CASE STUDY/ SOCIAL, ECOLOCIAL, ECONOMIC DEVELOPMENT STUDIES (SEEDS)

UBC Campus Sustainability Office



2008 / 2009 **CASE STUDY /** SOCIAL, ECOLOGICAL, ECONOMIC DEVELOPMENT STUDIES (SEEDS)

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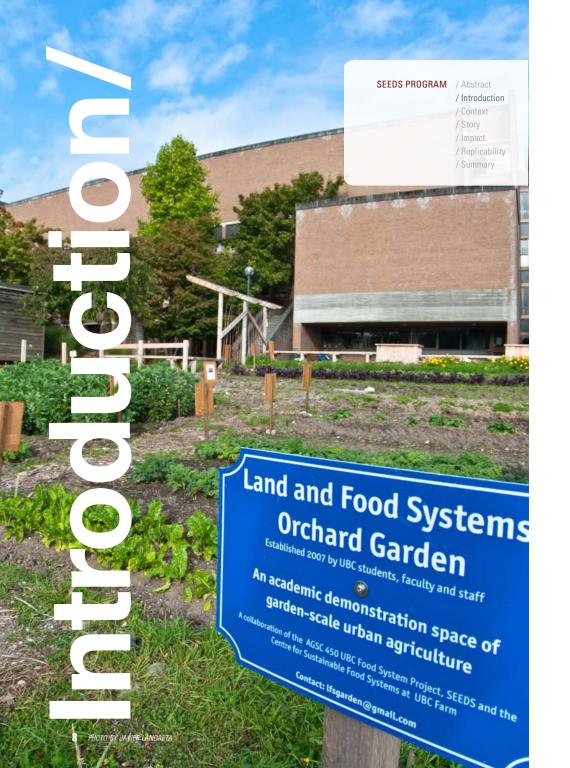
SEEDS PROGRAM / Abstract / Introduction / Context / Story / Impact / Replicabilit / Summary

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UBC SOCIAL, ECOLOGICAL, ECONOMIC DEVELOPMENT STUDIES (SEEDS) ENHANCES THE SUSTAINABILITY OF CAMPUS OPERATIONS BY COORDINATING APPLIED, ACCREDITED RESEARCH OPPORTUNITIES FOR STUDENTS IN PARTNERSHIP WITH UBC STAFF AND FACULTY.

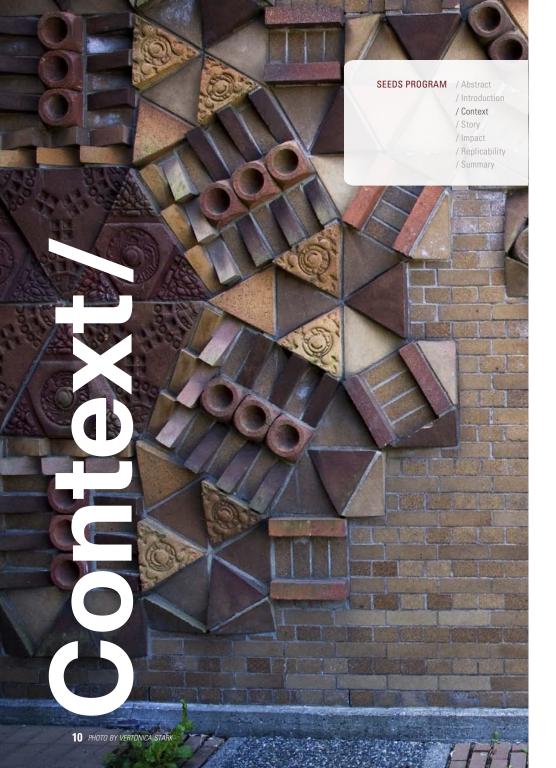
USING THE CAMPUS AS A LIVING LAB, THE SEEDS PROGRAM BUILDS OPPORTUNITIES FOR STUDENTS, STAFF AND FACULTY TO DEMONSTRATE SUSTAINABILITY ON CAMPUS AND ESTABLISH UBC'S LEADERSHIP POSITION IN CAMPUS SUSTAINABILITY.

THE STORY OF SEEDS, ITS CONTEXT, IMPACTS, REPLICABILITY AND FUTURE DIRECTIONS, PROVIDES A ROADMAP FOR OTHER INSTITUTIONS INTERESTED IN DEVELOPING CAMPUS SYNERGIES FOR SUSTAINABILITY.



SEEDS IS THE FIRST ACADEMIC PROGRAM IN WESTERN CANADA TO SUCCESSFULLY INTEGRATE THE ENERGY AND ENTHUSIASM OF STUDENTS; INTELLECTUAL CAPACITY OF FACULTY; AND COMMITMENT AND EXPERTISE OF STAFF TO CONTRIBUTE TO SUSTAINABILITY ON CAMPUS.

UBC SEEDS (Social, Ecological, Economic Development Studies) is Western Canada's first academic program to successfully integrate the energy and enthusiasm of students, intellectual capacity of faculty and commitment and expertise of staff to build a more sustainable campus. The main objective of the SEEDS program is to enhance the sustainability of campus operations and beyond through coordinating applied, accredited research opportunities for undergraduate and graduate students. Specific goals of SEEDS are to: engage students in real life research; link staff with the intellectual resources of the university; enhance teaching and community service opportunities for faculty, and build community on campus.

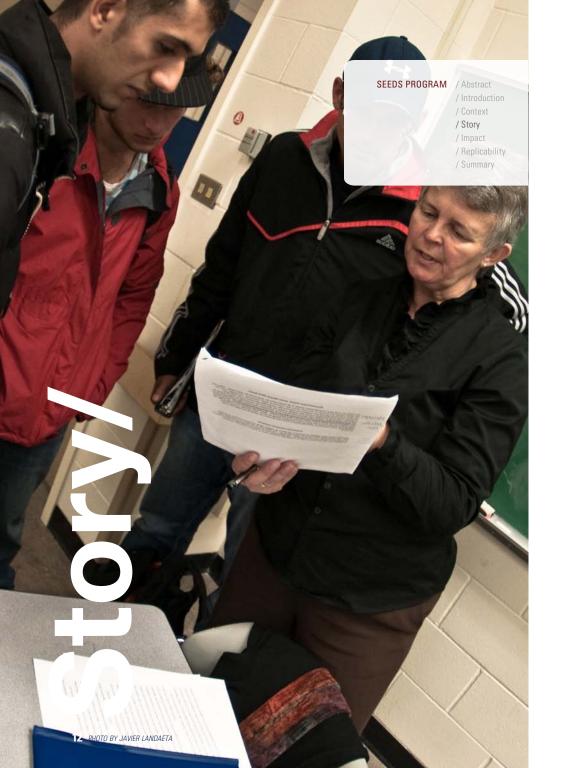


SEEDS RECOGNIZES THE FUNDAMENTAL IMPORTANCE OF STAFF INVOLVEMENT IN SUSTAINABILITY INITIATIVES ON CAMPUS.

SEEDS grew out of the Greening the Campus initiative (1994 to 1998) established under the leadership of Dr. John Robinson of the UBC Sustainable Development Research Institute. As per other "Greening the Campus programs" such as at the University of Waterloo in Canada and Tufts and Brown Universities in the United States, SEEDS recognizes the fundamental importance of staff involvement in sustainability initiatives on campus.

The SEEDS program helps fulfill UBC's guiding framework Place and Promise: The UBC Plan which states that UBC "aspiring to be one of the world's leading universities creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society and supports outstanding research to serve the people of B.C., Canada and the world." The program also addresses the Talloires Declaration – a commitment that UBC, among many other universities, has made to sustainability as the foundation for teaching, research and campus operations. SEEDS provides valuable and practical opportunities for students, staff and faculty to partner in the integration of sustainability on campus and support Policy 5, UBC Sustainable Development.

UBC CASE STUDY / Social, Ecological, Economical Developmental Studies (SEEDS)



ONCE A SEED HAS BEEN PLANTED, ONE PROJECT CAN GROW INTO ANOTHER IN WAYS THAT CANNOT BE IMAGINED.

SEEDS began by introducing the program to senior staff members interested in making changes in their areas of operation that would contribute to campus sustainability. The program's first success came by linking the university landscape architect with a Masters student in the School of Community and Regional Planning to design a campus trail to generate appreciation of place, history and landscape. SEEDS' first project, Placemaking at UBC: Creating a Heritage Trail, was well received by the landscape architect and the student reported benefiting enormously from staff input. Currently, SEEDS projects have spread across campus in most areas of operations. Campus staff, students and faculty work together on projects that address diverse campus issues in operations ranging from climate change, food security, water management, urban agriculture, energy and transportation to waste management practices and so much more. Once a seed has been planted, one project can grow into another in ways that cannot be imagined.

SEEDS employs a variety of approaches and methods to enable collaborative, applied learning. The program builds upon the pedagogical foundations of: Participatory Action Research, Community-Based Action Research, Community Service-Learning, Experiential Education, Case Study, Best Practices and Volunteer Management in all stages of the process (i.e. planning, establishing, managing, evaluating). Relationship-building amongst multiple stakeholders, whom otherwise may not find themselves at the same table, is of fundamental importance to the success of SEEDS.

In order to be considered a SEEDS project the research must involve UBC staff, faculty and students; offer academic credit and involve real-life sustainability issues in campus operations. SEEDS project ideas are ideally generated by staff who have an operational need and also by students and faculty members looking for applied research/project opportunities. The Sustainability Office is the cog in the wheel bringing together students, faculty and staff to initiate projects, provide support and help determine which project recommendations can be implemented to enhance the sustainability of campus operations. SEEDS projects can be classified as three broad typologies: projects taken on as a whole class or part of a class, individual , and group projects. The key success factors in all projects are that they:

Are achievable in terms of student time and expertise

Have staff and faculty commitment to the project.

Are based on mutual respect across the cultural divide between faculty and staff.

Have good quality control and organization including a clear agreement on the scope of the work and a product that is something that can be implemented or affect decision making.

When complete , SEEDS projects are evaluated by the instructor. Students submit a written report and often make class a presentation to instructors and staff, reports are then shared with staff.

Projects are organized on the Sustainability Office website in eight categories. One of the outcomes of the SEEDS program is the rich database of papers which allows us to build on our sustainability learning and move incrementally towards a sustainable campus.

Information from project evaluations forms the basis of an annual report. Feedback on the program from participants has been outstanding. As one student said,

"UBC IS NOT AN INACCESSIBLE INSTITUTIONAL BLOCK. IT IS A COMMUNITY OF INDIVIDUALS DOING THEIR BEST. GETTING TO PERSONALLY MEET THIS NETWORK AND PLAY A ROLE WAS HUGELY REWARDING."

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PROGRAM IMPACTS:

- 2800 participants
- \$200,000 in avoided consulting fees
- Several awards recognizing student engagement and involvement

CAMPUS SUSTAINABILIITY IMPACTS:

- 20% of UBC plant operations vehicles use bio-diesel
- Pesticide-free campus
- Design and installation of nine campus gardens
- Initiating the first campus eco-label
- Finding suppliers for biodegradable takeout ware
- Electronic records retention
- Making the campus a more attractive community that demonstrates sustainability
- Enhancing public awareness by communicating research results to specialist and nonspecialist communities on and off campus
- Creating friendly dynamic partnerships, enhancing connections and relationships between individuals and making for a richer, more caring community

Benefits for Students:

- Academic credit
- Interesting real-life learning opportunities
- Opportunity to work with staff and contribute to campus sustainability
- Input into the decision making processes of the University

"I ALWAYS BENEFIT HUGELY FROM SEEDS WHEN I SEE STUDENTS TAKING THE THEORY AND APPLYING IT TO A PRACTICAL, RELEVANT PROJECT."

Benefits for Staff:

- Access to current academic research and rich intellectual resources
- Sustainable operational solutions
- Opportunity to mentor students and contribute to community

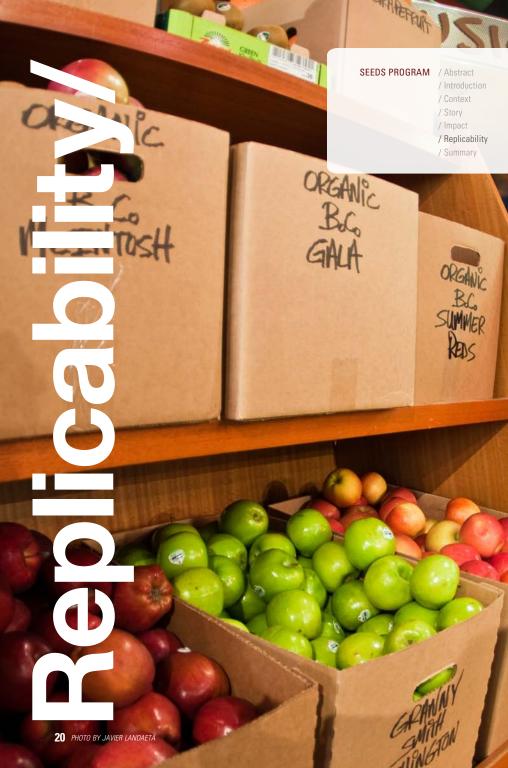
Benefits for Facutly:

- Mechanism for enriched and experiential learning
- Opportunity to work with staff and contribute to campus sustainability
- Potential for awards and recognition
- Community service

Benefits for the University:

- Long-lasting partnerships that build community and change campus culture
- Showcasing UBC leadership in sustainability
- Awards and recognition
- Financial savings in avoided consulting services

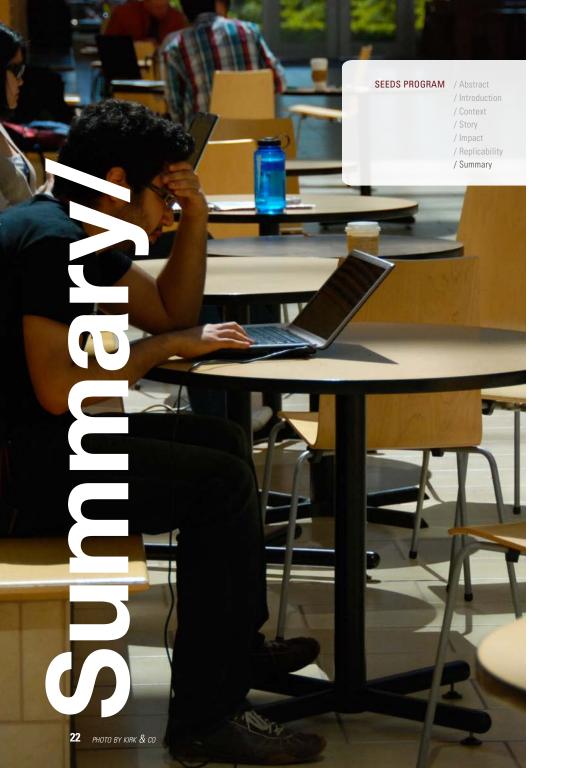
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SEEDS ENABLES THE TRANSFER OF SUCCESSFUL PEDAGOGICAL MODELS WITHIN UBC, AS WITH THE FACULTY OF LAND AND FOOD SYSTEMS' UBC FOOD SYSTEM PROJECT.

The SEEDS program is an excellent candidate for transferability to other institutions of higher education, especially as universities acknowledge the need to set positive social, environmental and economic examples for society. The SO has responded to inquiries about SEEDS from numerous universities across Canada, the United States and the world. Moreover, SEEDS enables the transfer of successful pedagogical models within UBC, as with the Faculty of Land and Food Systems' UBC Food System Project (UBCFSP) model being adapted for the Department of Civil Engineering.

The SO has a clear protocol for establishing and managing SEEDS projects, and documentation pertaining to each element of the program including: protocol; project and student registration forms; an e-library system for completed projects; evaluation forms; and recognition materials. SEEDS could likely be integrated into any college or university provided with a small budget and a program manager who has strong networking and facilitation skills as well as a keen interest in furthering campus sustainability.



IT IS CLEAR THERE IS NO THRESHOLD AS TO THE POTENTIAL OF SEEDS AS AN ACADEMIC, APPLIED SUSTAINABILITY FRAMEWORK.

FUTURE

In addition to changing the internal culture of the university, SEEDS has the potential to be taken off-campus to provide students with hands-on, cooperative learning opportunities within the broader community. Given the resources to do so, an adapted SEEDS program could also work to change the culture outside of the university.

CONCLUSION

SEEDS is an innovative and engaging program that enables real change in campus sustainability issues through the development of meaningful and lasting research partnerships amongst students, faculty and staff. Almost a decade into the program's establishment, it is clear there is no threshold as to the potential of SEEDS as an academic, applied sustainability framework.