viewed as a radical or new idea. Instead it will be expected, embedded, and engrained into a society that places a high priority on sustainability. And this SHOULD be the expected overall end game of any marketing/awareness plan with the mandate to provide tens of thousands of students per year with sustainable literacy. Literacy in any actual language is status quo. It is expected. It is gained because everyone around you speaks it, breathes it, and lives it. Sustainability U will eventually function that seamlessly in the sphere of sustainability education.

The *Sustainability U* brand will be the mechanism that allows sustainability to infiltrate the elusive social/interpersonal aspect of college that takes place away from the classrooms, and away from administrators. It takes place on Facebook, Twitter, Instagram, at bars, at parties, at social events, and on mobile apps that give the college experience a digital world. With the creation of the *Sustainability U* app, it will now take place on every student's computers, tablets, and smart phones. Sustainability literacy will physically be in the palms of students through an individual social sustainability network.

#### Features and Functions of the Sustainability U App:

- **Discussion Forum/Blog:** The discussion forum will allow students from different schools to connect and discuss the individual projects they are working on in their campus-community. This feature will give students the capability to discover what types of projects are going on across New York. We believe this feature will emphasize to students that *Sustainability U* is a larger movement that is embraced across all regions of NY. A secondary purpose of *Sustainability U* is to embed a holistic line of thinking into a majority of undergraduate students that do not have the ability to unpack a complex situation and think critically to produce recommendations for solving real life sustainability issues.
- **Photo Section:** The photo section will allow students groups to give visual updates of their progress. Photos will allow group projects to "come to life" and put a face on all the different projects undertaken of students across NY.
- Video Section: Student uploaded videos that describe group progress will be centralized in this feature. The video section will allow the larger *Sustainability U* community to collaborate, give recommendations, and network through video. Both the video and photo features of the app facilitate our proposed social media marketing campaign described later on. The *SU* app allows the New York State Sustainability Education Working Group to bypass resistance from institutions and directly market to students.
- **Twitter Feed:** The 4<sup>th</sup> feature of the app will be a scroll of the official *Sustainability U* twitter feed, @SU\_IC2013(Look us up!). This can function as a tool for the New York State Sustainability Education Working Group to provide messages directly to the target market of undergraduate students across NY.

\*Screenshots of our app can be found in appendix B. We developed the *Sustainability U* app on theappbuilder.com. While it is not a functioning app that can be downloaded, it does give an idea as to what the app will look like\*

We want the *Sustainability U* app to function as a one-stop-shop for all things *SU*. The app will provide a tool for all *SU* students to connect, collaborate, and communicate. This connectivity is a key aspect of our app and overall plan. Students will be given the ability to gain diverse knowledge, perspectives, and lines of thinking from peers. The *SU* app creates a situation that allows messages to be delivered from *student-to-student*, as opposed to *professor-student*. This distinction is crucial. The New York State Sustainability Education Working Group is made up solely of professors, administrators, and authority figures. But, the *Sustainability U* app will be full of student content. This will be a crucial tool to reach the minds of students that are naturally more receptive to the ideas of peers.

## Social Media Marketing Campaign

#### Social Media Channels:

#### Twitter: @SU\_IC2013

Creating an effective social media presence on twitter is an art that takes diligence, time, and constant attention. The key for *Sustainability U* on twitter is to make intimate and personal connections with other sustainability initiatives, environmental programs, and our target audience of NY college students. We have already followed and interacted with a number of sustainability organizations that share the goals of NYS Sustainability Education Working Group. Compiling a list of accounts to follow that keep us up to date on relevant news in the world of sustainability, higher education, and sustainability literacy is a gradual process. We must enter the existing sphere of sustainability on twitter with knowledgeable, interesting, and well-timed tweets that gain desired attention. Our presence on twitter is the most visible extension of the *Sustainability U* brand. Strategic interactions with established sustainability twitter accounts will gradually build a list of followers that match our target audience. This will be the task of the NYS Sustainability Education Working Group during the 2013-2014 period.

#### YouTube: Tree House Committee

Our reach on YouTube will help facilitate intimate relationships with students and organizations. The ability to see the involvement of students in campus-communities serves as a point of motivation for prospective *Sustainability U* students and legitimizes the efforts of *Sustainability U* to prospective NY institutions of higher education. The combination of our YouTube presence and Twitter presence leaves open the possibility that students from institutions not in our pilot program will be aware of *Sustainability U* and lobby their own administration to inquire about *Sustainability U*.

#### Blog/Discussion Forum: www.sustainabilityu.blogspot.com

Our blog, which can also be accessed through the discussion forum tab on the *Sustainability U* app, will be a running forum of student projects and interactions between student groups. This will function as a point for collaboration for *Sustainability U* students.

#### **App:** Sustainability $U \rightarrow$ link to our app.... <u>http://myapp.is/sustainabilityu</u>

The *Sustainability U* app will be the central marketing and communication tool that can be utilized by the NYS Sustainability Education Working Group. The app has enormous potential to connect with students because it will be located on student's iPhones, androids, and tablets.

Leveraging the social media reach of *Sustainability U* into a viral social media marketing campaign is essential to gaining the critical mass of support and enthusiasm from students that makes *Sustainability U* a normative program in higher education.

## <u>Sustainability U Evaluation and Student Follow Through</u> Freshmen Year:

Freshmen students participating in the *Sustainability U* program will be evaluated based on both qualitative and quantitative measures. Qualitative measurements will include successful follow-through on the group project and activity updating group progress on the app. This will be determined by the individual seminar "experts" leading the seminar. Our quantitative measurement will be a standardized assessment made by the NYSSEWG that *SU* students take at the end of their freshmen, sophomore, junior, and senior years. The survey will be designed to measure the "sustainability literacy of students. The Association for the Advancement of

Sustainability in Higher Education is currently developing an assessment and approaching institutions about their interest in a standardized "sustainability literacy" assessment.<sup>1</sup> Gradual increase in sustainability literacy from freshmen through senior year is an important tool for the NYSSEWG to use when lobbying other institutions to implement *Sustainability U* 

#### Sophomore and Junior Year:

After successful completion of the seminar, students will have the obligation to serve in a mentorship capacity to a *Sustainability U* seminar group at least one time during sophomore or junior year. This will keep students invested in the *SU* program and app after completion of the seminar. Keeping students invested in the messages of *Sustainability U* is half the battle when trying to reach the saturated minds of 18-22 year old college students.

#### Senior Year:

Senior students that have showcased the willingness and ability to invest time in *Sustainability U* will serve in a TA volunteer capacity to *SU* seminar classes.

At the end of fall semester senior year, students are awarded a certificate of recognition from the NYS Education Working Group signifying satisfactory sustainability literacy.

In May 2018, the  $1^{st}$  annual *Sustainability U* Conference will be held at one of the six pilot institutions. The conference is for current seniors that were part of the inaugural *Sustainability U* class. Each school selects one team to represent the school. The team that enacted the most change in the community throughout the four years will receive the  $1^{st}$  annual Sustainability Achievement award. The *Sustainability U* conference will garner positive publicity for the program, students, and NYS Sustainability Education Working Group.

#### **Phased-in Approach**

We recognize that a plan with a target market of "all students that graduate from a NY University/College" is such a large audience that it would be inefficient and ineffective to target all at once. Therefore, we recommend implementing the Sustainability U plan with a "phased in approach" that gradually puts SU on NY campuses. For purposes of this marketing plan, we selected a sample of public schools, SUNY schools, private schools, and Ivy schools across NY to be a part of a 6 school pilot program to launch Sustainability U on. We believe the 6 pilot schools represent a diverse group of students that, as a whole, represent all different types of students and colleges across NY. The plan is to implement the program on the 6 pilot campuses and evaluate success through administrator feedback, student feedback, community feedback, quality of group projects, enthusiasm of students, and activity on the SU app. Based on the success of the program, SU can be implemented faster or slower than our timeline which gives our general recommendation. Expansion of Sustainability U will be a fluid process that occurs organically based on a number of circumstances. Of course funding, sustainability "infrastructure", and levels of resistance from institutions may also influence how SU is phased in. In the appendices below, we made specific recommendations that outline how we would apply the SU concept to each of the pilot schools. But, we believe the "tipping point" described above proves that society and higher education are begging for a legitimate centralized force such as the NY State Working Group to develop a program such as SU. The success of our pilot program, our marketing of SU, the social media reach of SU, and media coverage of the program will all be tools that legitimize SU and make our program in demand. Making connections with already implemented campus and community sustainability groups is also a must to fully extract the most out of the SU program. Established groups have funding, expertise, and a litany of ready-to-work on projects to ensure students can find a customized project that meets interests and can sink their teeth into.

The first step of our phased in marketing campaign is to implement *Sustainability U* at Columbia University, Ithaca College, Binghamton University, University at Albany, University at Buffalo, and Queens College. We give recommendations below that describe how we would apply the skeleton *Sustainability U* program to each of the pilot schools based on their unique sustainability infrastructure. (See appendix A-F).

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## Appendix A

## **Columbia University**

#### Enrollment

- 8,000 Undergraduate
- 20,000 Graduate

### Location and Demographic Dimension

- Private university
- New York City, New York

### Sustainability Infrastructure

- The Earth Institute
- The School of Continuing Education
- Columbia Water Center
- Columbia College and The School of General Studies
- School of Engineering and Applied Science
- Barnard College
- The Department of Earth and Environmental Sciences
- The Department of Ecology, Evolution, and Environmental Biology

### Achievements

- Received the prestigious Leadership in Energy and Environmental Design Gold Certification by the United States Green Building Council
- Columbia Receives Gold from Sustainability Tracking, Assessment and Rating System (STARS)
- Clean + Go Green Program Won the EPA Environmental Quality Award
- Gary C. Comer Geochemistry Building Won the Excellence in Sustainable Design Award

## Certificates/Degrees

- Certificate in Conservation and Environmental Sustainability(Non-credit)
- Sustainability Analytics (M.S)
- Sustainable Water Management (M.S)
- Executive Master of Public Administration, Concentration in Environmental Policy and -Sustainability Management (M.S)
- Environmental Science and Policy (M.P.A)
- Climate and Society (M.A)
- Development Practice (M.A)
- Environmental Health Sciences (M.P.H)
- Conservation Biology (M.A)
- Earth Resources Engineering (M.S)

Columbia's sustainability masters programs open the possibility of using graduate students as leaders for undergraduate *Sustainability U* seminar programs. This would be a free or

extremely low-cost "students helping students" program that makes *Sustainability U* more feasible to implement in the early years.

#### Student Groups

- Student Advisory Council (SAC)
  - Participate in promoting relationships between student groups, developing events and panels, and assisting with student-interest program planning.
- Barnard EcoReps
- Columbia EcoReps
  - Participate in the Green Licensing Program for dorms/campus buildings as well as continuing work with campus recycling, energy consumption, and purchasing of organic/local foods.
- Columbia Environmental Biology Society
- Columbia University Food Sustainability Project
  - Participate in managing the campus community garden and running indoor/outdoor composting programs.
- Consilience: The Journal of Sustainable Development
- Green Umbrella
- Green Business Club
- Environmental Law Society

## Sustainability U Opportunities

Based on our research, we believe that implementing a campaign to an institution like Columbia would exponentially increase the student's knowledge about sustainability literacy. There are currently numerous departments and programs that engage student awareness and knowledge in a broad spectrum of courses pertaining to sustainability. In cooperation with these departments, there are a variety of clubs that coordinate the concepts taken from courses and implement them into necessary tasks within the surrounding communities.

Implementing Sustainability U in Columbia's program will successfully congregate newly learned concepts with hands on experiences. The educational aspect will be introduced to students in the form of a required seminar that is completed before they begin to enroll in further classes pertaining to sustainability. After the first part of the seminar, the students will then be placed into groups with whom they will chose a local project or group to participate in. Due to the fact Columbia has such a strong infrastructure in regards to their sustainability program, it is foreseeable that a physically present seminar is attainable. However, a web based seminar could also be successful do to the amount of faculty within each of these departments. It is our belief that by using Sustainability U, there will be a much stronger connection between what is learned within a classroom and what is learned outside of it.

## Appendix **B**

## **Ithaca College**

## Enrollment

- Undergraduate: 6,200
- Graduate: 460

## Type

• Ithaca College is private liberal arts college located in the rural area of the Finger Lakes within the small city of Ithaca.

## Sustainability Infrastructure

Administrative Groups

- Ithaca College Natural Lands
  - Campus group that oversees the undeveloped sections of College-owned properties.
- Peggy R. Williams Center Green Team
  - Promotes sustainable workplace practices that optimize the high-performance, sustainable features of their buildings.
- Resource and Environmental Management Program
  - Guides the environmental progress of campus operations.

## Student Groups

- Resource and Environmental Management Program
- Environmental Society
- Bomber Bikes
- Take Back the Tap
- Net Impact
- Teracycle: IC Brigade
- Organic Growers of Ithaca College
- Slow Food Community
- Food for Thought
- Stop Wasting Ithaca's Food Today
- IC TOMS
- Frack OFF
- IC Animal Rights
- IC Primitive Skills Club
- IC Nutrition Club
- Labor Initiative in Promoting Solidarity

## Local Organizations

- Cayuga Nature Center
- Sustainable Tompkins
- Primitive Pursuits
- Eco-Village

- Students can maintain facilities, help with marketing, community outreach.
- NYSERDA Energy Smart Communities Coordinator, CCE Tompkins

   Students can support current projects.
- Campus Sustainability Office, Cornell University
- Center for Environmental Sustainability-Ithaca
- Sustainability Center
  - Students can help with marketing, event management.

#### Academic Programs

- B.S. Environmental Science
- B.S. Biochemistry
- B.S. Biology
- B.S. Chemistry
- B.S. Outdoor Adventure Leadership
- B.S. Physics
- B.S. Public and Community Health
- B.S. Recreation Management

#### Courses

• Ithaca College supplies a 27 page listing of all courses related to sustainability that are offered in all but one of the schools. (http://www.ithaca.edu/sustainability/docs/2011sustcourseinv.pdf)

#### Achievements

- The Environmental Studies department was awarded with a grant from the Community Foundation for the "Commitment to Change" program for expanding sustainability educational efforts.
- Awarded with the Sustainability Leadership Award by the Association for the Advancement of Sustainability Higher Education (AASHE).
- Achieved GOLD rating for the AASHE Sustainability Tracking, Assessment and Rating System.
- Ithaca College Climate Action Plan- Program to become 100% Carbon Neutral by 2050.
- Directs research for "sustainability challenges" on campus creating the opportunity
- 2 LEED Platinum buildings.

## Sustainability U Opportunities

Based on the numerous student organizations, faculty and staff groups, course offerings, and general school attitude towards sustainability, we believe Ithaca College would be interested in implementing a non-credit, required online seminar for all students. This course format makes it the most convenient, and cost efficient way to introduce all students to the concepts of sustainability in hopes to inspire them to go beyond the seminar and participate through other

outlets. Because of the city of Ithaca's enthusiasm towards this issue and Ithaca College's current commitment to establish sustainable practices and teach about sustainable topics, a classroom-based seminar is a very possible option down the road. Local experts and sustainability minded faculty already exist in the area and can serve as resources for instructing the seminar. They could also become a supervisor through which students can improve their community through hands on sustainability projects. As shown below in a portion of Ithaca College's sustainability mission statement, the college currently takes sustainability very seriously in its vision and seeks to increase student awareness and literacy about this subject.

We continue to support faculty efforts to learn how to teach in this new way with programs such at the annual Finger Lakes Project sustainability curriculum development workshop and minigrants to incent faculty to develop whole new sustainability-focused courses or to create modules for existing courses to infuse considerations of sustainability into curriculum. As part of our ongoing sustainability outreach efforts, we also share our sustainability education model with others outside the institution.

### **Environmental Leadership and Actions Network (ELAN)**

We previously identified **ELAN** as an organization that *Sustainability U* can partner with. Below is our email correspondence with **ELAN** club member and **Frack-off** co-president Ben Knowles:

Thursday, April 04, 2013 5:57 PM Ben Knowles [bknowle1@gmail.com] To: Daniel Kaplan

#### Hey Dan,

ELAN (Environmental Leadership and Actions Network) would be more than willing to allow students in your proposed student seminar to get involved with any campaign that we are working on. We are always looking for increased student participation and welcome, and appreciate, the idea of ELAN being included in this proposal

## Frack-off

Ben Knowles [bknowle1@gmail.com] To Daniel Kaplan

Hey Dan,

Frack Off would be more than willing to allow students in your proposed student seminar to get involved with our student organization, which is devoted to education and action about and against the natural gas industry that threatens our land, health and future. We are always looking for increased student participation and welcome, and appreciate, the idea of Frack Off being included in this proposal

## Appendix C

## **Binghamton University**

#### Enrollment

- 11,000 Undergraduate
- 2,000 Graduate

### **Location and Demographic Dimension**

- Public university
- Binghamton, New York

## Sustainability Infrastructure

**Educational Departments** 

- The Department of Geological Science and Environmental Studies
- The Department of Geography
- Thomas J. Watson School of Engineering and Applied Science

### Research Centers

- Center for Autonomous Solar Power (CASP)
- Center for Integrated Watershed Studies (CIWS)
- Center for Advanced Microelectronics Manufacturing (CAMM)
- Center for Energy-Efficient Electronic Systems (E3S)

## Achievements

- 2011 Princeton Review gave highest university green rating and placed on Green Rating Honor Roll.
- In 2009 joined the Association for the Advancement of Sustainability in Higher Education.
- In 2009, published its Climate Action Plan
- In 2007, became one of the first institutions to endorse the American College and University Presidents Climate Commitment

#### Student Groups

- SEAC Student Environmental Awareness Club
  - Participate in raising awareness to youth in surrounding communities about sustainable lifestyle choices to make the Binghamton area climate neutral
- SUNY-CHOW
- New York Public Interest Research Group, Inc. (NYPIRG)
- Binghamton University Food Co-op
  - Participate in raising awareness in food choices available for the students by providing a number of different organic, vegan, vegetarian, and local food products
- Friends of the Nature Preserve
  - Participate in maintaining the Nature Preserve and developing new features
- Outdoors Club

- Binghamton Animal Alliance
- SUNY VINES
- Binghamton Environmental
- Amnesty International
- Oxfam America, Binghamton Chapter
- Tobacco Awareness and Reduction
- EMO/SAC (Experimental Media Organization/Student Action Collective)

### Sustainability U Opportunities

We believe that implementing our pilot seminar, furthering student's sustainability literacy, would be effective and optimal on Binghamton's campus. There are currently several existing departments that increase student awareness and knowledge in a variety of fields all pertaining to sustainability as a whole. To aid in the support of this, there are a substantial amount of groups that integrate concepts conveyed throughout the offered courses. This allows the students to incorporate the knowledge into hands on experiences facilitated through the student groups and organizations within the Binghamton community.

Implementing Sustainability U to an educational institution such as this constructs a facilitated strategy that essentially ties the educational aspect of sustainability literacy to the hands on experience. The educational portion will be seminar serving as a gateway to learning about sustainability prior to engaging in the broad spectrum of classes that are offered. After participating in the seminar, the students will be placed in groups that will choose a specific local project to undertake or join one of the established groups on campus. Through the seminar, students acquire the basic foundation of sustainability. This will allow them to succeed when applying sustainability concepts to their everyday habits.

## Appendix D

## **University at Albany**

### Enrollment

- 12,700 Undergraduate
- 4,300 Graduate

## **Location and Demographic Dimension**

- Public university
- Albany, New York

### **Sustainability Infrastructure**

**Educational Departments** 

- Department of Biological Studies
- Department of Chemistry
- Department of Earth and Atmospheric Studies
- Department of Geography and Planning
- The Rockefeller College of Public Affairs and Policy
- The Office of Environmental Sustainability

### Student Clubs

- UAlbany Sustainability Council
- UAlbany Green Scene
- UAlbany Students for Sustainability
- THINK GREEN
- The World of Environmental Sustainability

## Achievements

- Signing the Talloires Declaration in 2006
- Signed the American College and University Presidents Climate Commitment (ACUPCC) in 2008
- Rated Silver in AASHE's STARS program
- Partnered with SEFCU and Empire State Development to launch a \$2.5 million microloan program targeted to Capital Region small business.
- Named to the President's Higher Education Community Service Honor Roll by the Corporation for National and Community Service
- U.S. Senator Charles Schumer announced a \$57.5 million federal grant to the partnership of SEMATECH and UAlbany's College of Nanoscale Science and Engineering,
- The University at Albany student group Third World Impact was recognized nationally by Newman's Own Foundation for its efforts to build a primary school for more than 500 students in Uganda.

## Degrees and Certificates (Undergraduate)

- Atmospheric Studies
- Bachelor of Arts in Biological Sciences

- Bachelor of Science in Biological Sciences
- Interdisciplinary Major: Biochemistry and Molecular Biology
- Bachelor of Science in Chemistry
- Bachelor of Science in Biology
- Bachelor of Science Atmospheric Studies
- Bachelor of Science Environmental Studies
- Undergraduate Geographic Information Systems Certificate

#### Graduate Studies

- Atmospheric Science
- Biodiversity, Conservation & Policy
- Biological Sciences
- Ecology, Evolution, and Behavior
- Molecular, Neural, and Developmental
- Chemistry
- Earth Science
- Geography
- Geological Sciences
- Environmental Health Sciences
- Geographic Information Systems
- Geography and Planning
- Nanoscale Science & Engineering
- Public Health
- Masters in Regional Planning

#### Sustainability U Opportunities

Based on the research of UAlbany and their existing programs pertaining to sustainability, we believe that implementing Sustainability U would successfully further student's knowledge about sustainability literacy. Currently, there are a number of programs and organizations that already participate in the movement advocating for student awareness. Each department offers students courses pertaining to sustainability as a whole as well as ones that can be applied to different areas of study spanning the entire spectrum of majors. In cooperation with this department, there are student oriented clubs that support the ideals and concepts taught during these courses.

If Sustainability U teamed with an existing program like this one, the newly learned concepts could be applied with hands on experiences around the campus and community. The seminar gives students an educational and social experience not typically endured by most. After completing the first few weeks of the seminar, the students will be placed in groups to integrate their new ideas with a local organization or project. Due to the fact UAlbany already has a strong infrastructure to support the sustainable movement in its institution; we believe that a physical seminar is not only plausible but could also be widely accepted and effective. However, a web based seminar could be a viable option to accommodate the strive for sustainability from another aspect. Because of the amount of highly regarded faculty with expertise in this field, it is our goal to have Sustainability U aid in complementing what is learned in Ualbany's classrooms with what can be learned outside of it.

## Appendix E

## <u>University at Buffalo</u>

### Enrollment

- Undergraduate: 19,000
- Graduate: 9,500

## Location and Demographic Dimension

- Public University
- Buffalo, New York

## Sustainability Infrastructure

Administrative Groups

- Environmental Stewardship Committee: Direct UB's efforts toward achieving climate neutrality and sustainability.
- The Sustainability Round Table: A coalition of students, and staff that works at the grassroots level to bring sustainability projects and ideas to fruition.
- Office of Sustainability: Works with a broad range of campus and community groups, to facilitate the university's Climate Action plan by 2030

### Office of Sustainability Staff

- Ryan McPherson, Chief Sustainability Office
- Jim Simon, Sustainability Engagement Coordinator
- Erin Moscati, Sustainability Education Manager
- UB Green: Provide environmental stewardship for campus facilities.

## Student Groups

- Student Association Environmental Affairs
- Environmental Network
- Environmental Town Hall

## Local Organizations

- The Buffalo Live-Food Community
  - Students could organize farmers markets, and coordinate vendors.
- NY Passive House Meet up
- Students could help with marketing campaigns, and membership.
- People United for Sustainable Housing
- Students could help with building projects, raising awareness.
- Friends and Neighbors for Sustainability
- Designing To Live Sustainably
- Students could organize local projects, or propose changes to public spaces.
- Buffalo Exchange
- Students could help with marketing and event support.
- Preservation Buffalo Niagara
  - Students could help raise awareness and help maintain preservation areas.

### Academic Programs

- Biochemistry
- Chemical Engineering
- Geological Studies
- Biology
- Physics
- Environmental Design
- Environmental Engineering
- Environmental Geosciences
- Environmental Studies
- Urban and Public Policy Studies

## Courses

- Ecosystem science.
- Management of conservation areas.
- Ethics in public policy.
- Legal policies for the natural world.
- Human well-being and the environment.
- Civic engagement.

## **Achievements**

- Climate Action Plan: UB will achieve climate neutrality by 2030
- Installation of the Solar Strand, 3,000 solar panels along main entrance.
- The U.S. Environmental Protection Agency has named UB one of its Top 10 College and University Green Power Partners.
- First Gold rated LEED building in NY.
- 5 LEED designed buildings.

## Sustainability U Opportunities

Based on the feedback, we conclude that the University of Buffalo would welcome a sustainability literacy campaign to increase student's awareness. UB's on campus student groups and the administrative groups that steer these initiatives have already taken steps to establish a program similar to Sustainability U. We assess that UB's culture and current sustainability infrastructure would make implementing the Sustainability U program including an online seminar very feasible. A classroom-based course is also realistic as there are currently a number of environmental and sustainability related faculty.

Once the Sustainability U seminar is implemented it will focus on local issues and organizations. Students will be required to complete a final project to receive credit for attending the seminar. Each student will write a research paper on a sustainable practice relating to his or her field of study. Alternatively students are encouraged to contribute to a local cause or project with the purpose of increasing sustainability locally. Having students participate in local projects of their choosing will advance their knowledge of the subject through hands on experience, while positively impacting their community and making sustainability tangible.

## Appendix F

## **Queens College**

#### Enrollment

- 14,400 Undergraduate
- 4,100 Graduate

#### **Location and Demographic Dimension**

- Public
- Flushing, New York

### **Sustainability Infrastructure**

- School of Earth & Environmental Sciences
- Urban Studies Department
- Queens College Council on Sustainability
- QCUTE 4 (QUEENS COLLEGE ULTIMATE TRANSPORTATION EVALUATION)
- PlaNYC
- Small Business Achievement Awards

### Degrees/Certificates

- BA Biology
- MA Biology
- PhD Ecology, Evolution and Behavior
- PhD Molecular, Cellular and Developmental Biology
- PhD Plant Sciences
- BA Chemistry
- MA Chemistry
- MA Biochemistry
- BA/BS Geology
- BA/BS Environmental Sciences
- BA Environmental Studies
- MA Geological and Environmental Sciences
- MS Applied Environmental Geosciences
- PhD Earth and Environmental Sciences
- Advanced Graduate Certificate in Earth Science Teaching
- GLOBE Program Certificate

#### Student Clubs

- Queens College Environmental Club (QCEC)
  - Participate in raising peer and youthful awareness/engagement on campus and in surrounding communities.
- Geology Club
  - Participate in peer engagement on campus and sustainable advertising

#### Sustainability U Opportunities

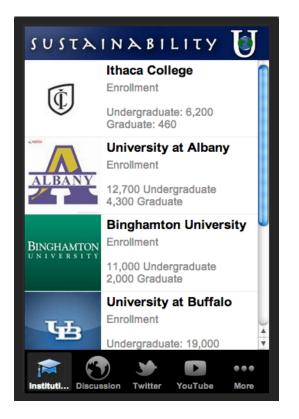
Based on research, we believe that implementing a campaign to further student learning and influence to sustainability literacy would be extremely beneficial on a campus such as this one. Due to the lack of initiatives on this campus and support for a sustainability movement, Sustainability U would implement programs, faculty, and students to take action in an effort to raise awareness and engagement of sustainable practices. There are a variety of courses offered that pertain to this field which gives us confidence that a required seminar would serve as a strong introduction to many students who may not normally be influenced during their four years.

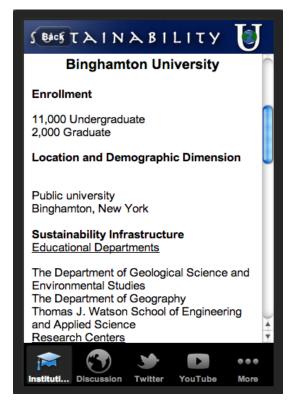
The main goal of using Sustainability U is to connect departments, organizations, clubs, faculty, and students together to create a learning experience in and out of the classroom. The first step is to incorporate a required seminar that informs students about the necessity of sustainability education and practices that could better their lives and their communities. The next phase includes guiding the students into groups where they will use what they have learned in the classroom and apply the concepts to participation in a local group or organization. Due to the obvious lack of funding and structure, we believe that a web seminar would be suitable to begin the movement on campus.

## Appendix G

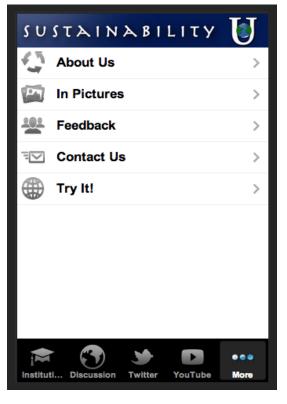
#### **Screenshots**

http://myapp.is/sustainabilityu









## Appendix H

### **Grant and Funding Opportunities**

There are a variety of educational and sustainability grants that the NYS Sustainability Education Working Group could apply for to fund its Sustainability U program. Bidding for local, state, and federal grants can strengthen the Sustainability U program and provide financial assistance to advance its presence and legitimacy. Alternative NY state and federal grants are available for schools who institute sustainable practices and educational programs. These additional grants can further incentivize colleges and universities to implement a sustainable literacy program such as Sustainability U. The following examples are available grants and opportunities that support the mission of Sustainability U and should be applied for or collaborated with.

- <u>Community Foundation of Tompkins County:</u> Organization that awards specific grants in addition to coordinating grants between local businesses and prospective programs. Similar foundations may exist in other counties.
  - Howland Grant: Supports grants in the areas of aging, youth, animal welfare, and environmental preservation in Tompkins County.<sup>2</sup>
  - \*Has the capacity to coordinate \$500,000 in donations from businesses
- <u>University Sustainability Act:</u> Put into action by the Higher Education Act this grant program provides the catalyst for colleges and universities to develop and implement more programs and practices around the principles of sustainability. One of the main goals of this campaign is to produce 3 million "sustainability-literate" college graduates each year.<sup>3</sup>
- <u>Campaign for Environmental Literacy</u>: Another force that the NYS Sustainability Education working group can partner with. The Campaign for Environmental literacy coordinates advocacy campaigns for programs which will restore or expand the federal investment in environmental education.<sup>4</sup>
- <u>Environmental Education Grant:</u> Federal grant provided by the U.S. EPA to provide money to support environmental education projects that increase the public's awareness about environmental issues and provide them with the skills to take responsible actions to protect the environment.<sup>5</sup>
- <u>Environmental Education and Training Partnerships:</u> This program delivers environmental education training and supports education professionals across the U.S. The consortium included universities and non-profit organizations that are nationally recognized leaders in education and environmental education.<sup>6</sup>

<u>Expanding Capacity in Environmental Education Project:</u> This initiative is working on linking two groups of professionals: (1) established environmental educators who have developed nationally recognized guidelines and curricula and (2) an emerging group of grassroots, urban environmental educators, who focus on environmental restoration and stewardship, community and youth development, and social justice.

## Appendix I

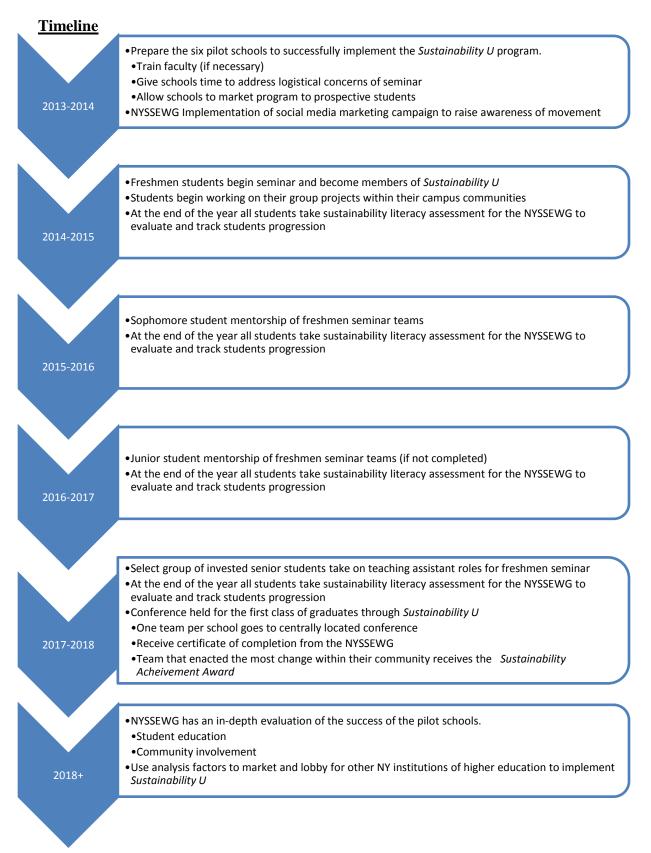
#### Sustainability U Pro forma (Worst Case)

	<u>2013-2014</u>		<u>2014-2015</u>		<u>2015-2016</u>		<u>2016-2017</u>		<u>2017-2018</u>	
Revenues										
Grant Revenue	\$	-	\$	-	\$	-	\$	5,000	\$	5,000
App Advertising Revenue	\$	-	\$	-	\$	-	\$	-	\$	-
Expenses										
Online Media Maintenance	\$	500	\$	500	\$	500	\$	500	\$	500
iOS expense <sup>7</sup>	\$	99	\$	99	\$	99	\$	99	\$	99
Android expense <sup>8</sup>	\$	25	\$	-	\$	-	\$	-	\$	-
Net Income (loss)	\$	(124)	\$	(99)	\$	(99)	\$	4,901	\$	4,901
Pro forma (Most-likely)										
	<u>201</u>	3-2014	<u>20</u> :	<u>14-2015</u>	<u>20</u>	<u>15-2016</u>	<u>20</u>	<u>16-2017</u>	<u>20</u>	<u>17-2018</u>
Revenues										
Grant Revenue	\$	-	\$	-	\$	10,000	\$	10,000	\$	10,000
App Advertising Revenue	\$	-	\$	-	\$	100	\$	200	\$	400
Expenses										
Online Media Maintenance	\$	500	\$	500	\$	500	\$	500	\$	500
iOS expense <sup>7</sup>	\$ \$	99	\$	99	\$	99	\$	99	\$	99
Android expense <sup>8</sup>	\$ <b>\$</b>	25	\$	-	\$	-	\$	-	\$	-
Net Income (loss)		(124)	\$	(99)	\$	10,001	\$	10,101	\$	10,301
Pro forma (Best Case)										
		<u>13-2014</u>	<u>20</u>	<u>14-2015</u>	<u>20</u>	<u>)15-2016</u>	<u>20</u>	<u>)16-2017</u>	<u>20</u>	<u>)17-2018</u>
Revenues										
Grant Revenue	\$	-	\$	20,000	\$	20,000	\$	20,000	\$	20,000
App Advertising Revenue	\$	-	\$	200	\$	500	\$	1,000	\$	1,200
Expenses										
Online Media Maintenance	\$	500	\$	500	\$	500	\$	500	\$	500
iOS expense <sup>7</sup>	\$	99	\$	99	\$	99	\$	99	\$	99
Android expense <sup>8</sup>	\$ <b>\$</b>	25	\$	-	\$	-	\$	-	\$	-
Net Income (loss)		(124)	\$	20,101	\$	20,401	\$	20,901	\$	21,101

Possible revenue streams for *Sustainability U* include funding from grants and advertising. For information on grants (see Appendix H). App advertising revenue is dependent on the popularity of the *Sustainability U* app. Expenses associated with *Sustainability U* include maintenance of media channels and app publishing expenses. Maintenance of our media channels we estimated to be \$500 per year. This fixed expense includes maintaining *Sustainability U*'s twitter, blog, YouTube channel, and mobile app.

Publishing expenses differ between the iOS and Android market. To publish in the Android market there is a one-time \$25 fee to get your app up and running. On the other hand, iOS charges a yearly \$99 fee to publish and run an app in the App Store.

## Appendix J



## **Bibliography**

<sup>1</sup> (<u>http://www.aashe.org/blog/assessing-sustainability-literacy-challenges-current-research-and-opportunities-collaboration</u>).

- <sup>2</sup> (<u>http://www.cftompkins.org/granting/grant-opportunities/</u>)
- <sup>3</sup> (http://www.fundee.org/campaigns/usp/)
- <sup>4</sup> (<u>http://www.eetap.org/</u>)
- <sup>5</sup> (<u>http://www2.epa.gov/education/environmental-education-ee-grants</u>)
- <sup>6</sup> (<u>http://www2.epa.gov/education/national-environmental-education-training-program</u>)
- <sup>7</sup> (https://developer.apple.com/support/ios/enrollment.html)

<sup>8</sup> (<u>http://mobiledevices.about.com/od/additionalresources/bb/Before-You-Become-A-Freelance-Mobile-App-Developer.htm</u>)