Values and Model

Objective

The Duke Community Gardening Initiative will construct and maintain an organic sustainable vegetable garden on a fifth of an acre plot next to the Duke SmartHome. The garden is designed to fill several unmet needs at Duke:

- Students and staff do not have practical knowledge of sustainable food practices
- Duke lacks a field facility to explore academic questions concerning food production.
- Duke organizations lack a location to conduct pilot projects for communities abroad.
- Duke students are not stakeholders in the process of growing their food.
- The environmental impact of the food culture of Duke are greater than necessary

Key Values

Our garden includes a package of interventions that will fulfill these needs and in the process transform the food culture at Duke. In order to fulfill this objective, the garden is planned around 4 key values. These values are:

Experiential: Duke Students and staff will gain the most practical knowledge of sustainable food production practices through hands on teaching and direct interaction with the land. This is a fundamental reason why a garden instead of any other intervention is best suited to transform the food culture at Duke. In addition we believe that the experiential model is the best way to share gardening skills with Duke that staff and students will use throughout their lives. Our commitment to experiential education is demonstrated by:

- Using student volunteer labor for the construction and maintenance of the garden
- Integrating a tour of the garden into existing Smart Home tours, allowing visitors to learn from the garden through first-hand observation and interaction with the land.
- Giving Duke students the experience of consuming local and organic food grown in the garden at On-campus dining locations.

Innovative: We believe that the garden must fulfill the need for academic exploration concerning food production. Accordingly we believe that the garden must be a place not only of sharing knowledge through experiential education but also creating new knowledge. Since Duke currently has exceedingly limited facilities for research in horticulture and agriculture we want to create a place that will provide these research opportunities and help Duke maintain its position as a great research institution. Our passion for innovation also stems from our close connection with the Smart Home. We hope to be a template for other universities and communities on the application of cutting edge technology to lead more sustainable lives. Our commitment to innovation is demonstrated by:

- $1,000 in annual funding for innovative individual or team projects that contribute to the sustainability or educational value of the garden.
- The integration of innovative water collection, irrigation and composting systems in the structural design of our garden.
- Inviting and encouraging students and staff interested in plant research to use the garden as a site for their research projects.

Collaborative: We believe that many Duke groups have important contributions to make to our mission. We will have the greatest impact by creating strategic partnerships with these groups. We strive to not be associated with any particular subset of the Duke community. Rather we hope to realize the true definition of a community garden by engaging undergraduate, graduates, staff, Trinity and Pratt in a spirit of collaboration. We will honor the spirit of collaboration by:

- A strategic partnership with the Duke Smart Home to further the smart home mission by engaging the ecosystem around the Duke Smart Home.
- A strategic partnership with the Freeman Center for Jewish Life to produce food for consumption just 50 feet away at Henry’s Place.
- Partnering with existing Duke organizations like Engineers without Borders to provide a location for pilot projects focused on improving communities abroad.

Sustainable: We believe that a sustainable garden will not only decrease the environmental impact of Duke but also impart knowledge on the Duke community that will give students and staff the knowledge and skill-sets to lead more sustainable lives. In addition to our absolute commitment to environmental sustainability, we believe that our endeavor must embrace organizational and financial sustainability if it hopes to have an enduring impact on Duke culture. We will practice our commitment to sustainability by:

- Employing organic gardening practices and analyzing the conducting life-cycle analysis of our design choices.
- Minimizing our use of material resources
- Offsetting the amount of conventionally-grown food that is transported long distances consumed at Duke by increasing the supply of local organic food supply.

Impact

These interventions revolving around our four key values will address the behavior of the volunteers that work in the garden, the visitors that tour the garden, the consumers that eat the produce of the garden and the Duke community at large. These four levels of impact can be visualized as a pyramid of impact the volunteers form the base of the pyramid while Duke is at the top of the pyramid. At each level, the garden modifies behavior patterns and reduces Duke's environmental impact while producing several important marginal benefits. The behaviors addressed at each level of the pyramid include:

- Volunteers: Acquire the skill-sets to practice sustainable gardening throughout their lives
- Volunteers: Create new knowledge through innovation that can be applied to improve the sustainability of other communities
- Visitors: Learn sustainable gardening techniques and further explore it in their lives
- Consumers: Consume healthier food that has a lower environmental impact
- Duke: Becomes more conscious of the type and the origin of the food consumed on campus
- Everyone: Becomes more integral stakeholder of the food production process
- Everyone: Interest and demand for organic and local food increases

The net impact of these changes in behavior is the transformation of the food culture at Duke. Through these behavior modifications, the new food culture will have a lower environmental impact, be more sustainable and will engage and appreciate the complete cycle of food production. In order to achieve these objectives a strong implementation plan will have to be followed. Our implementation plan is divided into what has to be done, and who will do it.
Moving forward

What has to be done: In each month from January to May 2009 pivotal incremental gains towards the project objective must be made. These gains include:

- January: layout design complete, designs for structural features finalized, seeds purchased, soil testing finished, final program design complete, volunteer schedules created, purchase and acquisition of construction materials and other supplies begins
- February: construction of structural features underway, first starts planted
- March: starts planted, structural feature construction complete,
- April: Garden finished, official opening, beds planted
- May: Garden maintained and transition into summer maintenance
- Summer: Garden maintained
- Fall: plantings, maintenance and harvests

These tasks will be coordinated and led by garden participants holding the following positions: Education Coordinator, Information Coordinator, Operations Coordinator, Project Leaders, Volunteer Coordinator