

Community partnerships and place-based collaborations: adventures in layering reuse and sustainability goals in NYC

Presentation to GreenBuild 2010

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Columbia University. Environmental Stewardship.

Columbia University: Commitment to Sustainability

Environmental research and teaching at core for decades

- 24 environmental degrees, plus a concentration and certificate programs
- 33 centers of research
- “Global warming” coined here 40+ years ago
- El Niño discovered at Columbia
- RV Langseth measures ice melt in Antarctica and Greenland
- Ocean currents role in climate change discovered
- IPCC

Asthma research and public health

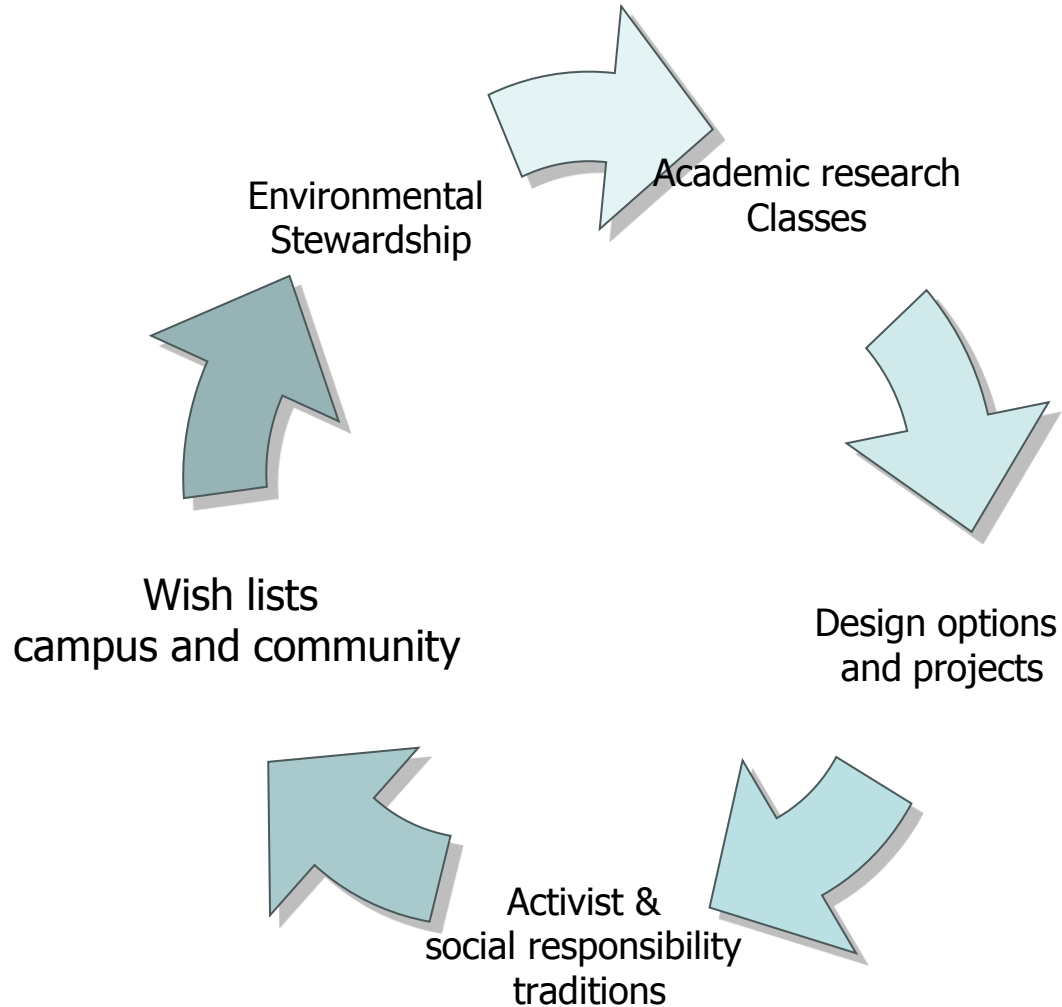
Service learning: SEAS, CBS, SIPA, Law School

Role of Columbia's Office of Environmental Stewardship

- Interdepartmental, interdisciplinary
- Bridging boundaries, facilitating new modes
- Testing and piloting
- Assessing
- Founded in 2006

- *How do you define sustainability in an urban campus setting?*
- *Networks and entrepreneurship are key*
- *No greenwashing, rigorous standards*

Integrating Core Columbia Values with Planning and Operations



Surplus Reuse Program



Cubicles



Desks



Chairs

Available to University and local community and other not-for-profits

Pilot: Faculty House

- Faculty House = first project
- Kitchen equipment to cooking school in Honduras
- 29,495 lbs
- Faculty House: LEED Gold
 - First McKim, Mead and White LEED building
 - Only LEED Gold dining and conference facility in Manhattan
- Expanded greening to dining and catering operations



Manhattanville campus



Sustainable Campus Design

- LEED for Neighborhood Development pilot program
- Commitment to at least LEED Silver certification for all academic and residential projects
- Research facilities designed to achieve Lab 21 standards
- Memo of Understanding with the Environmental Defense Fund
- PlaNYC Challenge initiative partner



Illustrative Open Space Design

Responding to public comments

Public Space & Revitalization

- Enliven and activate West 125th Street as the gateway to the West Harlem Waterfront Park
- Widen sidewalks and view corridors on east-west streets leading to the waterfront
- Two acres of open space with 38 trees in the large square
- Avoid the construction of gates that would block pedestrian access to and through the area
- Maintain historic 12th Avenue viaduct and promoting development of an open air public market near the waterfront
- Provide accessible open spaces and promote north-south pedestrian movement through the campus

New Secondary School

- Columbia-assisted public secondary school for math, science and engineering on a site provided by Columbia adjacent to the Manhattanville campus with priority given to high performing students from the neighborhood
- Columbia's role in the partnership is to lend its academic expertise to the development of curricula

Utility Improvement Program

- Replacing outdated 19th century sewers and water mains with new systems with increased capacities, constructed to today's industry standards to benefit the community at large
- Constructing a separate stormwater system that would divert all stormwater out of combined sewer system and reduce sewage overflow

Clean Construction

Why practice **Clean** Construction?

- EIS & other commitments
- Community impact
- NYC Local Law 77
- Commitment to a stringent **Clean** Construction program
- Organizational alignment across various University departments



Reality House **Sustainable** Deconstruction

- Month long “**green**” salvage training program during the summer of 2009 to deconstruct the 3rd and 4th floors of Reality House at 637 W. 125th Street
- Utilized 35 men and women from two local job training programs
- Approximately 40 tons of surplus materials removed and 90% donated both locally and internationally



What's happened to the NEW trainees since then?

- They started their own business with advice and consultation from the SBDC at Columbia
- New York State's only green SBDC is at Columbia's School of Engineering and Applied Sciences
- Recommended for union apprenticeships

Refreshing the residence halls

- Summer 2010: 69 tons of beds and furniture from residence halls
- Now part of how we do business
- 491 tons in 2 years = total Columbia University saved from landfill

Future plans

- Expanding website functionality
 - Internal and external
 - Real time
- Improving tracking
- Setting up process for smaller jobs

Some takeaways....

Circular developments

- Define community narrowly and broadly
- Networks not hierarchy
- Keep it fluid
- Verify and monitor
- Revise
- Repeat

Find outside opportunities

- Surplus furniture and equipment
- Food banks and shelters
- Local job /contractors
- Look for ways to build bridges including with other partners
- What are the big issues in the neighborhood?
- *Address those*

Don't give up: Transformative

- If you get it right, it's transformative and empowering
- New bonds are created
- New partnerships formed
- Communities are your new best friend
- Until someone forgets
- Then you reboot

For more information on Columbia and its environmental stewardship initiatives....

- www.environment.columbia.edu

