

Project's Final Report to IDRC - February 2014

Campus Sustainability: Sharing our Knowledge for Social and Environmental Sustainability



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Introduction

On November 2012, Dawson College and the Instituto Mexicano para el Desarrollo de Ciudades Verdes S.A. (Ciudades Verdes) in collaboration with the Universidad Pedagógica Nacional of the State of Morelos (UPN Morelos) and the Escuela Particular Normal Superior Lic. Benito Juárez (Normal Superior) with the financial support of the International Development Research Centre (Partnerships Branch) began a participatory action research project, Campus Sustainability: Sharing our Knowledge for Social and Environmental Sustainability. The project's main objective was to generate and support a process of knowledge generation and sharing as well as actions to support the establishment of sustainable campuses in post secondary institutions of the north and the south.

The motivation for this project came from the recognition that one of the challenges facing education today is how to respond to the environmental crisis we are experiencing as a global community. We recognize that post secondary institutions have the potential to offer innovative solutions to some of our greatest global challenges through their teaching and research activities (Cole 2000). They are the training grounds for future leaders and incubators for transformative social action. They also have the potential, through the establishment of policies that regulate their operations, to become examples, models of sustainable living. Thus, educational institutions at all levels must become capable of understanding, informing and encouraging local and global action, become agents of transformative social action towards sustainability.

Over the last decade Sustainable Campus initiatives have emerged throughout the Global North. A series of Canadian and international declarations on sustainability in education have been developed, and many campuses have committed themselves to implementing the declarations' ob-

jectives (Wright, 2002). In Canada, the National Strategy on Environmental Education and Sustainability was established in 2002, which aims to further the integration of environment and sustainability learning into both formal and non-formal educational systems. Today, post-secondary institutions in the North benefit from extensive formal and informal networks for information exchange. Through L'Association québécoise pour la promotion de l'éducation relative à l'environnement (AQPERE), the Sierra Club's Youth Coalition's Sustainable Campuses initiative, the International sustainable Campus Network (ISCN) and the Association for the Advancement of Sustainability in Higher Education (AASHE), to name a few, a forum has been established to share experiences and best practices and to support campus sustainability and the advancement of teaching and research for social and environmental sustainability in the North. However, mechanisms to share knowledge and experiences with educational institutions in the South are lacking.

This project set out to construct tools, mechanisms and an adaptable model for North-South collaboration to support sustainability in education. We proposed to establish a process aimed at supporting a path towards sustainability in educational institutions in Canada and Mexico and to do so through the sharing of knowledge and experience.

We, the partners in this initiative, understand sustainability to encompass concepts of social justice, as well as respect for the natural environment. We believe that sustainability touches the ecological, social, political, economic and cultural realms. For this reason, even as we discuss global consensus on the definition of sustainability and how educational institutions will help lead us there, we are particularly conscious of the importance of the specific social-cultural context. If there are to be local solutions to global problems,

diverse pathways to sustainability must be discussed, explored and articulated. Furthermore, we understand that achieving sustainability, in its broadest sense, requires structural modifications of the dominant conventional model of development that are not directly in our hands, but that this should not paralyze us to move towards this goal. Furthermore, educational institutions are responsible for critically analyzing the political and economic paths that have paved the way to our present ecological/social plights.

The partners and collaborators

This collaborative initiative has several levels of cooperation between different institutions. Dawson College and Ciudades Verdes S.C. are the main partners behind this project. They are both responsible for grant writing, execution, coordination and administration of this project. The UPN Morelos, with its three campuses, Cuernavaca, Ayala and Galeana, and the Normal Superior are integral collaborators in this initiative. Through this initiative they have embarked into collaboration with each other and with Dawson College on issues of campus sustainability. Another important collaborator is Earthvalues, a Canadian non-profit organization that has provided its expertise on informal environmental education to this partnership.

Shared Dreams and Responsibilities

This project was the outcome of a shared dream between Gisela Frias and Margarita Hurtado, who through a long process brought together the partnering and collaborating institutions. For the management of this project Dawson College and Ciudades Verdes shared the following responsibilities, which were carried out by the main coordinators.

- Maintain communication permanently to favor the development of the project
- Create and strengthen links between the participating institutions
- Promote and facilitate the exchange between members of the participating institutions

In this report we describe the participatory action research process, methods, our main activities, outcomes, as well as share our main research findings. The document has been written by the project's coordinators, Gisela Frias and Margarita Hurtado, however we would like to acknowledge that the content is based on knowledge generated through a collaborative process where students, teachers and administrators from all participating institutions have been engaged.

- Conduct research collaboratively
- Design strategies to disseminate the processes of project development and research
- Plan activities and monitor their development
- Prepare reports and documents, which may serve to disseminate the results of the action research project
- Develop and implement strategies for process evaluation and project results.
- Management of resources and development the financial reports

Other responsibilities held by Gisela Frias at Dawson College:

- Promote the participation of students, teachers and the educational community of Dawson College in project-related activities.
- Establish synergy with administrative departments and offices at Dawson College.
- Coordinate the participation in the project by Sustainable Dawson.

Other responsibilities held by Margarita Hurtado at Ciudades Verdes S.C.:

- Promote the participation of Mexican educational institutions in the project, UPN Morelos (three campuses) and Normal Superior.
- Promote the building of relationships between participating institutions in Mexico
- Promote the building of relationships between participating institutions in Mexico and Dawson College
- Establish synergy with municipal, state and

federal government institutions that can help strengthen the project and contribute to the development of similar experiences.

Dawson College

Dawson College is an educational institution that offers technical training as well as pre-university programs. It is located in the city of Montreal, Quebec in Canada. It has a population of approximately 10,000 students, about 500 teachers and more than 50 areas of instruction. Among its curricula, about 20 technical courses such as nursing, civil engineering, graphic design, accounting and administration are taught. It offers pre-university programs in the arts, natural and social sciences.

Dawson College does not only strive for academic excellence, but has also pledged to pursue social responsibility and global awareness. Therefore, it has as an objective to continue to integrate awareness of environmental issues and sustainability in its operations and academic programs and to establish meaningful links with local and international community members. Environmental education at Dawson College has a multidisciplinary approach. The college offers two programs on the environment, one in social sciences and one in the natural sciences.

In August 2006, Dawson launched a two year environmental initiative through the Earthvalues Institute, a nonprofit organization specializing in environmental education. Action Conservation had as an objective to reduce Dawson College's ecological footprint. It brought together students, faculty and staff with the goal of becoming a more sustainable institution. Environmental leadership, as well as initiatives such as Dawson College's Peace Garden were at the core of the program (Earthvalues, n.d.).

In 2008 Dawson College adopted the initiative as its own and established Sustainable Dawson. Sustainable Dawson is an initiative aimed at re-

ducing the college's ecological footprint, improving Dawson's environmental performance in academic areas, infrastructure, operations and communications. The objective of Sustainable Dawson is to make of Dawson College an example of leadership in the achievement of targets within a comprehensive sustainability program, and to aim to achieve innovation and social responsibility through a collaborative learning environment (Sustainable Dawson). In 2010, Sustainable Dawson received the Excellence Award given out by Québec CégepVert.

From the beginning of this initiative, Sustainable Dawson, and its coordinators, Cindy Elliott and Chris Adam were integral partners in the development of the initial proposal as well as its implementation. Furthermore, the initiative was conceived as a means of sharing Sustainable Dawson's experience and lessons learnt with the participating Mexican educational institutions. It is important to point out that the dissemination of results and sharing of lessons learned is an important goal of this initiative.

Instituto Mexicano para el Desarrollo de Ciudades Verdes, S.C.

Ciudades Verdes S.C. is a Mexican civil organization whose main objective is to promote sustainable development through scientific and technological activities, promoting processes which articulate government and society with professional consultancy specializing in municipal, State and federal levels. Its members work to offer technical and organizational solutions as well as offer training to address environmental problems. They work to foster collaborative relationships among community members, civil society organizations, the private sectors, academic and educational institutions, national and international entities and others who work for sustainability.

The Collaborators

This project had the participation of two Mexican educational institutions, UPN Morelos and Normal Superior. These institutions participated as collaborators in this initiative, without initial direct research and project management responsibilities. However, these institutions were responsible for coordinating their own sustainability initiatives and systematizing their own experience. Each of the institutions prepared their own activity, which they have shared with us to be part of this report.

UPN Morelos: Cuernavaca, Ayala and Galeana

With the motto “Educate to Transform”, the National Pedagogic University (UPN) was established in 1979 as a decentralized state institution with campuses throughout Mexico. Its main objective is to provide teachers, all throughout Mexico, with an undergraduate education. The National Pedagogical University (Morelos) is located in the city of Cuernavaca and has two branches, Ayala and Galeana. Currently, the institution offers university education including workshops, courses, diplomas, degrees, majors and graduate degrees. All programs focus on the educational field.

The main undergraduate program includes an undergraduate degree in education, one focused on primary and secondary education for indigenous students and the undergraduate degree in educational intervention. The overall enrollment is of about 900 students (Universidad Pedagógica Nacional, n.d). The UPN Morelos was identified as a collaborator for the beginning of this initiative. Formal institutional support to collaborate in this initiative came through its administration.

Escuela Particular Normal Superior Licenciado Benito Juárez

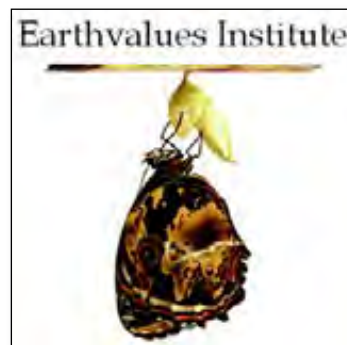
The Normal Superior began operations in 1987 as a result of a social commitment established by the

National Mexican Teacher’s Union to provide “education for the people”. Since then, generations of graduates have entered the educational field at the Normal Superior. Most have become primary and secondary school teachers in both public and private schools, and others follow pedagogical careers using the general preparation acquired. The Normal Superior currently serves a population of approximately one thousand two hundred students from Morelos and surrounding states. It offers degrees for teachers whose teaching specialization is in Mathematics, English, Spanish, Biology, Physics, Chemistry, History, Geography, Education Civics and Ethics, Physical Education and Special Education.

It also prepares those who will provide long distance learning. The school also offers within its graduate programs, a master’s degree in educational psychology and human potential and a Ph.D. in Psychology and educational innovation. Research is also an important line in the daily work of the school, along with editorial production (Escuela Particular Normal Superior Benito Juárez, n.d.). The Normal Superior was a collaborator within this initiative from its beginning. The institution’s administration, via its director made a commitment to become part of this initiative.

Earthvalues Institute

Earthvalues is a non-profit organization based in Montreal, Canada. Using a philosophy of Nature as teacher and experiential and holistic approaches to education. The organization played a leadership role in starting sustainability efforts at Dawson College and the formal establishment of Sustainable Dawson. As such, its participation in this initiative was key. Their experience in leadership for sustainability and the establishment of student driven programs for sustainability was identified as key to this project from its beginning.



Research and Action Objectives

Participatory action-research seeks to generate knowledge that can be used to support collective action and change. In its academic context, it is based on the principle that research should be useful to communities, organizations and participants at the same time as contributing to the generation of scientific knowledge. As such it has

as a primary objective to bring about social/environmental change through a research supported process (Pratt 2000). The objectives of the Sustainable Campuses initiative are framed within a participatory action research approach. Thus they incorporate both the exploration of research questions and action driven objectives through praxis.

To generate and share knowledge about the process of moving towards sustainability in post-secondary educational institutions of the North and South

- To define sustainability, identify where we are in relation to it, establish concrete goals to achieve it and performance indicators and benchmarks to evaluate our progress, at each of the participating institutions.
- To generate tools and mechanisms to share knowledge and experience between participating institutions.
- To produce an adaptable, flexible, model for North-South, Academic-Community collaboration to implement action-based sustainability education.

To create a didactical model “space” where practices and attitudes that support sustainability can be showcased to other institutions; (capacity building)

- To review and demonstrate, with regards to facility operations, proper care and use of resources such as water, soil and energy and introduce eco-friendly infrastructural changes.
- To incorporate sustainability content, with regards to education and research by designing courses on sustainability, extra-curricular activities that supports sustainability. We aim to identify pedagogical tools that support the teaching, learning and action towards sustainability.
- To establish institutional policies (administrative system and engagement) that promote sustainability.

To foster a conscious and informed attitude towards the common good, respect for values that support community and an appreciation of biodiversity

- To engage in a collaborative “hands on” initiative to learn about, foster, and conserve biodiversity, while strengthening community relations, nurturing peace, through strategies that contribute to reduce poverty and social inequity.
- To empower individuals with the values to advance in the goals of achieving social and ecological sustainability.

Methodological Approach: Participatory-action research

The sustainable Campuses: Sharing our knowledge for Social and Environmental Sustainability is grounded in a participatory action research approach. An important principle at the core of participatory action research is the breaking down of power relationships between researchers and those who are conventionally seen as the subject of research. It is based on the acknowledgement that research is not the domain of academics only. It identifies those who are conventionally seen as the “subjects of research, or persons to be studied” as participants in the design, analysis, interpretation, application and dissemination of the research (Kindon 2005). It seeks to redefine the relationship between the academic researcher and the subject of research and thus redefine the research process. It defines research as a collaborative endeavor, one based on a process that is in continuous negotiation between the objectives and processes defined as academic research and those of the participants (Kitchin and Hubbard 1999; Kindon 2005).

Research plays an important part of this project. It is an engine that guides and builds capacity for action among the members of the educational community (participants) and also a means of documenting the project’s process and thus generating new knowledge on North-South partnerships for sustainability within post secondary educational institutions.

Research on the project’s process was carried out by Gisela Frias and Margarita Hurtado as the principal researchers. It is also important to point out that the principal researchers played an important role as project managers (coordinators) and that they played a key role in ongoing documentation and systematization of the project’s process as well as facilitating the participation of others.

Methodological instruments

Research methods were designed to gather information about the different processes at play through this project and to gain insight into the different perspectives held by the participating members of the educational communities involved (participants). Some of the methods, such as the interviews, were used as conventional means of gathering data from different participants. However, others, such as the focus groups, were designed as a means of sharing and building knowledge among participants and supporting collective action.

Participant Observation

An important methodological tool used to inform the research (and action) was participant observation. We, Gisela Frias and Margarita Hurtado held multiple roles in the project, as principal researchers, coordinators and at the same time subjects of study. The use of participant observation in a participatory action research project required us to recognize ourselves as subjects who are part of the process and to adopt a critical perspective from where to seize the opportunity to detect and record relevant information regarding the object of the research (the project’s process). From this position we engaged with other project participants, observed the projects’ process and activities from within. The close relationship with others participants allowed us to promote and support ideas for project activities as well as document the process. As active observers we stepped back from the process and gathered information using participant observation techniques and tools designed for this purpose.

We devoted time and spaces to reflect on our role as coordinators. We had weekly Skype meetings where we reported to each other on the week’s activities in the Mexican campuses and at Dawson

College in Montreal. Registration of events and activities, part of the development of the project was another strategy for documenting activities to later be analyzed and interpreted. Thus, taking pictures and videos, making audio recordings, field journal writing, the annotation of testimonials, opinions, comments and ideas expressed by those directly involved in the project or that have a close relationship to it, were part of the strategy that guided our work as coordinators and researchers. The systematization of this information was channeled to updates on the project’s Facebook page and the creation of other documents that described, contextualized and analyzed project activities.

Participant observation involved spending time with Sustainable Dawson and building up a relationship with the initiative’s coordinators, who were also engaged participants in Sustainable Campuses initiative. Gisela Frias held regular meetings with members of the Sustainable Dawson team and throughout the initiative worked closely with them. Margarita Hurtado worked closely with the emerging teams engaged in sustainability work at each of the Mexican campuses, students, faculty and staff.

Semi-Structured Interviews

Semi-structured interviews were designed to gather information from a wide range of different key project participants. These included students, teachers, administrative staff and directors from all three post-secondary educational institutions who participated in the project. The interviews carried out included: Five interviews with Dawson College students who participated as interns in different participating Mexican campuses; Interviews with Sustainable Dawson’s coordinators; An interview with the director of one of the Mexican campuses; An interview with the academic dean of one of the Mexican campuses; An interview with five teachers from the two participating Mexican campuses; Two interviews with Mexican students (who were not available for the focus group carried out with students).

The interviews were designed to inform on the participants perspectives on the following issues:

1. Views on sustainability and campus sustainability
2. Their participation on campus sustainability projects
 - a. Organizational experience (intra-institutional)
 - b. Types of projects carried out
3. Inter institutional relations

In order to close the loop between research and action, the results of these interviews (via the final research report) will be shared with all project participants.

Focus group

A focus group with students from Dawson College as well as from the Mexican campuses, who participated in the project, was organized. The main objective of the focus group was to have a student perspective on the following topics: their definitions of sustainability, the student’s organizational experience throughout the project, their motivations, roadblocks and factors that supported their organizational process. The focus group took place at the UPN Galeana. It was designed and carried out jointly by Gisela Frias and Margarita Hurtado. A total of nine students participated in the focus group, one from the Normal Superior, two from UPN Cuernavaca, three from UPN Galeana and two from Dawson College. There was no representation from UPN Ayala. Participation in the focus group was voluntary. The students in-



visited to participate were identified by their peers as leaders, with high levels of participation in the project. It involved students who participated in the development of the participatory diagnosis, action plans, design and implementation of communica-

tion strategies and promotion activities aimed at achieving the objectives related to the project.

The focus group was run as a dialogue among participants. Dialogue, conducive to knowledge generation, was encouraged by the establishment of a horizontal relationship between the researchers and the participants. The role of the researchers was to create an environment of trust, to facilitate a process that encouraged wide participation, recognizing the knowledge of each of the participants and laying a foundation of respect and recognition of the richness of a diversity of opinions and perspectives.

To have greater richness in the diversity of responses and ensure equitable participation, each participant was given the focus group questions before the focus group session (questions were given a week in advance). At the focus group, the researchers facilitated the participation of all participants as they shared their answers. Once all participants intervened the researcher opened the forum for dialogue and reflection, collectively identifying common and divergent experiences.

Project Workshops and Evaluations

One initial workshop, a mid-evaluation workshop and a final evaluation workshop took place throughout the life of the project. These workshops had as objectives, not only the gathering of data, but also to provide the opportunity to build and strengthen collaborative work among participants from the different campuses and participating institutions as well as reflect on the advances of the project and to identify factors that either hinder or support the process of moving towards sustainability

Preparatory and Integration workshop (November 2012)

The preparatory and integration workshop took place on November 2012. It counted with the participation of a wide range of project participants from the different participating institutions. Two students from the UPN Galeana, one student from UPN Ayala, four students from UPN Cuernavaca and two students from the Normal Superior. There was also participation from one teacher from the UPN Ayala and one from UPN Galeana. Two

teachers from Dawson College and Sustainable Dawson's coordinator also participated. While the objectives of the workshop were established



by the project's coordinators, the workshop was facilitated by Xinemi, a Mexican non-profit organization.

The activities designed by Xinemi led the group to reflect on the values that underline the collective work that supports the objectives of the project. The workshop also provided an opportunity for participants to organize themselves and brainstorm around different forms of knowledge and experience sharing among the participating institutions. Each of the delegations gave a presentation sharing the work that has been done at their campus as part of their own sustainable campus initiative, highlighting strengths and weaknesses,



best practices and lessons learnt. Participants collectively identified capacity building needs. To review activity report for this activity see Annex I.

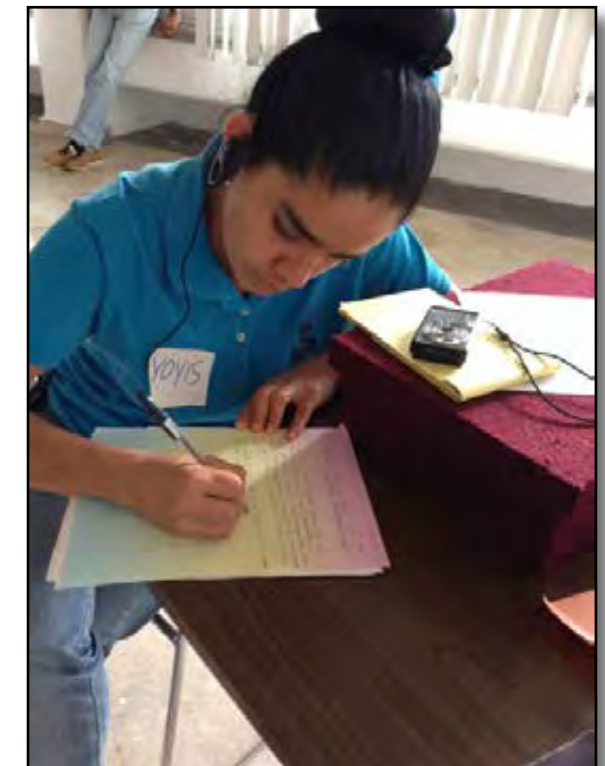
Mid-Term evaluation

On May 15th 2013 a midterm project evaluation took place at the Normal Superior, in Cuernavaca Morelos. The evaluation was designed and facilitated by Margarita Hurtado (Ciudades Verdes) and had the participation of representatives, teachers and students from the UPN (all three campuses) as well as the Normal Superior. The directors of both of these institutions also participated, Professor Concepción Tonda (UPN) and Professor Carlos Gallardo (Normal Superior). Gisela Frias, project coordinator at Dawson College, participated in the evaluation via Skype. Teresita Maldonado, representative of CECADESU, SEMARNAT and Mercedes Pesqueira, Director of environmental Education at the Ministry for Sustainable Development (State of Morelos), also participated in the evaluation.

As a research tool, the midterm evaluation provided information on the status of sustainability projects at each of the participating institutions. The evaluation also provided the opportunity for participants to share with each other institutional advancements, the identification of best practices as well as roadblocks encountered (organizational, administrative, and others), in the work for sustainable campus initiatives. The mid-term evaluation also served as a tool for action. It provided a space for collective reflection on the process carried out to date and as a means of collectively deciding on future project activities. A mid-term evaluation report was written. To review activity report for this activity see Annex II.

Final Evaluation Workshop

After twelve months from the beginning of the project we carried out a final evaluation. The evaluation took place in Cuernavaca, Morelos on November 11th and 12th 2013. Participation in the evaluation workshop included students, teachers, administrative staff from the UPN Cuernavaca, UPN Galeana, Normal Superior and Dawson College. It is important to highlight that also the Director of the Normal Superior participated for a short period during the evaluation. Mercedes Pesqueira, Director of environmental Education at the Ministry for Sustainable Development (State of Morelos) was also present at the evaluation as well as Janice Astbury, independent consultant



and Ph.D. researcher from the University of Manchester. To see independent review by Janice Astbury see Annex III.

From a participatory research perspective the evaluation was conceived as a time for reflection on the processes and for the collective identification of results, impacts, obstacles and favorable conditions. The evaluation provided an opportunity for individual and institutions to reflect on the lessons learnt and to collectively re-construct the process. The evaluation was carried out by individual reflection on several guided questions followed by a round of discussions on each of the questions. The questions were designed to inform on the participant's experience in the project in the following areas: environmental management and project management capacity; pedagogical dimension (curriculum/research); environmental (operations) impact; inter and intra institutional collaboration.

The evaluation's objectives were defined by the project's coordinators, Gisela Frias and Margarita Hurtado. However, two external evaluators were asked to facilitate the process and to provide their independent review. The facilitators, Dr. Miguel Izquierdo and M.A. Teresita Maldonado are both professionals in the education field. Teresita Maldonado is highly experienced in environmental

education. To review their independent report see Annex IV.

Ethical review process

The Sustainable Campuses: Sharing our knowledge for social and environmental sustainability obtained research ethics approval from Dawson College's Research Ethics Board. We followed the process established by Dawson College. Following we describe the process as well as some of the main challenges presented by the process.

An application for Research Ethics Approval was submitted to Dawson College's Research Ethics Review Board prior to the implementation of any research activity. The process required the researchers to obtain letters of consent from each of the participating institutions, UPN Morelos and Normal Superior, acknowledging their voluntary participation in the project as collaborators and consent for the collection of data about their institutions through the project's research activities.

We also submitted a detailed description of all the methods to be used including appropriate consent letters to be given to each of the project participants. Consent forms were designed and administered in English, French and Spanish, according to the language of each preference of the participants. See annex V for copies of consent letters received from UPN Morelos and Normal Superior, letters of approval from Dawson College's Research Ethics Board as well as a sample of the consent letter used with participants.

The requirements for obtaining research ethics approval under a participatory action-research context presented several challenges. Following we describe what we identify as conflicts between the philosophies of participatory action research and the regulatory regimes and procedures required by research ethics boards, as experienced through this project. We also share how we aimed to meet these requirements and at the same time tried to stay true to the participatory action-research process.

The core conflict between the philosophies behind participatory action research and the regulatory procedures established by the research ethics board lays in the notion of research subjects and its relationship to the academic researcher.

While research ethics regulatory procedures aim at protecting research subjects from potential harm and exploitation that they may experience as a result of the research process, and to protect the academic researcher from such possible future allegations, participatory research is based on the notion that research participants work collaboratively with academic researchers in the design, analysis and interpretation of findings. In participatory research, there are no research subjects per se. Those involved are considered to be research participants, involved in recognizing and changing their own reality and utilizing research to do so. Participatory action research works within a paradigm that attempts to make the research process a more inclusive and democratic one (Flicker et al. 2007). Thus, as Martin (2007) argues, the regulatory procedures established by research ethics boards assume an academic researcher driven model. It perpetuates the notion that knowledge production is the domain of academics researchers (Flicker et al., 2007). It also assumes a passive research subject rather than an engaged research participant. This core difference is at the basis of many other practical conflicts experienced in meeting research ethics regulations.

One of the first conflicts we faced with the regulatory procedure established by the research ethics board was the requirement to provide a detailed description of all research activities to be carried out throughout the project prior to receiving approval to carry out any research activity. This presented a conflict in terms of principle as well as practice. Under participatory research, flexibility and participants' true engagement in the research process is a core principle. As research participants engage in the process and identify their own needs, the process and activities are designed and carried out. This is a process that unfolds in the life of the research. Defining all research activities prior to starting the project implied going against this in principle and practice. Engagement with the research ethics board lead us to first of all differentiate and define the roles of all those involved in the project. We identified several levels of involvement. We recognized the role of the principal researchers and coordinators. Due to time constraints, the application for research ethics approval was elaborated by the primary researchers only. We also acknowledged the participation of what we identified as key re-

search (project) participants. These included individuals who have had meaningful participation throughout the project, while these were students, faculty, staff or others. They engaged themselves in the project through organizing at their campus and were active participants in the project's decision-making forums. We also recognized the participation of overall project participants. These included individuals who participated in one or more project activities but who were not engaged in the project's decision-making process nor were approached to provide information on their participation.

Consent was obtained from all key participants. These were obtained when project participants were interviewed or were part of a focus group or a workshop. The procedure was explained, including the possible risk for participating and issues of confidentiality. Key participants however questioned why they needed to provide consent if they were part of the research process and were involved in generating. This process was challenging as it established clear divides between the principal researchers and research participants, rather than help to establish a closer relationship where all participants work together.

A following step involved differentiating activities as "action driven" from those that were "research

driven". The blurred division between what can be considered research versus action, or project activities, made the identification of all methodological instruments difficult. This however, allowed us to continue carrying out project activities. Project activities were carried out without the need for research ethics approval. Methodological tools to gather data on these activities such as participatory observation, interviews and other conventional research methods such as interviews, focus groups were designed and these were identified as subjected to research ethics approval. The application for ethics approval was done in two stages. We submitted an application to be able to use information about the project that was generated prior to the formal beginning of the project, a secondary use of data request. We followed up by an application covering the life of the project. However, there were constant discussions with the ethics review board to determine the need to submit different project activities, which could be consider research, for ethics approval.

The process of applying for research ethics approval meant an important rethinking and redesign of the methodology used during this study. As a result we used more conventional research methods and worked towards distinguishing roles between the principal researchers and the research participants.

Activities, Results and Impacts

The project's proposal had a set of core activities designed to meet the project's objectives. The project was divided into three core stages: the participatory diagnosis, the design and implementation of campus sustainability action plans and the evaluation, systematization and evaluation stage. While these stages coincide with a chronological order, some activities overlapped across stages. For instance, in some of the campuses the implementation of sustainability projects began as early as the first stage of the initiative, while in others it did not take place until the project was formally in its evaluative stage.

The participatory nature of this initiative required a degree of flexibility in the design of the activi-

ties that would be carried out throughout the life of the project. The activities that were pre-designed were considered to be the core activities that would allow the partners develop a collaborative working relationship. These activities are linked with the partnership process and the development of spaces for the generation and sharing of knowledge among participants. Other activities, such as the actual "campus sustainability" initiatives to be carried out at each campus were dependent on this process and the engagement of the different project participants.

We find it pertinent to discuss some discrepancies from the process-oriented activities that were established in the original proposal for this project and the actual activities that were carried out.

These changes responded both to the importance of being responsive to a learning process as well as the identification of particular opportunity and/or barriers.

One important change made to the activities programmed versus those carried out was the proposed course on Peace and Sustainability that was proposed to take place at Dawson College, with a field component in Mexico. Originally, we had set out to do this course as a means of addressing issues of sustainability in course content at Dawson College and as a means of providing Dawson College students with a field experience in Mexico, to learn about campus sustainability issues on the ground. The activity was envisioned as a ten-day trip for a group of 10-15 students and three teachers. After further consideration we re-evaluated this idea and decided that we wanted to establish "internships" rather than a ten-day trip. We felt that a "tour" of issues would not provide the kind of engagement between the participating institutions that the project aimed to foster. Thus, the activity was replaced by five internships for a one-month period, for Dawson College students, at different host campuses in Mexico.

Another important change to the activities that emerged from the decision not to do a course on Peace and Sustainability at Dawson was the decision to design and carry out a course on Campus Sustainability in Mexico. The course was designed by project coordinators Margarita Hurtado and Gisela Frias and it took place in July 2013 at the Normal Superior. More details on this course will be elaborated on in the section of research

results. See Annex VI for course syllabus and memoirs.

It is also important to highlight that in many of the project activities that took place after June 2013, there was no direct participation from UPN Ayala. This campus is presently involved in a land tenure dispute and the university has lost access to its campus. Previous to this the campus, through its students, teachers and administration were active participants in all of this project's process and activities. These events however, have engaged the educational community on a very difficult and time-consuming process and their direct participation in the project has been put on hold.

Following we have compiled a table that briefly describes the main activities carried out as part of this project. Meetings and other forms of communication, for project coordination, between the participants are not detailed here. The table also identifies the main results obtained from each of the activities and highlights the overall long-term impact associated with it.

The table does not give details about all the different sustainability projects carried out at each of the campuses throughout this initiative. These activities have been systematized by each of the campuses through their own document. See Annex VII to review all four reports submitted by each of the participating institutions.

Activities, Results and Impacts Table

Stage One: Participatory Diagnosis

The project's first stage is a participatory diagnosis. It was carried out mainly from November 2012 to February 2013. However, other activities carried out throughout the length of the project contributed to the objectives of the participatory diagnosis.

This process asks participants to identify and define their own local problems and search for locally appropriate solutions. It will have as its main objectives a) to construct a local definition for sustainability, b) to identify the point at which each institution is at with respects to sustainability c) establish goals and define appropriate performance indicators to measure advancements, d) gather information to establish an action plan e) involve participants in the action plan f) design tools and mechanisms for knowledge sharing as a way to strengthen mutual capacity building and g) provide data to generate new knowledge based on a comparative analysis of the experiences of the institutions of the North and South and our collaborative experience.

Activities	Outcomes	Impact
<p>Pre-Project Workshop: Path to Sustainability June 2012</p> <p>Review and systematization of the results from the workshop "Camino hacia lasustentabilidad/Path to Sustainability" from June 2012.</p>	<p>15 participants representing the following institutions:</p> <p>Escuela Particular Normal Superior Lic. Benito Juarez, Universidad Pedagogica Nacional (Cuernavaca, Galeana and Ayala), Pilot program for Environmental Education IEBEM, CECADESU Semarnat, CIDHEM, Unidad de Manejo Ambiental (Environmental Management Unit).</p> <p>Contributed to the conceptual, theoretical and methodological capacity of the participants and their use of tools for campus sustainability.</p> <p>Greater awareness of sustainability as a concept and its links to post secondary education. Appropriation of the term and its relevance of for campuses.</p> <p>Sensibilization of the relationship between sustainability and peace.</p> <p>Elaboration of a participatory diagnosis</p> <p>Establishment of an inter-institutional link.</p> <p>Identification of Sustainable Campuses initiatives in Mexico and internationally. Established possibilities of links and exchange between them.</p> <p>Course is a mechanism for the sharing of knowledge between different members of the educational community and among different educational institutions.</p> <p>Promoted the establishment of an organizational model to involve the educational community in actions for sustainable campuses (in Mexican institutions)</p>	<p>Increased the institutional capacity to foster institutional change towards the establishment of sustainable campuses through tools such as participatory diagnosis, elaboration of action plans for the design and implementation of campus sustainability projects, organizational structures.</p> <p>Provided the conditions for future inter-institutional collaboration for campus sustainability.</p>

Activities	Outcomes	Impact
<p>Meetings and Workshops by Ciudades Verdes at each Mexican participating institution (UPN Cuernavaca, Ayala and Galeana and Normal Superior).</p> <p>Organizational leadership workshops and project planning workshops</p> <p>Implementation of participatory diagnosis (at each Mexican campus).</p>	<p>A total of 120 Mexican students and teachers participated in meetings and workshops where the project was presented.</p> <p>75 Mexican students were trained on project design using the tool "El tren de la Participación" (Participation Train).</p> <p>An organizational proposal was promoted for the engagement of the entire educational community in campus sustainability action projects. Establishment of working groups made up of student leaders in the areas of biodiversity, waste, water, energy, soil and communication.</p> <p>Several activities took place at each of the Mexican campuses geared at group/team building around environmental action.</p> <p>Several presentations were given at the different campuses and students and teachers began their organizational process. Formation of committees.</p> <p>Students and teachers began process of identifying issues they wanted to address in terms of campus sustainability.</p>	<p>The introduction of tools for project design to students and teachers to foster their capacity building in terms of actions for sustainable campuses.</p> <p>Put in practice/test organizational models for campus sustainability.</p> <p>Development of opportunities for engagement, teamwork and leadership skills among students and teachers in Mexican campuses.</p> <p>Learning to work with others (educational community) as the basis for campus sustainability.</p> <p>Student and teacher involvement in institutional projects.</p> <p>Put in practice strategies to foster an organizational process for campus sustainability.</p> <p>Application of program competencies for students learning "educational intervention" at the UPN.</p> <p>Generation of information and knowledge that can be used for the development of an action plan for campus sustainability.</p>
<p>Systematization of the participatory diagnosis and design of communication strategy.</p>	<p>Three of the four Mexican campuses systematized the results from their first stage.</p> <p>Generation of documents to share with other project participants.</p> <p>Documentation was shared widely with project participants and others via Facebook.</p>	<p>Knowledge was generated and shared about campus sustainability processes.</p> <p>Reports represented an independent vision of sustainability by each institution.</p> <p>Documentation can be used for future publications and the creation of other educational and didactical materials.</p>
<p>Two-day Preparatory and Integration workshop with teams from UPN (Ayala, Cuernavaca and Galeana), the Normal Superior and Dawson College. Coordinated by Ciudades Verdes.</p>	<p>Participation from Galeana: two students and one teacher.</p> <p>Participation from Ayala: one student and one teacher.</p> <p>Participation from Cuernavaca, four students</p> <p>Participation from Normal Superior two students</p> <p>Participation from Dawson College, two teachers and one administrator.</p> <p>Four Mexican campuses represented, one</p>	<p>Students, teachers and administrators increase their capacity to organize for campus sustainability by the appropriation of several tools, the identification of key values required for collective action, the use of indicators to measure their change.</p> <p>Sharing of practices and experiences cross-culturally generates new knowledge among participating institutions.</p>

Activities	Outcomes	Impact
<p>Development of mutually beneficial partnerships with members of the international community.</p>	<p>Mexican NGO and one Canadian Campus. Report done by the facilitators of the activity (Xinemi, NGO).</p> <p>Increased awareness about values that support collective environmental action and leadership.</p> <p>Sharing of knowledge about campus sustainability and the state of sustainability at each participating campus and their sustainability projects.</p> <p>Sharing knowledge about sustainability indicators to be used within a campus (Dawson College experience).</p> <p>Students, teachers and administrators become inspired by the work done by other campuses and the recognition of their own advances.</p> <p>Establishment of communication mechanisms for sharing of experiences among participating institutions.</p>	
<p>Visit by Sustainable Dawson Team to Mexican partner Institutions</p> <p>Visit to UPN Ayala, UPN Galeana, UPN Cuernavaca and Normal Superior.</p> <p>Project presentation and meeting with Ministry of Environment and Natural Resources CECADESU (Federal government).</p> <p>Project presentation and meeting with Ministry of Sustainable Development (State of Morelos).</p>	<p>In-situ knowledge (for Dawson College) of the natural, social, cultural, educational, socio-political, economic context under which the project is taking place in Mexico.</p> <p>Establishment of links, relationships between the different individuals and institutions involved in the project.</p> <p>Visit to and links made with governmental agencies in Mexico in the area of sustainable development and environmental education.</p> <p>Visit and all activities by the team were documented on the project's Facebook page.</p>	<p>Establishment of alliances at different governmental levels, state (Morelos), federal and international (in Mexico).</p> <p>Construction, strengthening, deepening of the relationships towards the knitting of networks for campus sustainability among participating institutions, allies and potential partners.</p> <p>Sharing knowledge and experiences with different types of institutions has the potential to expand and deepen the sphere of incidence of the project.</p> <p>Increase in terms of number of institutions involved in the project but also a qualitative change in terms of the types of institutions and their potential to foster social change.</p>

Activities	Outcomes	Impact
<p>Visit by Sustainable Dawson and Coordinating team to: UNAM's Alternative Technology's Center.</p> <p>Visit to UMA (Unidad de Manejo Ambiental/ Unit for Environmental Management).</p>	<p>In-situ knowledge of how a UMA works in order to apply some of its practices in the projects carried out at the participating campuses.</p> <p>Establishment of working relations with national (Mexican) institutions in the environmental field to begin innovative collaborative sustainability projects at the participating campuses.</p>	<p>potential establishment of working relationship between Mexican campuses and institutions in the environmental research and management field.</p> <p>Bring global awareness of environmental/ sustainability issues for the transformation of institutional practices at Dawson College (through Sustainable Dawson's practice).</p> <p>Increasing Dawson College's capacity to be a leader in anticipating and responding to the needs of society by being able to have a more global perspective on environmental issues and sustainability..</p>
<p>Visit by Sustainable Dawson and Coordinating team to "Cosas de Profes/ Teachers' Issues" Radio program:</p> <p>Interview given by Chris Adam and Cindy Elliot</p> <p>Interview given by Gisela Frias and Margarita Hurtado.</p>	<p>Outreach about the project and about sustainable campuses to a wide audience of students, teachers and staff of different campuses in the state of Morelos.</p> <p>Sustainability content in local Mexican radio programming.</p>	<p>Increased social awareness about the role of post secondary institutions in terms of social change for sustainability.</p> <p>Radio and TV programs represent and opportunity to share knowledge and experiences by two countries on campus sustainability.</p>
<p>Systematization of Sustainable Dawson's experience</p> <p>Research Activities Review of Sustainable Dawson literature</p> <p>It included the review of SD's website, Facebook page, end-of-year, participatory observation (participation in team meetings) and interviews with Sustainable Dawson's coordinators.</p> <p>The review of the literature generated by Sustainable Dawson was done by Gisela Frias.</p>	<p>Increased knowledge about the process behind the establishment of Sustainable Dawson, the organizational model behind it, areas of influence as well as the methodology behind its actions.</p> <p>Integration of Gisela Frias as a Dawson teacher into the work by Sustainable Dawson.</p>	<p>Potential generation of material to share the Sustainable Dawson experience internationally.</p>
<p>Virtual forum to share the results of the participatory diagnosis, (google group, etc). Creation of an online mural with the results of the participatory diagnosis and information about the process from each campus</p>	<p>We began a google group including representatives from each of the participating institutions.</p> <p>We established a Facebook page and a Facebook group where different project participants share activities linked to their sustainability projects and general posts about sustainability.</p>	<p>Inter-institutional connections were established with the objective of sharing knowledge.</p> <p>The development of a network that shares information, knowledge and experience in an informal and interactive fashion.</p>

Stage two: Design and Implementation of the Action Plan

The second stage of the project (seven months) includes the design and implementation of the action plan, based on results from the participatory diagnosis. Objectives are linked to bringing about changes in educational institutions towards sustainability in a) operations, b) education and research and c) administration and engagement. This stage is also linked to our objective of connecting post-secondary institutions of the North and South in a collaborative initiative to learn about foster, and conserve biodiversity, while strengthening community relations, nurturing peace, through strategies that contribute to reduce poverty and social inequity. Knowledge generation and sharing will be an important component of this stage.

Activities	Outcomes	Impact
<p>Systematization of Sustainable Dawson's experience</p> <p>Systematization of Sustainable Dawson's Experience Generation of videos about Sustainability at Dawson by Dawson College students in Spanish.</p> <p>Spanish Class: Three videos were created by Spanish students in Maria Fernanda Benavides' class (Peace Garden; Sustainable Dawson; Student life at Dawson)</p>	<p>Integration of Dawson College students into the project.</p> <p>Integration of sustainability issues into curriculum of Spanish courses at Dawson College.</p> <p>Strengthen the link, through integration of sustainability into the curriculum, between Dawson teachers and students and Sustainable Dawson.</p>	<p>Systematization allows for self-reflection, recovery of the experience lived in order to be able to share lessons and best practices.</p> <p>Systematization allows for the sharing of SD experience with others, to plant a seed to facilitate, invite other to carry out actions for campus sustainability from their own context.</p> <p>Identification and sharing of lessons learnt and best practices.</p> <p>Development of best practices and lessons to be shared among north-south partners.</p> <p>Development of student driven communication tools for sharing of experiences in an international network of institutions.</p> <p>Internationalization of Sustainable Dawson's experience.</p>
<p>Systematization of Sustainable Dawson's Experience</p> <p>Research Methods and Geography classes: two videos generated by students on indicators of sustainability and student life at Dawson College.</p> <p>Sociology class: video by Gisela Frias integration the work by Anna-Liisa Aunio (Sociology) sharing the experience of Dawson's Roof Top Garden.</p>	<p>Exploration of link between theory and practice in different courses at Dawson College.</p> <p>Generation of educational material as part of the curriculum.</p> <p>Identification of sustainability actions taken at Dawson College by students and teachers (outside of Sustainable Dawson). These included Green Earth Club (student club) and teachers teaching and involved in sustainability.</p> <p>Generation of material about Sustainability, Sustainable Dawson and Sustainability at Dawson (in Spanish)</p> <p>Videos shared via Facebook.</p>	<p>Dawson College students have the opportunity to apply the competencies acquired through their programs.</p> <p>Internationalization of Dawson College's educational practice.</p> <p>Develop social responsibility and global awareness in participating Dawson College students.</p> <p>Develop appreciation of cultural diversity in both Canadian and Mexican campuses.</p>

Activities	Outcomes	Impact
<p>Systematization of Sustainable Dawson's Experience</p> <p>Interns from Dawson College's Community Leadership and Recreational Training Program</p> <p>Diego Bermudez</p> <p>Regular updates on Facebook page on sustainability at Dawson</p> <p>Gabrielle Caron</p> <p>Video on self watering containers</p>	<p>Diego Bermudez worked for 6 hours per week for a total of 90 hours as communication's coordinator.</p> <p>Gabrielle Caron worked for 30 hours per week for a total of 450 hours.</p> <p>Integration of project activities into the curriculum.</p>	
<p>Visit by Ciudades Verdes, UPN and Normal Superior to Dawson College</p> <p>Activities included:</p> <p>Guided visit of Sustainable Dawson Projects</p> <p>Project presentation at Environmental Studies/Environmental Science Seminar</p> <p>Class presentations</p> <p>Meetings with Dawson College administrators</p>	<p>Strengthening of inter-institutional relationships between Dawson College and Mexican partner institutions.</p> <p>In-situ learning about the socio, economic, cultural context behind sustainability projects at Dawson (for Mexican partners)</p> <p>Sharing project findings with Dawson College Community (Students, teachers and staff).</p> <p>Development of first "campus sustainability training" at Dawson College, which included a series of learning activities.</p>	<p>Experiential learning opportunities provide motivation for action.</p> <p>Potential development of an outreach program to share best practices by Sustainable Dawson.</p> <p>Strengthening of inter personal, inter-institutional and international links as a basis for collaborative work towards sustainability.</p> <p>Expanding perspectives and strategies on how to move towards sustainability in educational institutions considering the north and south contexts.</p> <p>Greater impact on the dissemination of sustainability experiences as a result of exchange and the use of media that both institutions have at their disposal.</p>
<p>Celebrating our Path to Sustainability (April 2013)</p> <p>Celebration at Dawson College with guests from Mexico.</p> <p>Fundraising at Dawson College for Sustainability project at the Normal Superior.</p> <p>Interviews for Radio International by Rufo Valencia</p> <p>Margarita Hurtado and Gisela Frias</p> <p>Richard Filion (Dawson College Director General)</p> <p>Luisa Montes (Sustainability Coordinator at Normal Superior)</p>	<p>Outreach to Dawson community about sustainability projects at Dawson and in Mexico.</p> <p>Celebration of Dawson College becoming carbon neutral.</p> <p>Sustainability project at the Normal Superior shared at Dawson College. Auction of pictures part of "Our Green Neighbours" exposition by the Normal Superior.</p>	<p>Greater awareness about global environmental and sustainability issues among the Dawson College educational community.</p> <p>Informed concern for the larger good among campuses as they celebrate each other's accomplishments in a non-competitive environment.</p> <p>Increased awareness about the importance of strengthening working relationships between members of the educational community as a basis for campus sustainability action.</p>

Activities	Outcomes	Impact
<p>Workshop "Tools for Environmental Education" took place on Thursday April 25 and Friday April 26 2013, from 2:30 to 5:00 and it was also part of Sustainable Dawson's Earth Week's activities.</p> <p>Workshop was design and facilitated by Margarita Hurtado.</p>	<p>10 faculty members from Dawson College who teach environmental content in their courses participated.</p> <p>Participating faculty came from different programs including social science (sociology, geography and anthropology), science, business administration and CRLT.</p> <p>In addition, a teacher from the Mexican university "Normal Superior Benito Juárez" and an undergraduate student from the Mexican National Pedagogical University also participated.</p> <p>Capacity building of participants in environmental education.</p> <p>Tools shared for environmental education, including drawing techniques and interpretation as well as several board games (See Annex VIII for full report)</p> <p>Full report was shared widely on Facebook and through Dawson College.</p>	<p>Teachers involved expressed not only increased knowledge of techniques but also a sense of solidarity with other working for sustainability.</p> <p>Engaged teachers, with the right tools can in turn support engaged students.</p> <p>Participants reported to have felt renewed, willing and creative in their teaching practice.</p> <p>Transformation of the teaching practice can change the world.</p>
<p>Workshop "Tools for Environmental Education" took place on Thursday April 25 and Friday April 26 2013, from 2:30 to 5:00 and it was also part of Sustainable Dawson's Earth Week's activities.</p> <p>Workshop was design and facilitated by Margarita Hurtado.</p>	<p>Students and teachers from UPN Cuernavaca and Galeana, Normal Superior and Dawson College learned and shared knowledge about campus sustainability in a common learning environment.</p> <p>Capacity building in areas such as leadership, student organizing, environmental sustainability, environmental practices and technologies and others.</p>	<p>Teachers who participated in the course are integrating sustainability into the curriculum and linking it to campus sustainability initiatives.</p> <p>Student participants are actively engaged in student organizing for campus sustainability, applying what was learnt through the course.</p> <p>Educational communities that learn together can work together braking power dynamics and transforming education.</p> <p>Potential for greater impact as other Mexican educational institutions are interested in having the course given.</p>
<p>Dawson College students intern at UPN and Normal Superior.</p>	<p>A total of five internships were designed and carried out.</p> <p>Dawson students were hosted at different campuses (Normal Superior/UPNGaleana) for a period of a month.</p> <p>UPN Ayala- Kendal Birker and Gabrielle Caron</p>	<p>Transformation of educational experience.</p> <p>Engagement of the full person (student).</p> <p>Application of skills and knowledge gained as Dawson College students at the service of the global society.</p> <p>Pilot project provides insight into possible future internship for environmental studies and</p>

Activities	Outcomes	Impact
	<p>UPN Galeana- Lea Neumark-Gaudet and Dylan Davis Normal Superior Katie Wheatley</p> <p>These internships allowed us to integrate students from different Dawson College programs into the project.</p> <p>Student internships based on hands on, experience and knowledge sharing about campus sustainability.</p> <p>Youth to youth exchange and relationship building was generated.</p>	<p>environmental science students at Dawson College.</p> <p>Physical transformation for campus sustainability (linked to work done by interns and local students).</p> <p>Opportunities for the development of social responsibility and global awareness.</p> <p>Development of educational experiences that allow for the appreciation of cultural diversity.</p> <p>Personal transformation of participating students and educational community of host campus.</p>
<p>Generation of student blogs Gabrielle Caron Lea and Dylan Katie Wheatley</p>	<p>Three blogs were created. http://dawsonmexico.tumblr.com http://mexicoprojecto.blogspot.mx</p> <p>Use of writing as a tool for self-reflection and learning.</p> <p>Outreach and dissemination to wider Dawson College, UPN and Normal Superior community done by students involved in the project.</p>	<p>Information and knowledge generated and widely shared about campus sustainability initiatives.</p> <p>Facilitation of engaged learning through the use of social media.</p>
<p>Dawson Student fund raising</p> <p>Community Recreational and Leadership Training fundraised and increased awareness about campus sustainability projects in Mexico through a range of activities.</p> <p>UPN Ayala educational community send thank you video messages to Dawson College.</p>	<p>CRLT students fund raise for UPN Ayala and raise \$1000 (Canadian dollars).</p>	<p>Relationship building between students at Dawson College and students at Mexican campuses.</p> <p>Exploration of funding possibilities for campus sustainability projects in Mexico.</p>
<p>Dawson, UPN and Normal Superior, worked on a shared campus sustainability project to create "Peace Gardens/Huertos/Jardines por la Paz" initiatives.</p> <p>This was done through sharing the experience of the creation of Dawson College's Ecological Peace Garden (videos, presentations, visits)</p>	<p>Gardens created at all participating institutions. These include medicinal (herb) gardens, vegetable gardens and cactus gardens.</p> <p>Gardens were created by the educational community's collective work.</p>	<p>The activity supported knowledge generation, sharing, valorization and conservation of biodiversity.</p> <p>Symbolic spaces for peace generation in educational institutions.</p> <p>Collective work generated feelings of belonging and strengthened community relations among students, teachers and staff.</p>

Activities	Outcomes	Impact
<p>Visit from Dawson College to Normal superior to work on Peace Garden.</p> <p>Cindy Elliot, Sustainable Dawson's coordinator and creator of Dawson College's Peace garden visited Mexico for two weeks to support the creation of a Peace Garden at Normal Superior.</p>	<p>Shared methodology for community building through gardening projects.</p> <p>Creation of a Peace Garden at the Normal Superior.</p> <p>Workshops to appropriate theoretical and methodological, technological tools with axiological approaches that support sustainable practices.</p>	<p>Opening of spaces to speak about, work for and live peace.</p> <p>Experiential learning in the context of collaborative work and the sharing of knowledge in different socio-cultural and environmental contexts.</p> <p>Training of individuals with ethical principles that have the potential to transform their lives and that contributes to transition to sustainable societies.</p> <p>Internationalization of Dawson College experience in community building as a basis for sustainability projects (Peace Garden)</p>
<p>Visits and support given by the State of Morelos' Water and Environment Program. (CEAMA) for sustainability projects at participating educational institutions in Mexico.</p>	<p>Done at UPN Ayala, Galeana and Normal Superior campuses</p> <p>Knowledge was generated and shared about the importance of biodiversity.</p> <p>Actions like foresting and reforestation with native species were done with the participation of the entire educational community.</p> <p>Increased biodiversity and increased capacity for CO2 sequestration.</p>	<p>Activities promoted knowledge, valorization and conservation of biodiversity in the campuses and the region in general.</p>
<p>Campus Sustainability Projects At Dawson College, UPN Ayala, UPN Cuernavaca, UPN Galeana and Normal Superior.</p> <p>Several activities ranging from organizational to hands on work were involved in the implementation of their action plan for campus sustainability at each campus. See attached report from each of the participating institutions.</p>	<p>A series of sustainability projects were carried out at each of the participating institutions. A detailed report from each institution is attached.</p> <p>Projects were in the following areas: Curriculum and Research Operations: (water, energy, waste management, biodiversity, food security) Policy and community relations: Establishment of a Sustainability Coordinator post (Normal Superior).</p> <p>Workshops to learn together about several issues related to sustainability.</p>	<p>Projects impacted the physical environment of each of the campuses, transforming these into teaching spaces about and for sustainability.</p> <p>Transformation of teaching practices as well as curriculum modifications and research, support an educational culture for sustainability.</p> <p>Training of individuals who are able to internalize knowledge that will lead to feel, think and live in a more sustainable manner and to spread, through their example and work as individuals and professionals, to influence their families, communities and areas of intervention.</p>

Activities	Outcomes	Impact
On-going virtual forum to share experience between participants including: Skype conferences, online discussion groups and Facebook.	<p>Active Facebook page managed by a growing group of project participants.</p> <p>https://www.Facebook.com/pages/Planteles-Educativos-Sustentables-UPN-Normal-Superior-Dawson/465630926809940</p> <p>Two working Facebook pages for campus sustainability project at Normal Superior and UPN Galeana</p> <p>https://www.Facebook.com/plantelsustentable.normalsuperior?fref=ts</p> <p>https://www.Facebook.com/upn.sedegaleana.7?fref=ts</p> <p>On going Skype discussions</p>	<p>Pilot use of social media in a collective manner for the sharing of knowledge within and between participating institutions.</p> <p>Generating and sharing knowledge on an ongoing basis through an open system of self regulation allows for all participants to have their input validated.</p> <p>Beginnings of a network of knowledge sharing.</p> <p>Great wealth of information that can now be further systematized and shared widely outside of the more internal networks (website and other forms of documentation and sharing)</p>

Stage three: Systematization, Evaluation and Dissemination

A third stage (five months) included the systematization of findings, final evaluation and dissemination of final results. While each activity incorporated a data gathering technique, a final evaluation of the project also took place.

Activities	Outcomes	Impact
<p>Focus Group with students from Mexican Institutions and Dawson College.</p> <p>Workshop took place at UPN Galeana.</p>	<p>Data collection on perceptions on the concept of sustainability and campus sustainability.</p> <p>Data collection about the organizational process for campus sustainability in different campuses from a student perspective.</p> <p>Data collection about intra and inter institutional relationship building.</p> <p>Sharing research skills with students.</p>	<p>Information to be systematized and analyzed for knowledge sharing through the generation of different materials.</p>
<p>Interviews with Teachers and project participants from Mexican Institutions</p> <p>Interviews included</p> <p>Carlos Gallardo (Director- Normal Superior)</p> <p>Jorge Dominguez (Academic Dean- UPN Cuernavaca)</p> <p>JosueSerdan (Campus coordinator UPN Galeana)</p> <p>Jesus Castro (Campus coordinator- UPN Ayala)</p> <p>Juan Salvador Nambo (teacher at UPN Galeana)</p> <p>Luisa Montes (Sustainability Coordinator at Normal Superior)</p>	<p>Data collection on perceptions on the concept of sustainability and campus sustainability.</p> <p>Data collection on campus sustainability from the perspective of teachers and directors.</p> <p>Data collection about intra and inter institutional relationship building.</p>	<p>Information to be systematized and analyzed for knowledge sharing through the generation of different materials.</p>

Activities	Outcomes	Impact
<p>Interview with students from Dawson College who have participated in student internships in Mexico through the project</p> <p>Kendal Birker</p> <p>Gabrielle Caron</p> <p>Lea Neumark-Gaudet</p> <p>Dylan Davis</p> <p>Katie Wheatley</p>	<p>Data collection on perceptions on the concept of sustainability and campus sustainability.</p> <p>Data collection on campus sustainability from the perspective of Dawson College students.</p> <p>Data collection about intra and inter institutional relationship building.</p> <p>Data collection about experiential learning.</p>	<p>Information to be systematized and analyzed for knowledge sharing through the generation of different materials.</p>
<p>Visit from Mexican student to PED day at Dawson College (October 2013) Billy Hernandez</p> <p>Participation in Ped day</p> <p>Meetings with Sustainable Dawson</p> <p>Campus sustainability tours</p> <p>Meetings with Green Earth, student group</p> <p>Meetings and work with Dawson's Student Union</p> <p>Participation in Eco-hack with Dawson College's sociology students</p> <p>Class presentations: Geography, Sociology and Spanish.</p>	<p>Sharing of project activities and results to Dawson College teachers and staff.</p> <p>In-situ learning about the socio, economic, cultural context behind sustainability projects at Dawson (for Mexican partners)</p> <p>Sharing project findings with Dawson College Community (Students, teachers and staff).</p> <p>Development of a "campus sustainability training" circuit at Dawson College, which included a series of learning activities.</p> <p>Development of a student blog (Spanish) http://visitasustentablecanada.blogspot.ca/2013/10/el-ped-day-el-gran-dia-dia-2.html</p>	<p>Experiential learning opportunities provide motivation for action.</p> <p>Potential development of an outreach program to share best practices by Sustainable Dawson with other campuses.</p> <p>Impact on the integral formation at a student who can share the learning with his family, his campus and in the long term, in his professional field as an education intervention professional.</p>
<p>PED Day Presentation</p> <p>Panel discussion during Dawson's Ped day.</p> <p>Chris Adam (Sustainable Dawson)</p> <p>Billy Hernandez (UPN Galeana)</p> <p>Lea Neumark-Gaudet(student Dawson College)</p> <p>Gisela Frias (teacher/project coordinator Dawson College)</p>	<p>15 teachers and staff members from Dawson College were informed about the Sustainable Campuses project.</p>	<p>Opportunities for future engagement of more Dawson College teachers and staff in the project.</p> <p>Collective reflection on issues such as campus sustainability and experiential learning.</p>
<p>Visit by Dawson College to Normal Superior and UPN Galeana and Cuernavaca.</p> <p>Visit from Diane Gauvin (Social Science and Administrative Technologies Dean)</p> <p>Cindy Elliot (Sustainable Dawson Coordinator)</p> <p>Chris Adam (Dawson College teacher)</p> <p>Gisela Frias (Dawson College teacher and project coordinator)</p> <p>Visit included a walk through the campus</p>	<p>In-situ knowledge (for Dawson College) of the natural, social, cultural, educational, socio-political, economic context under which the project is taking place in Mexico.</p> <p>In-situ knowledge (for Dawson College) of the campus sustainability projects carried out at the host campuses.</p> <p>Establishment of links, relationships between the different individuals and institutions involved in the project.</p>	<p>Construction, strengthening, deepening of the relationships towards the knitting of networks for campus sustainability among participating institutions.</p> <p>Identification and celebration of accomplishments builds relationships among project participants and motivation for action.</p> <p>Knowledge of different realities and contexts in which a project is developed to broaden views and perspectives.</p>

Activities	Outcomes	Impact
<p>learning about different sustainability projects.</p> <p>Meetings with Directors, teachers and students.</p> <p>Celebration of accomplishments through a social event.</p>	<p>Visit and all activities by the team were documented on the project's Facebook page.</p> <p>Meetings to share experiences between different project participants.</p>	<p>Develop the ability to use communication strategies to disseminate sustainability initiatives.</p> <p>Establish and strengthen interpersonal and inter North / South links.</p> <p>Share together results and achievements of the projects.</p> <p>Recognition and multiplier potential of these experiences.</p>
<p>Inauguration of Agua Viva (living water) and Aula Viva (living classroom) projects at Normal Superior.</p> <p>Wide invitation to inauguration of Normal Superior's sustainability projects.</p> <p>"Agua Viva" project- rainwater collection and filtration for the establishment of a public water fountain.</p> <p>"Aula Viva" project- living classroom outdoors space for an ecological garden and the exposition of environmentally friendly practices opened to students and teachers as a learning space.</p>	<p>Visit to the garden by government officials from Mexican federal program for environmental education, CECADESU (Leonardo Meza); Miguel Brito, GEZ.</p> <p>Access to clean and free (of charge) drinking water for the entire educational community of the Normal Superior.</p> <p>Establishment of a model space for the exposition of sustainability practices.</p> <p>Increased biodiversity at the campus.</p>	<p>Establishment of the Normal Superior as an educational institution leading the process of transformation to a sustainable campus in the state of Morelos.</p> <p>Sharing of a model of sustainable practice within an educational institution that trains educators.</p> <p>Project impact on the national and international level. Multiplier potential experienced by institutions at the state, national and international level.</p> <p>Ability to implement actions that promote coexistence and peace building spaces and collaborative work.</p>
<p>Participatory final evaluation workshop including all stakeholders.</p> <p>Two day evaluation in Cuernavaca Morelos. Participation included students, teachers and administrators from Dawson College, UPN Cuernavaca, Galeana and Normal Superior.</p> <p>Included the participation of two external evaluators (see Annex IV)</p>	<p>Collective data gathering and analysis of the projects results and impact in areas such as: environmental management and project management capacity; pedagogical dimension (curriculum/research); environmental (operations) impact; inter and intra institutional collaboration.</p> <p>Knowledge generation and sharing from wide variety of participants.</p> <p>Relationship building between project participants.</p>	<p>Collective analysis to be documented with the potential of being shared widely with other project participants and in the campus sustainability field.</p> <p>Capacity building in the establishment of paces for collective reflection and analysis to evaluate processes.</p> <p>Building the capacity to share perspectives, ideas, visions, dreams collectively in a cross cultural setting with diversity in age and professional experience.</p>
<p>Internal Evaluation- Gisela Frias and Margarita Hurtado</p> <p>Four day working meeting for collaborative analysis.</p>	<p>Gathering of all data collected in Mexico and in Canada.</p> <p>Drafting of final project reporting documentation in a collaborative manner.</p> <p>Advancement on research findings analysis.</p>	<p>Collective analysis to be documented with the potential of being shared widely with other project participants and in the campus sustainability field.</p> <p>Exercising collaborative work, sharing visions and north / south perspectives.</p> <p>Develop research processes to document and share research results as a strategy to support sustainability experiences.</p>

Activities	Outcomes	Impact
<p>Publication of a manual for campus sustainability.</p> <p>Project's Final Report writing Overview document created to outline process and final action and research results (wide distribution) (online publication).</p>	<p>Estimated to be done by Dec 2013</p>	<p>Documentation to share knowledge on campus sustainability and research with Mexican university campuses.</p>
<p>Participation of project participants in <i>Cosas de Profes</i> and <i>BJ Media</i> at the Normal Superior in special programs about the project.</p> <p><i>Cosas de profes</i> (teachers' issues) is a weekly radio program done by the Normal Superior.</p> <p><i>BJ Media</i> is a newly founded radio and tv station at the Normal Superior.</p>	<p>Sharing knowledge and experiences about the ways to building sustainable campuses using radio and tv programs.</p> <p>Up to date these are the interviews that have taken place Margarita Hurtado (project coordinator) Cindy Elliot and Chris Adam (Sustainable Dawson_ Dylan Davis, Lea Neumark-Gaudet and Katie Wheatley (Dawson College Students) Gisela Frias(project coordinator) Paulina Mogel (Summer course participant) Janice Astbury (Independent Consultant) Leonardo Meza (Director of Environmental Education at CECADESU/SEMARNAT)</p>	<p>Potential production of radio and tv programs about sustainability topics using BJ Media and other channels from Mexico and Canada.</p> <p>Motivate other students and teachers in the country to start makings changes for campus sustainability.</p> <p>Generate conditions to create links and networks between institutions that are in similar experiences and share best practices.</p> <p>Bjmedia has began daily programming on sustainability issues as a result of their engagement with the project.</p>
<p>Dawson College student presentations at Dawson College.</p>	<p>Each Dawson College intern has done presentations in classes, student forums and public forums at Dawson.</p> <p>Close to 500 students have learned about this project through student lead presentations.</p>	<p>Contextualization of the project in terms of environmental education and social engagement.</p>
<p>Public forums at all three participating institutions will be used to share the results with the participants and the community at large.</p>	<p>To be done before the end of January</p>	<p>Sharing knowledge with a wider public.</p>

Project Research Results

The following sections describe the main results from the research conducted throughout the project. These are described in their “raw” nature. They are not associated nor interpreted through any particular theoretical framework. Instead, they are described in the context that they were generated as a means to construct a more general interpretation.

Constructing institutional visions for Campus Sustainability

The concept of sustainability achieved its greatest popularity when in 1987 in the Brundtland report. Sustainable development was then described as a re conceptualization of the goals of progress that have guided the industrialized world. It positions itself as a type of development that aims to “meet the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). It proposes that economic growth must consider the limits of nature and natural resources and that progress goes beyond the economic, that the social fabric just as important for the future generations’ right to a livelihood. There can be no progress without fresh air, without biodiversity without clean water for all. There is no progress in a world of inequality. Much has been written on sustainable development, including abundant criticism that exposes it as a last attempt to spice up a decaying economic model based on environmental and social exploitation.

The complexity of the concept calls for a reflection on how the concept is being appropriated by the educational community to redefine the role and objectives of our social institutions, in particular our educational institutions. One of the objectives of this initiative was to identify how the participating institutions define sustainability and thus use it as a guiding principle to reshape the roles and practice of their institutions.

How do participants define sustainability?

Through semi-structured interviews and a student focus group, members of the three participating educational institutions were asked to provide their definition of sustainability, what sustainability was for them and what they envisioned as a sustainable campus. Following we will describe the definitions given, highlighting the associations made with the term as well as some of the main differences between the northern and southern visions for sustainability.

“Sustainability is the use of nature, in a way that future generations can continue to enjoy its benefits” (Student focus group)

“Sustainability is being aware of global issues, to find solutions to help correct these issues to enable a healthier planet. Sustainability is being able to work with the community, to share knowledge to work as one and to transfer the knowledge to the next generation” (Gabrielle Caron, Dawson College Student)

“Sustainability is an attitude. It is an attitude that is expressed through a commitment to aim for development through equilibrium in the use of the natural resources. It is solidarity not only with the rest of the planet, but also with the future generations” (Jorge Arturo Dominguez, UPN Cuernavaca academic director)

“The concept of” sustainability has a connotation that has to do with the environment. But it also refers to the social and economic. Not only are they equally important, but they work together. Without community there can be no sustainable spaces.” (Dylan Davies Dawson College Student)

“Sustainability is to live the present visualizing a future where all human beings can have a home. It is a healthy world, filled with peace, love, justice

and freedom.” (Yarida Avila UPN Ayala student)

The definitions provided by the students, teachers and directors interviewed reflect different degrees of familiarity with the official, conventional definition of sustainability as outlined by the Brundtland Report. The definitions provided by Dawson College students varied from their Mexican counterparts in that there was a stronger emphasis on the conventional definition of sustainability, one that incorporates environmental, social and economic objectives. Their definitions also reflect an awareness and concern for global economic dynamics that generate poverty and inequality.

An important aspect of the way participants described sustainability includes the notions of what they referred to as “taking care of”, or “helping” “nature” or the “environment”. There is indication that they associate the term mainly with the deterioration of the physical environment while also identifying that there is an important role for us to play in mitigating the impact that our, individual and collective actions and consumption patterns have on the future generation’s ability to meet their needs. The definitions given, particularly by the Mexican participants, have a strong emphasis on the need to promote “greening” activities, such as the expansion of green areas. This vision of sustainability is also corroborated by an analysis of the sustainability projects that each of the Mexican institutions chose to focus on.

Participants’ definitions also link sustainability with social objectives such as peace and justice. Participants associated meeting sustainability goals through an emphasis on community building and solidarity with others. While these are seen as values required to achieve sustainability, they are also described as objectives of sustainability, the social nature of their vision of sustainability.

How do participants define Campus sustainability?

A sustainable campus is one that trains citizens in the nurturing of the environment. It is one that educates about the environment” (Josue Serdan – coordinator UPN Galeana)

“It is an institution, a campus, that makes a commitment to sustainability in its academic and normative aspects, the institution’s philosophy and its

educational programs” (Jorge Arturo Dominguez-Academic coordinator UPN Cuernavaca)

“They are schools, or institutions that have achieved the goal of working together in order to create a greener environment within their campus and community they have the goodwill to outreach to the rest of society “ (Gabrielle Caron Dawson College Student)

“My school is a teaching school so I see it as an institution in which the students become informed about sustainability, learn about sustainability, look for opportunities to become sustainable. It is also a space where you not only learn about but also learn to share, develop and apply knowledge so that our space can be a model, an example to others in terms of infrastructure and policy. A place where everyone works together, students, teachers and administrative staff” (Yarida Avila UPN Ayala)

When participants were asked what a sustainable campus was to them they defined it as an institution that has a commitment to sustainability which reflects itself in its core reasons for being, teaching and learning, as well as its operations and the policies that guide it. An emphasis was also placed on how this goal for sustainability is to be reached, community engagement.

Participants expressed that a sustainable campus is one that engages in teaching about sustainability as well as the generation of knowledge about it. Dawson College students who were interviewed referred to the importance of not only having sustainability be the core subjects in programs such as environmental studies and the environmental social science profile, but the need for environmental and sustainability issues to be addressed in all of the College’s programs. They envisioned an institution where sustainability is at the core of what students learn about as citizens as well as in their professional and academic programs. According to this vision, a sustainable campus is one that takes on the responsibility to educate for sustainability. Mexican students placed an emphasis on the fact that their institutions are teaching institutions and thus defined a sustainable campus as one that trains them to teach about sustainability.

Participants also described a sustainable campus

as one that establishes norms and policies that regulate the institution’s operations for sustainability. Thus, for example, a sustainable campus places norms on how waste management is carried out, water and energy consumed and green areas kept. This aspect of campus sustainability was described as a key component to learning about sustainability, learning through practice.

In the definition about campus sustainability participants highlighted the importance of reaching sustainability through community building and participation. The shared vision of a sustainable campus is one where students, teachers and administrative staff engage in sustainability.

Campus Sustainability Projects

Throughout the life of the project each of the participating campuses carried out a series of campus sustainability projects. These projects were the outcome of each educational institution’s own organizational process, which is described in a following section. Here we classify the projects into different categories. For a more detailed account of these projects see Annex VII.

Campus Gardening and Reforestation projects

In all participating institutions projects that aimed to increase biodiversity and extend forested areas



were implemented. These projects included:

- Reforestation efforts through the planting of native and other species

- Construction of cactus gardens
- Construction of herb and medicinal gardens
- Construction of fruit and vegetable gardens
- Construction of green walls
- Construction of rooftop gardens
- Construction and upkeep of Peace gardens

It is important to point out that all these initiatives were carried out within the context of creating community gardens, places created by the educational community for the educational community. Some of these focused on the provision of food, protecting and increasing local biodiversity, as well as spaces for community life and increasing awareness about sustainability.

Curriculum and Research

In all campuses there were efforts to make changes to the formal curriculum, add extra curricular activities and to support research focused on environmental and sustainability issues. These also included collaborative efforts between the different partnering institutions.

- The design and teaching of elective courses related to environmental issues and sustainability.
- The Sustainable Development and the Environmental Culture courses were taught at the UPN as part of the bachelor’s degree program in Educational Intervention.
- The incorporation of sustainability content within different courses included in existing programs.
- At the UPN, the Action Research and the Qualitative Research course incorporated campus sustainability as a main theme to be explored in these courses.
- The design, production and distribution of environmental education materials as part of an assignment linked to a particular course.
- At the UPN the course Design of teaching materials, designed posters, brochures, postcards and billboards with environmental and sustainability themes.
- Undergraduate research related to sustainability.
- This includes five undergraduate theses being carried out with this project as the main subject of study, four at the UPN Galeana and one at the UPN Ayala.
- Support the training of members of the educational community on different topics to promote the transition to sustainability through participation in courses and workshops.
- Workshops were carried out at all participating

institutions opened to all members of the community included themes such as: composting, vermicomposting, building green walls, seed saving, self watering containers for gardening, planting and use of medicinal plants.



- The co-design and teaching (inter-institutional) course on “Strategies and tools for building sustainable educational institutions” (See Annex VI).
- Field visits for hands on learning about environmental issues.
- These included visits to permaculture farm, Fresno (Garden of environmental culture), Park Chapultepec (Natural Protected Area), Ecological house, Center for technological innovation, Center for Alternative Energy (UNAM).
- Field visits from Mexico to Dawson College as learning opportunities.
- Recognition of the importance of applied learning lead to the establishment of internships.
- At Dawson College, the rooftop garden and peace garden initiatives established internships available to all College students.
- Internships were established to engage Dawson College students from different programs, in sustainability projects in partner Mexican institutions.
- Broadcasting, through radio and internet television of sustainability programming
- Environmental and sustainability content was

disseminated through “cosas de profess” (teachers’ issues), a radio program emitted from the Normal Superior.

- Establishing of new environmental content programming at B.J. Media, at the Normal Superior.

Operational Projects

Several of the projects that were designed and carried out during this initiative included projects aimed at making the operations of the institutions more environmentally friendly, to reduce their ecological footprint.

- Audits were carried out at several of the institutions
- These included garbage audits, biodiversity audits and energy audits. These were carried out by members of the educational community with the support of external experts.
- Audits were followed up by the starting of composting and recycling programs at the Normal Superior and UPN (all campuses).
- The construction of a system to capture, keep and purify rainwater.
- The Normal Superior constructed a water captivation and purifying system using a bicycle as a pump. The system provides free drinking water to the community.
- Design and construction of a living classroom.
- The Normal Superior built a Living Classroom.



An outdoors place for community engagement and learning about environmental issues and sustainability.

Community Building and Engagement

While community building and engagement were an integral part of the method used to design and implement the campus sustainability projects, as an approach, there were specific activities that aimed primarily at bringing the educational community together.

- Painting of murals with the theme of sustainability.



- Recreational and sports activities to promote integration among participating campuses.
- These included inter institutional activities, bringing in UPN, Normal Superior and Dawson College students, faculty and others.
- Hockey games and other activities were organized during the time Dawson College interns were in Mexico.

A model for institutional sustainability

At the beginning of this initiative, the partnering institutions found themselves at different organizational levels with respect to sustainability. At Dawson College, there already existed an institutional initiative mandated to carry out and support sustainability initiatives on campus, Sustainable Dawson, as well as other initiatives working for sustainability at the campus. At the UPN and Normal Superior the beginning of this initiative marked the beginning of an institutional commitment to sustainability. Following is a brief description of the different organizational forms that existed or were established at each of the participating insti-

tutions, to support campus sustainability. We will then highlight what participants identified as the main roadblocks to organizing for sustainability action and the factors that supported their institutional sustainability projects.

Dawson College

Sustainability at Dawson College takes place from different internal initiatives that involve different members of the educational community. These initiatives range from student driven initiatives, to academic programs and an institutional program for campus sustainability.

Sustainable Dawson is an institutionally supported initiative that has as a mission to carry out and support initiatives that lower Dawson College’s ecological footprint, to guide it in becoming a sustainable institution. The initiative began under the guidance of a non-profit organization, Earthvalues through a program called Action Conservation. After two years of operation it became a Dawson College initiative

Sustainable Dawson’s organizational structure includes a full time sustainability coordinator and a part-time project coordinator who is also a Dawson College teacher. The initiative is also institutionally supported with a yearly budget and office space. The initiatives carried out by Sustainable Dawson respond to three lines of action: operations, academic-curriculum, policy and community engagement. In order to carry out their mission, Sustainable Dawson has worked with students, teachers and staff and works to coordinate projects between different members of the educational community.

Student driven projects are at the core of Sustainable Dawson. For the first six years of operations Sustainable Dawson has worked mainly with students from the Community Leadership and Recreation Training (CRLT) program. Students have been involved in the design of several projects that mainly deal with the College’s operations. Student engagement is done through the fulfillment of their requirements for several courses within the CRLT program (program design, fundraising and others). Thus, students are credited for the work they do for Sustainable Dawson. Through a participatory action research model students identify environmental issues at Dawson

College and through research they find means to address these issues and provide workable solutions. Students design projects, carried them out and fundraise. Another way in which Dawson students have been involved through sustainable Dawson has been through the internship program part of the CRLT program.

Through a set of sustainability indicators that make up Dawson's Sustainability Assessment Framework, Sustainable Dawson has been making progress in meeting its objectives. While a great percentage of the work is student lead, many of the changes respond to the establishment of a relationship between Sustainable Dawson and Plants and Facilities at Dawson College. Based on research carried out by students, Sustainable Dawson staff proposes changes to make operations more ecologically friendly while at the same time aiming to meet economic viability and social responsibility (Sustainable Dawson 2009). In terms of policy, Sustainable Dawson has also been key in leading the institution to adopt policies that support its sustainability goals such as Dawson's Sustainability Policy adopted by the Board of Governors in 2008.

Sustainable Dawson is increasingly playing the role of coordinating the educational community to carry out sustainability projects, bringing together students, faculty (from different programs) and staff who have their own initiatives. They have the capacity to weave the various threads of student, faculty and staff commitment to social and environmental sustainability to weave a convergent sustainable community. One such project is Dawson College's Rooftop Garden. The initiative is jointly coordinated by a Sociology teacher, Anna-Liisa Aunio, and Cindy Elliot, Sustainable Dawson's coordinator. This initiative addresses sustainability issues from a curricular and an operational approach. Students are engaged in learning about food issues from a global and local perspective as they are enrolled in a course for credit, the "Sociology of Food", while they also engage in action as they learn to plant and save seeds. This initiative has also generated "internships" and engaged students in hand on work in the garden while they also gain course credit.

The Green Earth Club is a student run club at Dawson College. The club is institutionally supported by the Dawson College's Student Union.

They receive a budget as well as a meeting space to carry out their activities. The main activities carried out by Dawson College's Green Earth Club can be described as environmental in nature with a critical perspective. The group defines themselves as striving to promote sustainable practices in the educational community in a fun and inspiring manner.

They focus on raising awareness as well as environmental responsibility through events that are educational, practical and enjoyable (Green Earth Club). In the academic year 2012-2013 the students organized a water bottle campaign, informing students (and the entire Dawson College



community) of the impacts of consuming bottled water. They also worked on raising awareness about the importance of bees, had a sustainable bazar during the Christmas period, and organized activities as part of Earth day

The **Dawson College's Student Union** is a student run organization. With a student elected team, students design their own projects to contribute to student life. Some of the projects that the DSU carried out from 2012 to 2014 include a water bottle campaign, to encourage the student community to not buy bottled water while public access to water is available. Another project is their Food Box. The main objective of the Food Box is to provide affordable access to food for the entire educational community. While affordability is one of the main objectives of the program, the food box also aims to provide food that is healthy, ideally organic and locally grown.

In the last six years Dawson College has also responded to the need for environmental education through the establishment of the **Social Science's Environment Profile** and an Environmental Science program. Both of these programs are part of the college's pre-university programs. They provide incoming students with two programs that are environmentally focused while at the same time meeting the requirements to graduate with a Science or a Social Science diploma.

Dawson College is a vibrant community of engaged faculty, students and staff who involve commit themselves as individuals and professionals to social and environmental causes. Faculty and students have a long tradition of using the classroom to engage with each other as a learning community to support transformative change. Knowledge and action on environmental issues and sustainability is generated at Dawson College through different organizational structures. It is also found in many independent initiatives by teachers, students and staff, who through their research, courses, extra curricular activities generate an overall change.

Initially Proposed Organizational Structure

At each of the participating Mexican campuses, there was an institutional commitment to engage in actions that move the institution on a sustainable path prior to the beginning of this project. However, there was no existing organizational structure for designing and executing sustainability projects. An organizational model, based on addressing different environmental issues, was proposed by Ciudades Verdes. The objective was to promote and support the participation of members of the educational community, directors, faculty, administrative and support staff and particularly students.

Each of the institutions identified a "project coordinator" who was responsible for mobilizing the community into action. Through a series of presentations students were encouraged to organize themselves into "leadership working groups" and focus their action on different thematic issues. The suggested themes were: biodiversity, water, energy, waste management, communications and institutional policies.

This proposal was made at all campuses as part of the initial presentation of the project to members of the educational community. There was a very good initial response. At all campuses students were enthusiastic and assigned themselves in to the various working groups according to their interests. Following, workshops by Ciudades Verdes were carried out providing students methodological tools for the design of action plans based on a participatory diagnosis and comprising the definition of objectives, targets, indicators, activities, human and material resources, time, ways to evaluate, organize and communicate the process and results.

Despite the interest shown both during the project presentations and during the workshops to design action plans, in practice, the proposed model did not give the expected results. While students assigned themselves to different groups, they did not follow up with action.

Through interviews and participant observation we could identify several factors linked to the failure of this particular organizational attempt. At the UPN there was a change in the administrative direction of the institution. Directors and campus coordinators with whom there was a relationship were changed. Teachers assigned to coordinating the project were also changed. This made continuity very difficult. As students were organizing into groups they were not provided the proper support structure for their organization. Furthermore, there was a constant flow of students and teachers interested in the project but who had not participated in the initial workshops.

Thus, knew little of what had been done already. It took several months for each of the campuses to find their own organizational structure and at the end, the proposed structure was not assumed as their own by the participating institutional communities. These efforts however, were can be considered successful as they were the basis for engaging the educational community in a discussion about the need to organize for collective action. They provided an opportunity for community dialogue about environmental issues and the role of the institution in establishing a path to sustainability. Following we describe the organizational efforts made at each of the Mexican campuses

UPN Morelos (Cuernavaca, Ayala and Galeana)

At the beginning of this project the UPN Morelos was not institutionally involved in a sustainability initiative. Through this project the institution made a commitment to explore means of becoming a sustainable campus. The project was institutionally adopted in its three campuses, Cuernavaca, Galeana and Ayala. The experience developed differently at all three campuses yet we can identify common factors that supported or hindered institutional organization for sustainability.

At the beginning of the project there was no organizational structure to design and carry out sustainability projects. The institution provided a teacher with release time, Juan Salvador Nambo. With a total of ten hours a week this teacher was given the responsibility to coordinate the organization of students and faculty at all three campuses so they could design sustainability projects. Through the project different members of the educational community of all three campuses participated in workshops designed by Ciudades Verdes to provide students and teachers with tools for project design and they were also provided with the above described organizational structure.

UPN Cuernavaca



The organizational process at UPN Cuernavaca was the one to have the slowest start. While presentations to introduce students and teachers to the project and workshops on project design were given at the start of this initiative, organization did not take place well into the project. The sustainability projects that were done were designed and carried out by students under the leadership of students. Through their participation in the initial project activities, two students emerged as lead-

ers. These two students participated in the project workshop that took place in November 2012 and were later responsible for encouraging other students to participate in the initiative and also engaged the participation of faculty and staff, including the important participation of the campus' gardener. Students organized themselves within the context of their classes and encouraged other classes (and their teachers) to become involved. They motivated their teachers to use the curriculum as a tool for action and managed to create a meaningful learning experience about sustainability in the process. For a description of the projects carried out at UPN Cuernavaca see Annex VII.

UPN Ayala



Initially, at the UPN Ayala campus sustainability initiatives were promoted mainly by the dedication of a student who was supported by the campus' director. Both had participated in a workshop done by Ciudades Verdes and Dawson College, on campus sustainability in June 2012. At UPN Ayala the entire student community was encouraged to participate on a voluntary basis and they formed a student group. This group, which reached 30 students, organized themselves to design and carry out sustainability projects. For a detailed description of all the projects carried out at the UPN Ayala, see Annex VII. Student leadership for environmental action was strengthened during the stay of two Dawson College students at this campus. During their stay many other students expressed leadership in the design and execution of sustainability projects. Another way in which sustainability projects were carried out was through a course that was included in the curriculum at this campus, Cultura Ambiental (Environmental Culture). The course engaged teachers and students in sustainability projects as part

of their requirements for the course's completion.

It is important to point out that the UPN Ayala campus found itself midst a land tenure conflict during the time this project was carried out. As a result the university lost access to its campus and students and teachers were relocated to a temporary location. Due to this situation, students and teachers could no longer focus on project activities on their campus.

UPN Galeana

At the UPN Galeana sustainability projects were designed and carried out by a class and its teacher. During the June 2012 workshop, the coordinator of this campus participated in the sustainability campus workshop. Students and teachers were also present at the initial November 2012 workshop. Later on, as the project was presented to the entire educational community, one class took on the coordination of the project. The group of students became to be known as the "high performance team". Initially, they began working within the context of their participatory action research class. Once this course was finished, they continued working on the projects during their own time. Eventually, other students and teachers became involved in the project through different courses that were added to the curriculum, Cultura Ambiental and an Ethics class.



Normal Superior

At the Normal Superior, the project was seen by the Director as a "special strategic project". The administration assigned teacher, Alberto Miranda to be responsible for its functioning and gave this teacher release time to coordinate. The coordinator was given the responsibility to report directly to

the Director. With the support of Ciudades Verdes, presentations about the project, and workshops on project design were given. Students and teachers were invited to participate on a voluntary basis. Students organized themselves into the different groups (leaders of energy, water, etc.). The first coordinator was a teacher with a profile linked to environmental issues, a biology teacher. Due to a change in employment, the coordinator was replaced by the school's sociologist, Luisa Montes. The new coordinator did not have a profile linked to sustainability, but was considered as someone who was trusted by the institution. She was expected to report directly to the Director so that he may know what was working and what was not, and there could be a quick response. She was assigned ten hours a week.



The initial organizational structure did not work. However, students at the Normal Superior organized their own group and carried out several projects. The student group however dissolved and the projects were mainly spearheaded by the administration. The administration, with the project coordinator decided on the projects they wanted to carry out and looked for ways of involving students, teaches and staff in the projects.

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A Proposed Organizational Model for Campus Sustainability

The organizational structure of educational institutions can be described as mainly rigid and hierarchal in nature. Decision-making is a top-down affair and knowledge is treated as a treasure held by some and to be transferred to others. Students in this case are seen as empty vessels to be filled with knowledge. Campus sustainability requires of the engagement of all the members of the educational community or it risks being a cosmetic, physical change without a process of awareness raising by its members. True engagement however, requires that each individual has the power to make decisions and the recognition that all individuals have important knowledge to be shared which can contribute to finding solutions to the complex issues sustainability presents.

From the beginning of this initiative the existing hierarchy in educational institutions was recognized and by encouraging the entire community to engage in becoming agents of change, those power relations were challenged. As students, teachers, staff, directors and others were encouraged to become involved in changing their educational institutions, the capacities of each individual were recognized and valued, whether they were students, teachers, staff or any other member of the educational community. In this case, the hierarchal, top down structure was not changed for a bottom-up structure. Instead, each member of the community was empowered to envision his or her institution as a sustainable campus and given the opportunity to transform it.

Flexible structures that are able to adapt to those who conform it allow for the skills of all participants to be recognized, shared and used. A flexible structure does not imply that the decision making powers of an institution's directors need to be dismantled, instead it implies that leadership for sustainability may come from teachers, students, staff and the institution must be flexible to recognize it and support it.

Adaptable structures also allow for individuals to feel empowered and thus tap into their deeper motivations for bringing about change. This initiative shows us that leadership can come from students, staff, teachers or the administration it self. For this leadership however to translate

into action it needs to facilitate the participation of others. Spaces for students, teachers and the diverse members of an educational community to work together are needed, places where the conventional hierarchies are dismantled and each individual can participate along side others.

During this project in all cases activities were conducted with the participation to a greater or lesser extent, of different members of the educational community. Some were driven and supported by management and staff or by teachers assigned to coordinate the project. Others were driven mainly by teachers in their classrooms or by students, with little or no support from teachers, manage-



ment or staff. The projects that involved campus cleaning and beautification, afforestation, planting vegetables, medicinal plant gardens, building peace gardens there was involvement of the entire school community. These were in some cases driven by the administration and in others by students, but they involved the entire community to see them through.

To achieve greater involvement within the school community, it is necessary to implement different strategies to strengthen the organization for collaborative work that makes possible the development of sustainability projects.

laborative work that makes possible the development of sustainability projects. Providing tools, strategies and overall support and resources to those individuals within the educational community who are interested and want to engage in bringing about change in the institution. These individuals will then emerge as leaders and drive change within the institution. How does an educational institution respond to today's environmental challenges and becomes a cradle for sustainability? How do we breakdown conventional hierarchical schemes that inhibit its members from reaching their full potential and become engaged learners and leaders? What is needed is a restructuring of our vision of who can make decisions and drive change within an institution. As changes take place in the operations, the curriculum and other aspects of campus life the entire community becomes engaged in learning about social and environmental responsibility as integral parts of higher education.

Drivers for campus sustainability?

Through participant observation as well as the semi-structured interviews conducted we aimed to highlight different factors that participants identified as contributing to their organizational experience or hindered it. Based on their organizational experience participants shared their reflections. We asked, what students, teachers, staff, directors could do, from their posts, to support sustainability at their campus. Following we share the responses. We have focused mainly on factors that support sustainability. The lack of these conditions can also be understood as factors that may hinder the organizational process. We only identify these when they are not obvious.

A supportive administration

"The administration must play a facilitator role, not a protagonist role. Here, [at the Normal Superior] the Director knows nothing about sustainability, but has the sensibility and an open heart to support those who do know about it" (Carlos Gallardo, Director Normal Superior).

Support for sustainability from the institution's direction is essential. Institutional commitment to sustainability requires the organizational structure

of the institution to reflect such commitment. The administration has resources and decision-making power to bring about change and support other members of the educational community to bring about change in all areas linked to the functioning of the institution, operations and academic.

During this project, an important factor identified to support sustainability action was the direction's decision to assign an individual (teacher) to the coordination of sustainability projects. In both cases, at the UPN and the Normal Superior, the teachers who were assigned this task were assigned a number of hours to work with the Sustainable Campuses initiative. Assigning an individual to this role, tells the rest of the members of the community that the institution is behind change for sustainability and is willing to commit human resources to it. Through this project we learnt how important it is to have someone who is part of the institution that can promote and coordinate the work individuals and groups within the campus want to do. Further commitment could include the assigning of a permanent post for a sustainability coordinator. This can contribute to continuity and the institutionalization of sustainability as an important axis of action.

The administration can also lever support by encouraging the participation of teachers and staff in pursuing their own projects for sustainability. This can be done by encouraging teachers to engage students in sustainability actions within or outside of the curriculum. This encouragement can come in the form of time and or recognition for the work being done.

Another way that the administration can support sustainability is by channeling financial resources to sustainability. While this project provided resources for sustainability projects at each of the participating Mexican campuses, the directors of the participating institutions also committed financial resources to these projects. This however, is limited by the financial capacity of the institution as well as the degree of independence that the institution has to manage its finances. In the case of the UPN and Normal Superior, both institutions have very different degrees of independence. The UPN is a state funded and run institution with a very top-down decision making structure that provides for little room for each of the campuses to make important decisions on how resources

will be spent. The Normal Superior on the other hand, is a private institution and while it responds to the board of directors of the National Teachers' Union, it has greater decision-making power to make financial decision.

Changes in the curriculum are also dependent on the level of independence enjoyed by the institution. In the case of the changes that took place at the UPN and the Normal Superior, initiatives to incorporate sustainability to the curriculum came from students and teachers and the administration supported the proposed changes. Thus, we observed that as individuals made commitments to sustainability they pushed for changes at the institutional level. Openness and flexibility to respond to these proposed changes are important. These changes are then only limited by the structure of the institution, which in term can also be challenged under the recognition of the transforming needs of our society.

The establishment of institutional policies is also at the hand of the administration. Sustainable Dawson's coordinator, during an interview, argued that one of the most important steps taken at Dawson was the adoption of Dawson's Sustainability policy. The policy itself sets sustainability as a guiding principle for the institution. It lets the community know that sustainability is an important goal for the institution and for which programs, projects and activities will be developed.

Policy change is sometimes however slow or cumbersome to come about. In the case of operational changes participants argued that in some cases when normative changes (policy making) are needed these must go through rigorous decision-making procedures. However, de facto changes can take place as individuals push for change without the immediate need for normative changes to take place.

Participants were emphatic on making the point that while normative change is important, it is more important for actual change to take place and then for the norms, rules and regulations can be adapted. As a teacher pointed out "sometimes when we have norms, we do not even obey them. But when we are aware that change is required, we will push for normative change".

Engaged faculty

The participation of faculty was key for the successful completion of sustainability at each campus. Many teachers became sustainability leaders in their educational community, promoting environmental knowledge and action. Also, during interviews students highlighted that engagement of their teachers was a key factor supporting their projects. Support from teachers came in different forms, as teachers in the classroom and as facilitators of change outside of the classroom.

Teachers who got involved in this initiative were key engines of change. They proposed curricular changes and acted as facilitators of change by opening their classrooms to spaces for environmental action. We observed that as teachers got involved and participated in project activities, such as in the course "Tools and Strategies for Campus Sustainability" they became more enthusiastic and felt more empowered to lead environmental action and change. It is important to point out that both participating institutions in Mexico are teaching institutions, teachers have pedagogical training and not many of them have formal training in environmental science, which they initially felt was needed to teach about sustainability. Discussion on environmental education however, led teachers to recognize that sustainability is



not the domain of scientist only and the need for non-reductionist perspectives. Through capacity building on environmental issues they started to recognize ways in which sustainability could be part of the courses they already were teaching and also felt capable of teaching other courses more directly linked to sustainability such as the UPN's course on Sustainable Development and the one on Environmental Culture. The adminis-

tration however, does identify the lack of teachers with environmental studies training as an important roadblock to incorporating sustainability into the curriculum.

As students engaged themselves in environmental action they required time to organize and carry out their projects. Key teachers were flexible to provide students with time within their classes to participate in this initiative. Others looked for ways to engage their classes through assignments for



credit that allowed the students to use their time to both contribute to their sustainability projects while at the same time meeting their academic responsibilities. Others went as far as proposing that courses be included in the curriculum so that they could use these courses as tools for environmental action.

Students also noted that an important factor supporting their organizational efforts were teachers who had an open disposition to let students lead their own projects. Teachers who allowed students to take on a leadership role were identified as key supporters of sustainability. Attitudinal changes that challenge the power relations between students and teachers can open spaces for the type of collaboration needed to carry out projects. Students are dynamic and enthusiastic members of the educational community. Many of them are also knowledgeable and have important skills to contribute. Under conventional power relations in educational institutions however they are at the bottom of the organizational pyramid (in terms of decision-making).

Empowered Students

"The ones responsible for seeing the Sustainable Campus project through were us [the students]. Some teachers participated and some were not interested or busy with their classes. But then we started to see that students were the key to this project and that we had to strengthen our knowledge and take all the opportunities to build our capacities". (Interview Yarida Avila –UPN Ayala student)

Throughout the Sustainable Campuses project the most prominent element behind the sustainability projects that were carried out were students, students who were motivated, enthusiastic and empowered to take on action. Students who became involved in this project were engaged in an organizational process, through workshops on project design and implementation as well as on capacity building activities linked to the projects they decided to carry out. Living through the process of student engagement presented an opportunity to identify the conditions necessary to support it.

How do students become empowered? During a student focus group, carried out mid-term and the project's final evaluation students shared their experience participating in this project and highlighted what was behind their motivation to become and continue to be involved in sustainability action at their campus as well as what their main roadblocks had been.

Students identified that their organizational process changed them as individuals and as a group, or class. Students interviewed indicated that the opportunity for collective discussions and engagement through group work was the key to collective action. They valued the opportunity to engage with their classmates, "discovering the potential for action", and "strengthening of their capacity to work in groups" as they critically reflected on the environmental issues facing their campus (Student comment- Final Evaluation). They also discovered new ways of seeing others and gained interest in sharing knowledge.

An important outcome of the organizational process was a greater sense of *compañerismo* fraternity, among participating students. At the UPN Galeana, students talked about how they became

a family and experienced a greater sense of commitment to the objectives of the project and also a commitment to each other. These students discussed how they were not looking forward to graduating, as they wanted to continue their engagement not only with the project, but with each other. In the case of UPN Cuernavaca, students discussed how prior to their engagement in the project their class was divided, with no sense of *compañerismo*, but that this had changed with their engagement with the project and with each other. At the UPN Ayala, a student leader shared with us that through the project “we [the students] not only shared an experience as class mates but also strengthened our affective relationships. We learned to related to each other not only in a educational setting but as *compañeros* and as friends” (Interview Yarida Avila). Relationships of trust were developed which were at the core of their ability to work together.

Students identified that capacity building was key to their success. They identified that as a group they experienced the development of their capacities in terms of project design, management and implementation. Capacity building also extended to leadership and group management, oral and written communication. They also identified increasing their knowledge of environmental and sustainability issues, planning processes and an interest in other languages. This is particularly important considering that prior to the project sustainability was not present in the curriculum. Knowledge about environmental and sustainability issues were generated and shared through this project both within the curriculum and also through a latent curriculum expressed in the project activities supported by the institutions.

The changes experienced through the process also reached the personal level. Students indicated that through their participation in the project their perceptions about the world were changed and how they acted in it as well. A student expressed “this project changed my life, the way that I live my daily life” (Student comment- Final Evaluation). Students expressed that through participating in this project they experienced feelings of pride, belonging and hope [Final Evaluation]. Pride of their institution and of being involved in the project, belonging and being an important part of the project and the institution, hope in the possibility that changes can be brought about. During

the Final Evaluation students identified that values, such as trust, hope, respect, solidarity, commitment, patience, perseverance and tolerance were developed through the project, values that strengthened their organizational experience.

Empowered students are students who are motivated to bring about change, who have the skills to do so but also who are given the spaces within the institution to carry out action. Students expressed that one of the main constraints they faced was the lack of time and decision-making power. Students indicated that they had difficulty finding time to organize themselves and plan their activities as in many cases these activities were carried out outside of class time. As Jessica, a student at UPN Cuernavaca expresses “many of us do not have the time. For example, in the last two months we were asked to hand in final assignments, so when we had decided to meet on Fridays from 8 to 9 am but it was hard for all my classmates to make it”.

A packed academic schedule and other work and family commitments did not give the students the time to work on their projects. Students who had the support of their teachers and were able to incorporate their projects within class time and or as part of the curriculum indicated that this was the ideal situation. This was true for students who were already engaged in the project. There is also indication that in the case when students were required to engage in sustainability projects by their teachers this also created conflicts. This was the case of a class at Ayala UPN where half of the students in one class were participating in the project and enjoyed the opportunity to carry out these projects within the context of their class, while the other half were not interested and were asked to meet the same class requirements.

Another important factor that can support student empowerment is the creation of spaces where students have decision-making power. In a hierarchical structure where students are placed at the bottom, students felt powerless to carry out the actions they felt were necessary for their projects. They commented that the often felt they needed their teachers’ approval or simply did not know who to ask if they could carry out a particular action. This is an indication that there lacks of a culture of student organizing and decision-making.

ing. Students are accustomed to work within the structure and as such as were waiting for approval and not felt empowered themselves. In other cases they felt frustration after having reached a decision and having this questioned by a higher authority. As a student indicated during the focus group “we might have the capacity, but at the moment of making a decision a teacher can set you back by telling you no, that is not the right way”.

A Network for Institutional knowledge and experience sharing

The Sustainable Campus initiative had as one of the main objectives to strengthen the capacity of educational institutions for sustainability action mainly through the sharing of knowledge and experience. Throughout the initiative we designed



opportunities to engage different members of the educational community of all three participating institutions in activities that motivated them to share their process and lessons and to learn from each other. These activities are described in the previously shared table of project activities.

The activities that were designed for knowledge and experience sharing can be grouped into four categories: student internship exchanges, institutional visits, courses, social media exchanges and evaluative workshops. These activities contributed to the development of a network, or support mechanism for sustainability action at each campus. The network was based on the principles of sharing rather than competing. Sharing was done with a generous spirit of showing others what is

being done at each campus, opened to sharing lessons learnt. All campuses engaged in sharing their experience, whether these had just began organizing or had a rich organizational experience such as Sustainable Dawson.

Student internship exchanges

“I see sustainability as a much broader subject now. It is not just the act of planting a plant or buying greener cleaning products, but also about working together or making the world a better place. Building connections with people around us, working together as a team in creating change for a better tomorrow is how I now see sustainability. It is about finding the goodwill in people and working as one” (Interview: Gabrielle Caron- Dawson College Student intern)

During the life of this initiative four Dawson College students and one alumni participated in a project internship. The internships were designed to engage Dawson College students who had knowledge and or experience about campus sustainability issues in an exchange with Mexican students. We looked for students who were either enrolled in an environment/sustainability focus program and who ideally had an organizational experience on campus working for sustainability with Sustainable Dawson or other initiatives on campus. These students were given the task of preparing material to share with other students in Mexico about sustainability issues at Dawson, support the organizational experience taking place in the host institution and to report back to Dawson College on their experience. Two students interned at UPN Ayala, two at UPN Galeana and one at the Normal Superior. Two of the students were part of Dawson College’s Community Recreational and Leadership Training program (CRLT), two students were from Dawson College’s Social Science Environment Profile and one from Dawson College’s Environmental Science Program. All five interns had an experience working with Sustainable Dawson and three of them were part of Dawson College’s Green Earth Club.

The establishing of these internships required institutional collaboration, which entailed the establishment of a program of activities for the students to carry out while in Mexico, as well as clear distribution of responsibilities. Ciudades Verdes, in collaboration with the Mexican educational institu-

tions, took on the responsibility of finding lodging for the students and assigning a person responsible for their activities. Funding for the internships came from Dawson College's Student Success program as well as IDRC funding. Dawson College engaged in finding means to provide the participating students with credit for their internship when no formal internship program was available to the student.

All five students spent a month in Mexico, as interns in their assigned institution. Their activities included working closely with other students on locally designed sustainability projects. Depending on the level of organization at the host campus, students also encouraged campus organizing through community building activities. Students also designed and gave workshops on different sustainability issues they were engaged in at Dawson College, such as the design of self-watering containers for rooftop gardens or sharing Dawson College's plastic water bottle campaign. Finally, they also had as a task to report back to the Dawson College community on their experience. Four out of the five participating students wrote a blog, where they shared their experience and learning with others.

Interviews held with all five Dawson College participating students indicate that the internship experience provided them with an opportunity to increase their knowledge about environmental issues, learn about sustainability from an institutional and international perspective, participate as engaged individuals in sustainability action through knowledge sharing and action and have a cultural youth exchange.

During interviews students identified different environmental and sustainability issues they were exposed to which they had not considered previous to their internship. Environmental issues such as waste-management, water and energy use, biodiversity conservation and others were explored in a different, local context. While students expressed having an understanding of these topics from a theoretical perspective, gained through their courses at Dawson College, they valued the opportunity to understand these issues as they

were being experienced at their host campus. These issues were also explored in a Mexican context, in some cases in a rural or urban context. They also had the opportunity to learn about these issues as they are tackled institutionally within the context of a campus. Institutional differences between Dawson College and the host campus were also identified by the students as important knowledge about different approaches to sustainability.

A student accounts during an interview that:

"my trip to Mexico has changed the way I see sustainability in terms of cultural differences and



the challenges [we each] face. In Mexico, I found out very quickly that although they did not have much money as us, to put towards their projects, it did not matter because they would always find solutions. I also found it amazing how little permission they needed to begin creating something new on the school property, example, compost, cactus garden, etc. this made it a lot easier for them to begin working on things without having to deal with some many administrative details"

In terms of sustainability, students identify that the main learning from their exchange experience was in terms of community building. All five students discussed during their interviews that the internship had taught them that community engagement is key to sustainability. They talked about the jornadas, workdays organized by students where the entire educational community got

together to carry out physical work for their school. During an interview a student described his learning experience in the following manner: "While I was in Mexico, I was exposed to hard working passionate people, who believed in their school and in maintaining their country and their planet". Another student noted that "the concept of sustainability brought the whole community together, not just a group of students or the administration". This concept of community and community building was experienced by the participating students during their stay at the Mexican campuses and during their engagement with other Mexican youth engaged in sustainability action.

Insert photo 11

Students also identified that the internships gave them an opportunity to share what they had learnt at Dawson College and in some cases through their environmental activism. It is important to note that all participating Dawson College students were either enrolled in an environment related program and or were engaged in campus sustainability. At the same time it is also important to point out that the participating Mexican campuses did not have at the time that the project started any environmental programs or courses, thus their students did not have access to environmental information through their programs. Accordingly, the internships were design so that Dawson College students could share with the Mexican students their knowledge and experience in environmental action. For the Dawson College participating students this meant having an opportunity to apply their knowledge, have hands on experience and to become engaged global citizens.

Culturally, Dawson College students were exposed to a different language and culture, and they all took on the opportunity to learn Spanish. The cultural exchange provided them to see middle class family living in rural or urban cities. They had the opportunity to step into a Mexican household and learn about different social family structures and the local context. Students also took the opportunity to share their culture with their Mexican counterparts.

The student internships proved to be a meaningful way of sharing knowledge and experience from a student-to-student perspective. Dawson College students learnt from Mexican students while interviews with Mexican students and teachers supported that the leaning was mutual. The learning went beyond environmental information and

knowledge. Interviews indicate that these student internships and the relationships that developed motivated Mexican students to continue working on their sustainability projects, as they felt that "someone cared" about what they were doing. Personal relationships and networks were established that are seeing by the participants to support their actions.

Institutional Visits

Another mechanism used to share knowledge and experience between institutions was the design of visits from Mexican delegations to Dawson College and from Dawson College to Mexico. These visits were key at establishing institutional ties and forming a network of institutions working for sustainability in education. These visits brought the participating institutions closer together and established a collaborative space and possibilities to explore future institutional collaboration.

Two students from Mexico, one from UPN Ayala and one from UPN Galeana, as well as the Normal Superior's Sustainability Coordinator and Ciudades Verdes' coordinator visited Dawson College. While we identified these activities as important and relevant we were limited in the number of people that could travel from Mexico to Dawson College due to financial constraints. Visits from Dawson College, not including the above described student internships, included visits by



Sustainable Dawson's Coordinators, two teachers as well as Sustainable Dawson's Dean of Social Science and Business Technologies.

The visits from the Mexican delegates to Dawson College were designed as learning spaces to share knowledge and experience. Thus the visitors had the opportunity to do the following activities:

- Guided visits through the Dawson College campus identifying and learning about different Sustainable Dawson projects
- Discussions with Sustainable Dawson coordinators to share best practices
- Applied work with Sustainable Dawson projects. These included participation in Earth Day Week celebrations, clearing of Peace Garden, selling of tulip bulbs as fund raising, etc.
- Visit and participation in Dawson College's environment related courses
- Presentations to share project advances in Mexico to Dawson College students, teachers and staff
- Discussions with student campus groups involved in sustainability, such as Dawson Student Union and Green Earth Club

For Sustainable Dawson, these visits were an opportunity for outreach and to develop a pro-



gram for showcasing its projects and the organizational and community building process behind them. Through a self-reflexive practice Sustainable Dawson has identified its path as well as its strategy, which through this project is now sharing internationally. The visits were also an opportunity to build relationships with other institutions on the process of learning about sustainability. These relationships were based on sharing knowledge and experience in a setting of trust and good will rather than the more common engagement between institutions that compete for recognition and raising the profile of the institution each institution aims to meet the benchmarks established by different certifications. Ideas such as the establishment of Sustainability Tours came about through, tours that highlight sustainability projects at Dawson College and focus on how these projects were brought about my community engagement and



the integration of academic and operational activities were developed during these visits.

Visits by Sustainable Dawson representatives to the participating Mexican institutions also proved to be important means for sharing knowledge and experience. During these visits, Mexican institutions had the opportunity to showcase their projects and collective forums to discuss campus sustainability were established. Learning about sustainability from a different institutional and international perspective provided all participating institutions with new perspectives on institutional sustainability.

Dawson's Sustainability Coordinator, Cindy Elliott, for example made a visit to the Normal Superior to support their efforts in creating their Peace Garden. Drawing on her knowledge as a horticulturalist as well as her experience creating and coordinating the creation of Dawson College's Peace Garden, she spent two weeks working with students, teachers and staff in Mexico.

Sustainable Dawson coordinator and program developer were asked to describe what changes they perceived in themselves due to their exchange with the Mexican institutions. Their responses indicate that participation in this project provided them with knowledge about sustainability but also a positive exchange experience with others and a value shift. As Chris Adam noted, participating in the project provided him with "renewed knowledge for how to structure projects with a strong dose of community building as a powerful agent for change." He also stated that

from this experience he confirmed that "positive psychology theory in the cultivation of hope, trust in others and validation must be injected continually into evolving projects". The impacts however also reached his personal value system as he shares that his "sense of sharing has shifted after meeting the people of Mexico".

Use of Social Media



One of the main challenges presented by the objective of sharing knowledge and experience was language. Social media however, provided an opportunity to help bridge the cultural and physical distance between the participating institutions. The use of facebook, as well as blogs provided an opportunity for continuous updates on what was being done at each participating campus, as well as a means of systematizing project activities. Pictures, documents, videos were generated and later shared widely through facebook.



A facebook page provided the opportunity to upload information in both English and Spanish, and provided an opportunity for all participants to provide and also view content. The facebook

page was managed by several individuals. Students and faculty from the participating institutions provided content. During the final evaluation however, discussions on the use of facebook lead us to conclude that it did not meet our expectations due to a different culture in terms of the use of the tool. The expectation by the coordinating team was that facebook could provide a platform for the discussion of issues. However, while content was widely viewed, comments did not lead to the expected discussions. Mexican participants argued during the final evaluation that culturally facebook is not used by students as a means of establishing discussions but mainly sharing pictures and images. Furthermore, teachers are not all connected and using this socialmedia.

Courses and workshops

Institutional sharing of knowledge and experience was supported through participation in workshops



and the inter-institutional design of a course on campus sustainability. The project coordinators designed three workshops. A preliminary, a mid-term evaluation and a final evaluation workshop were designed to gather project participants from all institutions to discuss project objectives as well as activities. These workshops brought the collaborating educational institutions together even in the absence of formal institutional partnerships (Dawson College, UPN Morelos and Normal Superior). The process brought the institutions, its members and administrative structures to collaborate with each other in the accomplishment of common goals and to support each other in their own institutional objectives.

An important space for knowledge sharing and collective learning was the design of a workshop,

Tools for Environmental Education: A workshop for facilitating student engagement, learning and environmental action. The workshop was



designed by popular environmental educator Margarita Hurtado, who is also the coordinator of this project in Mexico. The workshop brought teachers together from Dawson College and their Mexican counterparts to learn and shared their own pedagogical practices in environmental education. Through the workshop relationship were built between Dawson College teachers and a network for knowledge generation and sharing between institutions established.

Finally, the course Tools and Strategies for the development of Sustainable Campuses, held in Mexico was a perfect example of four educational institutions coming together to teach and learn. With participation from students, teachers and staff from all participating institutions knowledge was shared on environmental issues, best practices for campus sustainability, leadership for sustainability and other topics collectively identified through this project as the basis for sustainability action. The design of the course brought together best practices in the area of education for sustainability.

The course was constructed on a theoretical-conceptual model based on the collective construction of basic knowledge for the understanding of the concept of sustainability and campus sustainability (curriculum, research, policy, operations and community engagement), knowledge about global environmental issues and leadership for environmental action. The methodological approach was participatory and experiential in nature. It aimed to generate links between theory,

research and practice through a participatory action research model. Participants were exposed to the use and application of alternative energies, eco-technologies, curricula design for sustainability and techniques for group dynamics. An important axis for the design of the course was the development of activities that promoted collective and inclusive work as well as peaceful environments and the reinforcement of values such as warmth, openness to diversity, coexistence, joy, friendship, fellowship, compassion, empathy, respect, hope and trust, all identified as key for building sustainable societies. Chris Adam, a collaborator and participant in the course described it as “experiential, holistic, authentic and interdisciplinary. The project (itself) was not only an incubator of ideas, dreams and application, because such an incubator doesn't form unless those ideas and application are cradled. This project was, throughout, a safe place to be and how that happens was addressed in the course”.

External Support

The network established through this project went beyond the participating partner and collaborating institutions. Needs for information and professional support were identified and a network of professionals and institutions for the



resolution of concrete problems was developed. The network also extended to other educational institutions interested in education for sustainability, as well as government agencies and non-governmental organizations working in the area of education or sustainable development. These

alliances proved to be key for providing an opportunity to share best practices with the community at large and also guaranteeing the sustainability of the initiatives carried out for campus sustainability.

Professionals in the area of biodiversity conservation, green walls, horticulture, green energies and others were brought in to support projects taken on by the different participating institutions. It is important to point out that these professionals played a supporting role, rather than becoming involved in the decision making process already established or being elaborated at each of the participating institutions. Many of these professionals are part of non-profit organizations in Mexico. Thus, extending this network to incorporate the support of these professionals has established relationships between educational institutions and civil society. This is an important advancement in the establishment of synergy between different social actors.

Collaboration was also extended to include governmental institutions at the state and national level in Mexico. Important alliances were established

through this project with institutions such as the newly established ministry of Sustainable Development in the State of Morelos. The ministry has supported the Mexican participating institutions by extending their human resources to support their sustainability projects. The Mexican institutions have also extended their support to the ministry. For example, presently, the Normal Superior and the ministry are collaborating in the development of radio and video programming for sustainability. The federal agency, SEMARNAT, the secretariat of Environment and Natural Resources has also participated in this project through collaboration in workshops. These partnerships strengthen the capacity of educational institutions in Mexico to bring about change within their sphere of influence. There is a reconfiguration in the way institutions relate to each other based on problem solving as well as the establishment of new norms.

Interest in the project continues to grow. It is being identified, by Mexican governmental institutions, as a model drawing the interest of other higher education institutions in also becoming members of this network of knowledge sharing and support for sustainability in education.

Final Recommendations

Given the complex nature of sustainability issues it is imperative that institutions of higher education learn, teach and aim to model sustainability. Research, curriculum but also the campus' grounds and its infrastructure are tools for contemplating and acting on the institution's performance and role with regard to sustainability. This project set out to establish collaboration for institutional sustainability in higher educational institutions of the North and South. In the process we learnt about institutional organizational processes, inter-institutional collaboration, support networks, education for sustainability (or sustainable development), leadership for environmental action and community engagement as key building blocks for sustainability in education. Through a participatory and flexible process it identified tools and strategies for knowledge building and sharing within a context of community building and leadership strengthening. The process allowed us to identify

factors that strengthen such process. Following we offer our recommendations to all the participating institutions. Some of these recommendations are specific to the context of this project and others can be generalized as contributions to the overall understanding of how to support a path to sustainability in our institutions of higher education and educational communities.

Structure for institutional Sustainability

Throughout this project each of the Mexican participating institutions explored different organizational models to carry out their sustainability projects. Their organizational efforts and Dawson College's organizational experience mainly, but not exclusively, that of Sustainable Dawson, allowed us to identify key internal elements that support sustainability on campus. These include

empowered students, engaged faculty and a supportive administration. A structure however, that brings together and provides support to the educational community is necessary. We recommend:

- The establishment of a sustainability policy. It is fundamental that each institution draft its own sustainability policy, based on a collective vision of sustainability.

- The establishment of a Sustainability Coordinator. This post could be covered by a teacher, a student or a staff member. However, it is imperative that the post includes allotted time to coordinate campus initiatives with payment, or an economic stimulus, or release time. In the case of a student we suggest provide academic recognition.

- The main task of the Sustainability Coordinator should be to encourage and support students, faculty and staff to involve themselves in projects that will help the institution achieve its sustainability goals. Ideally, this should aim to integrating research, curriculum and operations through the collaborative work of students, faculty and staff.

- Due to the importance of establishing personal relations, we suggest that the post of Sustainability Coordinator should aim for stability, which in turn will allow him or her to build relationships with students, faculty and staff.

- Establishment of a Sustainability Committee

- Ideally integrated of engaged students, teachers and staff.

- Allocation of a budget for sustainability projects or a strategy for fund raising.

- Capacity building for writing grant proposals and applying for funding

- Allotment of human resources for project management.

- Allotment of time by administrative staff, including financial officers, to the functioning of the institution's sustainability project.

- Establishment of an ongoing capacity building program for project design and management

- Allocation of time, spaces and resources for student initiatives. Encourage and support student-driven initiatives and encourage their collective action (student run clubs or activities).

- Allocation of time, spaces and resources for faculty initiatives. Provision of release time for research on institutional (campus) sustainability, resources for creating links between research

and teaching, possibilities for creating links between curriculum and operations (learning about and taking action on issues such as energy use, waste management, etc.)

- Showcase institutional advances

- This can be done via facebook, a website or through the elaboration of a semester report.

An integrative approach to campus sustainability

Sustainable Campus initiatives throughout North America have already identified the importance of working on all different aspect of campus life, curriculum, research, operations and in some cases community engagement. Our contribution lays in proposing that campuses aim to integrate, make links between these different elements that make up campus life and the reason for being of the institution. There is great potential for lowering campus ecological footprint as students, faculty and staff work together using the curriculum and research as well as professional expertise found at the institution to do so. This means bringing members of the educational community together, building relations of trust and mutual respect to do what they do best, teach, learn, administer or fix. We encourage institutions to find synergy between curriculum and operations and nourish relationships between students, teachers and staff.

Following are some more specific recommendations:

- For the UPN and Normal Superior we suggest the design of courses and programs with environmental and sustainability content, that are applied and linked to campus operations or curriculum.

- Campus Sustainability Courses have the potential to engage students in theory and practice by carrying out research on campus operations (or curriculum) and proposing solutions.

- For Dawson College we recommend to move towards a more integrative means of teaching about the environment and sustainability.

- Establishment of internships for both the Environmental Studies and Environmental Science in collaboration with Sustainable Dawson

- Encourage greater collaboration between Sustainable Dawson and the curriculum

(with all departments).

- Support research into Sustainable Dawson and other Dawson initiatives that support social and environmental responsibilities

- Capacity building among teachers, student and staff on environmental issues through extra-curricular programs.

- Participation in workshops, outings, visits to learn about other experiences provide a practical, fun and experiential means of learning.

- Capacity building through courses or extracurricular activities on leadership, collaborative work, fundraising strategies, positive psychology and projects design. Pedagogical approach that engages educational community in environmental/sustainability action

- Continuous collaboration with external professionals and government institutions for capacity building and collaborative action

- Support for research on environmental education and sustainability, with a focus on campus sustainability

- Encouragement and support for researcher engagement in the Sustainable Campus project

- Support for dissemination of project research results and educational material

Inter-Institutional Collaboration

The establishment of inter-institutional collaboration was one of the main strategies used throughout this project to support an organizational process towards sustainability in educational institutions. This collaboration was international in nature but also among Mexican campuses and between educational institutions and other organizations such as government agencies and civil society (NGO) organizations such as Ciudades Verdes and Earthvalues. This collaboration provided opportunities to share knowledge and experience in areas such as organizational structures, environmental knowledge, environmental education, project design and management, leadership training and others. This collaboration however, was also an important element in motivating the participants to see their projects through. Being a showcase to others was a strong motivational

force. Students, faculty and staff felt proud of their accomplishments as they were appreciated by others. Through personal and institutional relationship building an important network has been created through this project. Our recommendations aim at strengthening of this network and eventually to its extension.

- The establishment of a “network committee” made up of representatives from Dawson College, UPN (all three campuses), Normal Superior and Ciudades Verdes.

- The main objective of the committee would be the discussion of means to maintain and support collaboration between the participating institutions. This committee should include the participation of students, faculty and staff.

- Activities may include regularly established meetings, workshops as well as the use of social media for communication.

- Establishment of formal partnership agreements between UPN Morelos, Normal Superior and Dawson College. Establishment of an agreement of intention to continue collaboration for sustainability.

- A formal partnership agreement is now existent between Dawson College and Ciudades Verdes.

- Support of collaborative research projects between faculty of the different institutions.

- Continue to showcase, share advances made on campus sustainability.

- Via facebook, website, sharing of reports, etc.

- Establish course “Tools and Strategies for Campus Sustainability” as an accredited “diplomado”.

- Open up of network to other educational institutions through a dissemination strategy of project activities and results.

- Design a plan to extend the network for knowledge and experience exchanges with other schools in Morelos and other Mexican states, Latin American countries that are in similar processes.

Dissemination Strategy

Dissemination and outreach has been done throughout this project. The maintaining of a facebook page, presentations made by different project participants in different forums within and outside of the participating institutions, radio and tv (online) interviews have been an important means of sharing with others about the process we have engaged in and the emerging results. Presently there is a manual being elaborated based on the experience of the summer course "Tools and Strategies for Campus Sustainability".

- Maintain and upkeep facebook content by all participating institutions
- Transferring of facebook content into a website for wider access and dissemination
 - We propose that the website is housed in one of the participating institutions with a clear

mechanism for updating information and accessible to all.

- Future presentations by project participants in different forums outside of the participating institutions
- The writing and publishing of an academic journal article
 - This is presently being done by Gisela Frias using this report as the main source of information.
 - Set up of a conference to share experiences with other campuses.
 - Encouraging students to present from all participating campuses
 - Elaboration of video to share main research findings and overall experience.

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Annexed Documents

Annex I

XINEMI A.C.

Proyecto "Planteles Educativos Sustentables: Compartiendo saberes"

Taller : Iniciación y encuentro interplanteles : UPN- Normal Superior- Dawson College
Coordinación: Macu Resines y Rocio Aranda
Fecha : Diciembre 2012
Lugar: Casa Verde, Jiutepec Morelos

El taller se realizó en la Casa Verde en Jiutepec Morelos con la participación de dos alumnos de la LIE de la UPN Galeana, dos alumnos de Villa de Ayala , 4 alumnos de Cuernavaca y dos de la Normal Superior, además de maestros y docentes de Dawson College: Chris Adam, Gisela Frias y Cindy Elliot y la coordinación de la Mtra. Margarita Hurtado Badiola.

La duración fue de dos días y se organizó de la manera siguiente:

El primer día se inicia a las 6 de la tarde con la instalación de asistentes en las habitaciones y se disfruta la presentación del grupo de Danza de la Normal Superior del Estado de Morelos con bailables de Veracruz y Guerrero. Se comparte la cena. Posteriormente reunidos en parejas se dialoga sobre las características personales y los motivos por los que se asiste al evento.

El segundo día se abre propiamente el taller con la presentación de cada uno de los asistentes.

Otra actividad fue : **Los principios que rigen nuestro que hacer .**

Estrategia: Generar la reflexión grupal a partir de la lectura de **refranes ambientales.**

Recurso: Juego de la Oca. (tablero, fichas y dados)

Procedimiento. Se cuenta con el tablero en forma de espiral donde a través del uso de un dado se avanza la ficha correspondiente al jugador tantas casillas como el dado marque, de tal manera que el lugar donde se coloque la ficha presenta una consigna, mensaje o tarea que tiene que realizar el

jugador.

Las aportaciones que surgieron del juego fueron:

- Regar los jardines por la noche
- Mantener el entusiasmo y la energía para seguir.
- Buscar capacitaciones que nos permitan seguir avanzando
- Compartir los avances
- Tener una base que nos sustente una meta
- Nutrirnos con las experiencias de otros.
- Cubrir las necesidades del grupo. Dar y recibir. Estar alertas
- Dejar de producir cosas inservibles
- Cuidar nuestras relaciones, pensar antes de actuar
- Aprovechar los errores, equivocaciones de quienes ya han andado el camino
- Cuidar nuestros recursos para que nos duren
- Acciones concretas, viables, seguras.
- Ser solidarios apoyarnos
- De "pocos en pocos" llegaremos a ser muchos " Mucha gente pequeña en lugares pequeños harán cosas pequeñas que transformarán el mundo.
- Nuevos paradigmas, romper el modo estático de ver la realidad
- Plantel árbol..... todos los planteles bosque
- Cuando se necesite dar un paso hacia atrás y reflexionar
- Pensar alto, ver hacia el futuro, contar con un proyecto
- Vale más una acción que mil palabras.
- Celebrar cada paso que damos y llegar juntos a la meta
- Potencial para responder de manera creativa a una problemática compleja porque lo integra gente joven.
- Reconocer, valorar la diversidad de conocimientos; en esa diversidad está la riqueza.
- Abiertos al cambio, a recibir.
- Si caemos nos levantamos
- Elegimos caminos poco conocidos....arriesgarnos.
- Identificar una causa común, estar-ser unidos, trabajo en conjunto, amar lo que hacemos.
- Retroalimentarnos, crítica constructiva, aceptar, aplicar.
- Cada uno somos la propia medida de lo que podemos hacer, podemos pedir ayuda
- Estar unidos.
- La energía y creatividad de los jóvenes impulsan el proyecto.
- Convencernos que estamos caminando a un lugar mejor.
- Un sueño común
- Ir más allá de las acciones, ver más allá.
- Dar el 101%
- No producir la basura en nuestras relaciones de trabajo.....afinar los procesos
- Caminar por nuevos senderos, abrir brechas, quitar obstáculos
- Perder un turno....nos puede fortalecer.
- En la diversidad de personas está la riqueza
- Valorar las experiencias compartidas.

Actividad 2: Puesta en común sobre el diagnóstico y los avances alcanzados en cada uno de los planteles.

Estrategia: Exposición

Esta actividad deriva de una serie de reflexiones que cada participante construyó desde su plantel.

Aportaciones de cada uno de los planteles organizadas en seis apartados:

1. DIAGNÓSTICO:

Fortalezas:

- Participación de 30 alumnos en actividades (Villa de Ayala)
- Espacio amplio: terreno
- Energía solar
- Uso seguido/corriente de agua en los mingitorios (Normal Superior)
- Contexto UPN Galeana: Se cuenta con espacio/edificio a partir de luchas (Galeana)
- Cinco años ininterrumpidos en actividades extracurricular
- Contradicciones al interior
- No somos maestros, somos interventores educativos
- Se cuenta con acopio de cartón

Debilidades:

- Escasez de agua (Villa de Ayala)
- Conflicto jurídico con el dueño del terreno.
- Una materia de educación ambiental está en el curriculum y es optativa.
- Escasa participación, compromiso y aprobación de los docentes.
- No hay temas ni actividades extracurriculares.
- Los edificios no cuentan con estructura (diseño sustentable)
- Indiferencia de los alumnos ante el tema ambiental.
- Al exterior: inseguridad y zonas desaprovechadas. (Galeana)
- Al interior: suelo con desniveles "baches", madrigueras de animales (cuiniquis e iguanario).
- Baños en desuso, áreas de escombros.
- Lugar caluroso con abundancia de lluvias de temporal.
- Los y las alumnas participan a cambio de algo "que me das a cambio de qué". (Normal Superior)
- Materia problemas sociales contemporáneos. (Plantel Cuernavaca)
- Terreno vacío.
- Composta sin mantenimiento
- Los alumnos desconocen con lo que se cuenta en el plantel: contenedores, acopio de pilas.
- Árboles frutales.
- Construir más edificios a largo plazo (existe el proyecto).

2. ORGANIZACIÓN:

- Evitar conflictos con los ex dueños. (Plantel Villa de Ayala)
- Surgen iniciativas.
- ¿Cómo lograr que el proyecto perdure en el tiempo?
- El grupo ha crecido.
- Mantener el entusiasmo.
- Generar actividades detonadoras.
- Se involucra a los alumnos de quinto semestre de la materia investigación-acción. (Plantel Galeana)
- Inicia con dos alumnos.
- Hacer convocatorias.
- Jornadas de "acondicionamiento" del plantel: participación, colaboración, trabajo en equipo.
- Participación de docentes, administrativos, egresados (60 personas).
- Equipo de alto rendimiento: diez integrantes.
- Dejar nuestro legado: impulsar a las y los alumnos de nuevo ingreso "patrimonio estudiantil".
- Coordinadores: dos alumnos y un maestro. (Normal superior)
- Comisiones cinco, cada comisión cuenta con un líder.
- Difusión: radio
- Cinco de primer semestre, una maestra, un compañero de séptimo semestre. (Plantel Cuernavaca)

- Crear alianzas con asignaturas.
- Gestión

3. INVESTIGACIÓN:

- Toma de conciencia: dónde vivo, dónde estoy (visión de futuro) (Plantel Galeana)
- Investigación sobre el agua. (Normal Superior)
- Proyección de nuestras acciones, implicaciones (Normal Superior)

4. CAPACITACIÓN:

- ¿Cómo diseñar un proyecto? (Plantel Galeana)
- ¿Cómo utilizar un baño ecológico? (Normal Superior)
- Se impartieron conferencias sobre cactáceas. (Normal Superior)
- Clasificación de residuos: importancia (Plantel Cuernavaca9)

5. TOMA DE DECISIONES:

- Incluir la materia de investigación acción al programa e involucrar a los alumnos de primer y tercer semestre. (Plantel Villa de Ayala)
- Tener un plantel (instancia) más digna. (Plantel Galeana)

6. ACCIONES:

- Siembra de árboles (no se sabe cuántos) de las especies Nim, Palo prieto, Pochote y Jaca randa. (Plantel Villa de Ayala)
- Lunada de integración. (Plantel Villa de Ayala)
- Presentación del proyecto a los estudiantes de diferentes grados. (Plantel Villa de Ayala)
- Juego motivacional Naranja dulce. (Plantel Villa de Ayala)
- Elaboración de murales por parte de un alumno y un maestro el cual resultó ser un detonador de dones. Tema: Ecosistemas con los que contamos. (Plantel Villa de Ayala)
- Visita de un rancho ecológico. (Plantel Villa de Ayala)
- Asignar espacio para la composta. (Plantel Galeana)
- Acondicionamiento del contenedor. (Plantel Galeana)
- Invitación/plática/motivación (Plantel Villa de Ayala)
- Trabajos de albañilería. (Plantel Villa de Ayala)
- Recolecta de recursos. (Plantel Villa de Ayala)
- Clasificación de residuos: orgánicos e inorgánicos. (Plantel Villa de Ayala)
- Se acondicionó compostero/composta de hoyo. (Plantel Villa de Ayala)
- Proyecto: (Plantel Villa de Ayala)
- Fijar la malla, arreglar el alambre de púas.

Sembrar árboles y hacer un mural al exterior del plantel.

Rotular el logo y lema de UPN en la fachada del edificio.

Instalar un contenedor

Diseñar y reubicar áreas verdes: huerto y vivero.

Limpieza de baños, construcción de bodegas.

- Diseño del logo para el plantel sustentable. (Normal Superior)
- Diagnóstico del consumo energético del plantel. (Normal Superior)
- Pasarela de moda: diseño de ropa con objetos reciclados. (Normal Superior)
- Hacer un rally (Normal Superior)
- Separar la basura. (Normal Superior)
- Torneos deportivos en nombre de la sustentabilidad. (Normal Superior)
- Contar con baños ecológicos. (Normal Superior)
- Contar con un jardín por la paz de cactáceas. (Normal Superior)
- Películas de Semarnat serie "Sistema planeta". (Normal Superior)
- Plantar hortalizas. (Plantel Galeana)

- Reactivar composta. (Plantel Galeana)
- Focos ahorradores. (Plantel Galeana)
- Mantenimiento de áreas verdes. (Plantel Galeana)

Actividad 4: Ser líder Estrategia: Exposición de Chris...

Recurso: Juego por equipos "pasar la pelota...."

Chris y Gesella hacen una presentación sobre ambientes sustentables e implementan una actividad en dos grupos con una pelota donde la consigna era : pasar la pelota por todas las manos en el menor tiempo posible y una vez hecho el ejercicio se reflexiona sobre las diferentes participaciones que tienen los estudiantes en la actividad. Se reconoce como un recurso para el docente con el objeto de integrar el trabajo en equipo responsable e identificar líderes.

Al respecto dice:

" El liderazgo no es una posición, es un acto.

Los estudios demuestran que los líderes son identificados como personas que muestran: Visión, confianza y optimismo.

Actividad 5: Establecer acuerdos

Estrategia: Puesta en común

Acuerdos:


- Mantener comunicación entre todos
- Reuniones rotativas en los plateles
- Centrarnos en la etpa de diagnóstico
- Fortalecer los grupos base: permanencia, participantes.
- Seguimiento.
- Apertura para compartir saberes
- Dos capacitaciones en el periodo diciembre 2012- junio 2013.

Indicadores:

- Comunicarnos con cuatro planteles.
- Compartir información al menos con una universidad extranjera.
- Dos capacitaciones en metodología y técnica.

Se realizó el cierre del taller compartiendo lo que significó para cada uno de los participantes el haber compartido saberes en este taller.

Annex II



Primer Taller de evaluación,
17 de mayo de 2013

Informe


El pasado viernes 17 de mayo, tuvo lugar en las instalaciones de la Escuela Particular Normal Superior “Lic. Benito Juárez”, el primer taller de evaluación del proyecto “Planteles Sustentables. Compartiendo saberes”.

Estuvieron presentes representantes de los equipos de los planteles UPN en sus tres sedes y de la Normal Superior “Lic. Benito Juárez”, encabezados por sus directores generales, Profesora Concepción Tonda de UPN y Profesor Carlos Gallardo de la Normal Superior.

Así mismo, durante este taller, nos acompañaron la maestra Teresita Maldonado, representante de CECADESU, de la SEMARNAT. la Licenciada Mercedes Pesqueira directora general de Educación y Cultura para el Desarrollo Sustentable en el Estado de Morelos y la Dra. Gisela Frías coordinadora del Proyecto Planteles Sustentables en Canadá, esta última a través de una videollamada.

El Primer taller de evaluación se llevó a cabo bajo el siguiente programa:

Horario	Actividad	Responsable
10 a 10:20	Encuadre del taller y presentación de participantes	Margarita Hurtado Badiola
10:20 a 11:20	Presentación de los avances con intervenciones de 15 minutos por cada plantel bajo el formato de programa de radio. <ul style="list-style-type: none"> • Ayala • Cuernavaca • Galeana • Normal Superior 	Conductores: Luisa y Nambo (Se sugiere que los estudiantes líderes de cada plantel sean quienes realicen las presentaciones apoyados por los docentes) UPN Ayala: Yarida Ávila UPN Cuernavaca: Jorge Arturo Domínguez UPN Galeana: Josué Serdán Leyva, Billy Hernández y Dania García EPNSBJ: Azucena Morales, Priscila Della Valle y Amín Nicolás
11:20 a 11:30	Cierre con preguntas y comentarios en relación con las presentaciones por parte del “auditorio”.	Margarita Hurtado, Luisa Montes y Juan Nambo
11:30 a 11:	Informe sobre la visita al Dawson College	Margarita Hurtado, Yarida Ávila y Luisa Montes



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50	Convivio sustentable en el Jardín por la paz	Amin Nicolás y Juan Galeana
11:50 a 12:20	Trabajo en plenaria para planear e impulsar los proyectos de cada sede, acciones de vinculación, sistematización y estrategias de comunicación.	Mercedes Pesqueira Teresita Maldonado
12:20 a 12:50	Cierre del taller por parte de los directores de las instituciones participantes	Concepción Tonda y Carlos Gallardo

Discusión y acuerdo

En esta reunión se presentaron los avances de cada uno de los planteles involucrados en el proyecto. La primera participación fue realizada por la estudiante Yarida Ávila, de UPN-Ayala, quien lamentó la poca disposición de los profesores a trabajar en el proyecto. No obstante, se mostró confiada de que en poco tiempo el proyecto se vea fortalecido con la participación de todos. Entre las actividades que se han desarrollado, se encuentran: la composta escolar, el mural por la paz, el jardín de cactáceas (en el que se busca resguardar dos especies en peligro de extinción), y tuvieron durante el mes de marzo el apoyo de dos estudiantes del Dawson College, para realizar proyectos en común.

Por su parte, Jorge Arturo Domínguez Sagahón, coordinador del proyecto en UPN Cuernavaca, detalló que el proyecto se encuentra en fase inicial. Apuntó que luego de una reunión con los estudiantes que se han integrado al equipo determinaron que el primer paso sería hacer una lombricomposta para garantizar que el suelo en sus instalaciones tenga las condiciones óptimas para desarrollar otros proyectos relacionados con el uso de la tierra. Por lo tanto, se hicieron los trámites para iniciar con una capacitación con especialistas. Asimismo, abrió la invitación a una representación de cada uno de los planteles para que reciban esta misma capacitación.

La tercera intervención corrió a cargo por parte de los estudiantes de UPN_Galeana, Billy Michael Hernández Morales y Dania Karen García Rodríguez, quienes han conformado, con el liderazgo del profesor Josué Serdán Leyva, un grupo denominado Interventores en



Primer Taller de evaluación,
17 de mayo de 2013

acción, en el que se han realizado actividades relacionadas con el embellecimiento y mantenimiento de las áreas verdes, reubicación del área de comida, reconstruyeron su contenedor para PET, han tomado cursos de capacitación sobre compostaje y el beneficio del uso de los residuos de la caña. De igual manera mostraron sus proyectos para iniciar en la escuela la construcción de una cocina escolar, habilitar un aula como comedor escolar, además de que recibirán el próximo mes de junio a dos estudiantes del Dawson College para el desarrollo de proyectos sustentables.

Azucena Morales y Luisa Montes coordinadoras del proyecto en la Normal Superior, compartieron las actividades realizadas que dieron inicio con un ciclo de películas del Programa Cinema Planeta, esto con la intención de sensibilizar a la comunidad e introducir los propósitos y las características del proyecto, se dieron un par de conferencias sobre cactáceas con expertos en el tema con miras a la construcción de un jardín xérico por la paz, recibieron la visita de los iniciadores del proyecto de sustentabilidad en Dawson College Canadá y de las coordinadoras Internacional y Nacional, se ha abierto un espacio permanente de información sobre el proyecto en el programa de radio semanal "Cosas de Profes" que se transmite en vivo, todos los martes a las 10:30 am en www.cosasdeprofes.com.mx, espacio que se ofrece a las instituciones participantes. Mencionaron que actualmente se está diseñando un Diplomado en sustentabilidad para impartirse en el período de receso en el mes de julio. En abril se realizó una exposición fotográfica denominada "Nuestros vecinos verdes" con una metodología que pretende la revaloración de las especies florales que existen en el plantel, metodología y exposición que han sido puestas a disposición de las instituciones interesadas para ser replicadas con la asesoría necesaria si así lo requieren. En el mismo mes, recibieron la visita y asesoría de Cindy Elliot, diseñadora y coordinadora de actividades académicas en el Jardín por la paz en Dawson College, para construir el ala A del Jardín Xérico medicinal por la paz.

Mencionaron también que tienen un espacio mensual en la revista virtual *Normalario*, del Centro de Estudios de Posgrado "Benito Juárez", cuentan actualmente con la asesoría de FIDE (Fideicomiso para el ahorro de energía eléctrica), han recibido asesoría para formarse como "Promotores del cuidado de la energía" y actualmente están en proceso de hacer un diagnóstico de gasto de energía eléctrica para valorar el diseño de un proyecto de energía fotovoltaica.

Gisela Frías, coordinadora en Canadá del proyecto *Planteles educativos sustentables: compartiendo saberes*, afirmó que la educación en sustentabilidad no es sólo una cuestión teórica sino práctica como se ha pretendido desde un inicio en el proyecto. "Me interesa el asunto de que para este proyecto la sustentabilidad de la que ustedes hablan es más compleja porque implica nuevos modelos de convivencia e interacción. Espero –dijo– que de aquí se dé una relación en la que ustedes como pioneros compartan con otras instancias en el Estado de Morelos. Son guardianes de la Tierra".



Primer Taller de evaluación,
17 de mayo de 2013

Mercedes Pesqueira Villegas, directora general de Educación y Cultura para el Desarrollo Sustentable, señaló que es importante trabajar en estos foros, abrió el espacio para los jóvenes de este proyecto realicen servicio profesional en la Secretaría de Desarrollo Sustentable, en este sentido señaló que es necesario impulsar la autogestión de las escuelas y dar como ejemplo el trabajo del proyecto estamos haciendo en los planteles de educación básica media superior y superior. Afirmó que son pocas las instalaciones que se han comprometido de esta manera con su comunidad estudiantil. Evidencia de ello es haber escuchado de voz de los propios estudiantes los avances del proyecto.

Por su parte, Teresita Maldonado, subdirectora de Educación Superior y Normal, del CECADESU, afirmó que es necesaria la construcción de una red de escuelas que buscan la sustentabilidad. Para lograr lo anterior, dijo, hay que trabajar en la formación de liderazgos ambientales y administrativos.

Ambas funcionarias se comprometieron para impulsar el proyecto *Planteles educativos sustentables: compartiendo saberes*, y establecer vínculos con los profesores y estudiantes responsables para que se puedan recuperar los proyectos.

Entre los acuerdos a los que se llegaron fue el de recuperar los diagnósticos realizados en cada sede para conocer y priorizar los proyectos que han llevado a cabo.

- Realizar un diplomado durante el verano. La fecha que se propone para su inicio es el dos de julio, en el que se encontrarán presentes los gestores del proyecto y personajes de renombre en el campo. La modalidad del diplomado será presencial teórico-práctico, en el que se retomen temas como el desarrollo del liderazgo, tecnologías alternativas y diseño curricular para hacer sustentable un plantel escolar.
- Diseñar estrategias para sensibilizar a los profesores. Para ello, se tendría que trabajar desde las asignaturas, vincularlo en los casos que sea posible al servicio social; para ello se sugirió que el gobierno del estado y el federal participen desde los proyectos que actualmente tienen en función (particularmente el proyecto de beca-salario).
- Hacer un manual sobre el proyecto en un plazo de seis meses.
- Realizar directorio de los participantes y aliados del proyecto.
- Llevar la exposición fotográfica "Vecinos verdes" junto con su metodología a las sedes UPN de Cuernavaca, Galeana y Cuautla.



Al tiempo de respaldar los acuerdos antes mencionados, Margarita Hurtado consideró indispensable pensar en tres preguntas ejes que ayuden a determinar las metas de los proyectos: ¿Para qué? ¿Cómo? y ¿Por qué? Ya que debemos ser conscientes de que muchos de los proyectos en educación sustentable, no se aterrizan o, en su caso, no son capaces de sostenerse. Para la sostenibilidad de los proyectos es indispensable también buscar una estrategia de difusión que pueda impactar a la comunidad y usar los diferentes recursos a nuestro alcance, como aquellos disponibles a través de internet y la conformación de redes.

Cabe mencionar que el taller de evaluación se llevó a cabo en un ambiente de cordialidad favorecido por la hospitalidad de la escuela anfitriona, Normal Superior, en el aula de espacio de lectura. El momento de compartir un saludable y sabroso refrigerio fue un plus para convivir de una manera más informal que contribuyó a entablar y fortalecer relaciones interinstitucionales.

Luisa Montes
Coordinadora EPNSBJ

Annex III

Feedback based on observations during evaluation workshop for 'Proyecto Planteles Educativos Sustentables', Cuernavaca, 11-12 November 2013

Janice Astbury, Independent Consultant and PhD researcher, University of Manchester

This feedback is offered as a contribution to reflections on the project and may be used in reporting to stakeholders.

I very much appreciated the opportunity to observe this evaluation process. I have been directly involved in sustainable campus projects as both student and teacher and have followed a variety of initiatives across Canada through my work with the J.W. McConnell Family Foundation. In the context of my background in this field I was very impressed with both the evaluation process and what it surfaced about the project, specifically the following strengths:

Social Innovation versus benchmarking

Planteles Educativos Sustentables is an excellent model of a sustainable campus initiative oriented towards social innovation. Many initiatives to date have operated within an Environmental Management System (EMS) framework where the focus is on meeting a series of benchmarks. While this approach has been very helpful in defining the characteristics of a sustainable campus and providing a framework for institutional commitment, it does not generally take full advantage of the energy and creativity of stakeholders. *Planteles Educativos Sustentables* has created space for students, teachers, administrators, support staff, and in some cases the surrounding community, to engage fully with the initiative. The evaluation surfaced many examples of how this range of actors had initiated and were carrying out projects that incorporated their skills and interests.

The EMS approach also tends to put universities and colleges in competition with one other as they vie for the highest score which they can then announce in their marketing material. The very collaborative nature of this project within and across campuses reflects the sort of multi-stakeholder and multi-institution collaboration that is necessary to achieve social, economic and environmental transformation.

Focus on building relationships

The designers of this initiative understood that in order to create the space for innovation, they needed to invest extensively in building relationships within and among the campuses before they determined specific project activities (and they fought the necessary battles within their institutions to not pre-define activities and thus keep this space open). The investment paid off; it was very clear during the evalua-

tion process that the success of this project was directly linked to it being driven by dedicated people in relationships of trust. The importance of relationships extended to the initiation and overall management of the project where the long-standing friendship between the project initiators/coordinators helped to overcome numerous challenges.

The trust that exists at all levels has encouraged commitment and perseverance in project implementation, as well as providing space for experimentation and for documenting failures as well as successes. The close-knit network that has developed over the course of the project has served as a continual source of motivation and support; providing inspiration and information, as well as materials and physical labour to bring projects to fruition on participating campuses. If one campus is struggling, the larger 'system' of the network has been able to rally around and sustain it until things turn around.

As is common among projects involving international exchange, the learning and inspiration offered by cross-cultural experiences were considerable. The fact that this project focused so much on building relationships and reflecting on practice, as well as fully engaging so many members of the campus community, made these effects even more significant.

Fully engaging the capacities of all stakeholders

The ability to fully engage the capacities of all stakeholders was supported by explicit reference within the project to the hierarchies of power that characterize most educational institutions. It was made clear through a variety of means that relationships of power must be recognized and reconfigured in ways that allow ideas and solutions to come from any part of the system; people must learn to recognize one another and work together outside of their roles.

One important strategy was having an engaged and engaging project coordinator present the project to the campus community as a whole and invite any member of this community to take leadership within the initiative. This created an open and supportive space while simultaneously communicating and transferring a clear and interesting mission to promote sustainability. As a result, everyone was invited and encouraged to appropriate the space in ways that aligned with their own capacities and interests. The leadership that was demonstrated by the students participating in the evaluation workshop and the collaborative relationships among students, teachers, support staff, directors and members of the surrounding community that were in evidence during the evaluation made it clear that efforts to allow leadership to come from any part of the campus system had been effective.

Multiple forms of complementary support and capacity building with demonstrable impact on students

The project partners ensured on-going capacity building opportunities through both workshops provided by the project as well as activities incorporated into the curriculum of participating institutions. Responsive support was also provided when challenges were faced and it was mentioned how one coordinator was constantly keeping an eye out to see who needed support—and who needed recognition. The effect of these opportunities on the students was particularly evident. Students participating in the evaluation described how training opportunities and coursework, as well as support from various mentors (including students from other campuses with whom the project allowed them to interact) impacted on their capacity to work together, engage others and carry out projects with tangible results on the ground.

Teachers also mentioned specific examples of having learned from approaches used by teachers on other campuses and of applying these in their own teaching, which in turn had an impact on students.

Facilitating engaged learning

Students spoke of how much they had learned from specific mentors who taught them things about which the mentors themselves were passionate. It was clear that not only knowledge and skills but also inspiration and motivation had been transferred.

Students were also motivated by the fact that they were learning things that could be immediately applied in their projects. Sometimes the application touched another campus as in the example of students

on a fundraising course at Dawson College raising funds for a project on one of the Mexican campuses. The enhanced learning opportunities provided by having students undertake internships related to specific projects at partner campuses, as opposed to more typical student exchanges, were also noted. The project furthermore made links between more theoretical coursework and activities on the ground. For example students studying free trade agreements and the commodification of seeds participated in saving seeds from the campus garden for next year's tomatoes, giving them something in common, and in solidarity, with small producers

Smart use of social media and other communication tools

Social media was used very effectively in this project, helping the partners to feel continually connected despite their geographic separation and allowing them to share their learning and excitement. Students were able to communicate their experiences on their home campuses and during visits/internships at other campuses using blogs, photos, videos, etc. A teacher reported how he had received a message from another institution wanting to learn about and possibly replicate the project. This interest was inspired by the Facebook page, which managed to convey the spirit of the project in such a way that it inspired someone from another institution to say, "I don't know exactly what you're doing but we want it!" Social media was also combined with other communication tools to engage a range of people in the campus projects. The other tools included presentations, site visits, posters and postcards that were designed in an 'Educational materials' course. Students demonstrated thoughtful analysis of how to formulate their messages and get them across to different audiences

Teachers shared their reflections and materials through a variety of means, including via *bjmedia's* 'Cosa de profes' (<http://bjmedia.mx>) taking advantage of the multi-media website and high quality video broadcasting from one of the participating campuses.

Institutional and Personal Transformation

The project reconfigured relationships among participants in ways that are likely to be enduring and influence the institutional cultures of the participating campuses. It was also reported that institutional boundaries were affected by the implementation requirements of this sustainable campus initiative where lines between education, research, fundraising and facility management blurred.

One student stated that the project made the campus community put mission and objectives related to sustainability into practice. The importance of students (including many who will become teachers) seeing stated aspirations translated into reality cannot be overstated when many students worldwide express cynicism about real commitment on the part of institutions. A teacher spoke about moving from teaching about composting to actually practicing it at home and about how the project had caused him to overcome his cynicism about 'sustainability' as meaningless political discourse. It was also mentioned that the empowering nature of the project and the tangible results generated hope in the current context in Mexico where there is "a feeling of submission to violence".

Physical changes are visible on the campuses, which now benefit from new green infrastructure facilitating delivery of a variety of ecosystem services. In addition to new infrastructure, there were also examples of greater use by a broader community of existing green facilities. This not only has an immediate positive environmental impact but also provides 'learning and doing' spaces for students and teachers to carry on transforming their campus and themselves. It also sends a strong message to everyone who comes to the campus that it is not just feasible but also normal that campuses incorporate sustainable practices.

Living laboratories facilitating adaptive experimentation and learning—and offering significant research opportunities

The open and experimental space created by *Planteles Educativos Sustentables*, along with the broad range of expertise and support provided by the many people who engaged with this initiative has meant

that each campus has developed its own unique set of projects. These projects generally emphasize particular sustainability themes such as food systems, water or energy, combined with practices common to all, such as improving reuse and recycling and expanding climate-regulating vegetation cover. As each campus also has its own particular context and conditions and the whole initiative is framed as a participatory action research project, the result is a series of living laboratories.

Students reported that they got the message that this was a space of experimentation, a safe place to try things and sometimes to fail. They were encouraged and supported to analyze their actions and the results. Teachers and other actors enjoyed similar support for risk taking. The adaptive experimentation and learning approach that was therefore present in these 'living labs' means that there has been a continual process of reflection and adaptation of strategies within each project and well as within Planteles Educativos Sustentables overall. The fact that this has been shared across the network makes it even more powerful. There is an opportunity to continue capturing and systemizing this learning so that effective approaches are documented and tools are developed in support of future efforts at these campuses and across a broader network.

There is also room for deeper analysis of what is going on within each living lab. Additional resources could be brought to bear to create more explicit 'laboratory conditions' such as establishing baselines and monitoring changes, capturing the perspectives of different stakeholders throughout the process, modelling drivers of change in social-technical-ecological systems, etc.

Several of the participating students were sufficiently interested and able to collect enough information to lead them to focus their undergraduate dissertations or equivalent projects on aspects of Planteles Educativos Sustentables. There may also be an opportunity to involve post-graduate students and possibly identify a group of interested academics who could set up a collaborative long-term research project.

Thank you for the opportunity to participate in the collaborative learning opportunity offered by this evaluation process!

Annex IV

Evaluación del proyecto

Planteles Educativos Sustentables: Compartiendo Saberes

Sustainable Campuses: Sharing our Knowledge for Social and Environmental Sustainability

**Proyecto financiado por
International Development Research Center**

**UPN Morelos
Universidad Pedagógica Nacional, Morelos**

Escuela Particular Normal Superior Benito Juárez

Coordinadoras del Proyecto:

**Gisela Frías
Dawson College
Margarita Hurtado Badiola
Instituto Mexicano para el Desarrollo de Ciudades Verdes, S.C.**

Evaluadores:

**Teresita del Niño Jesús Maldonado Salazar
Miguel A. Izquierdo Sánchez**

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Evaluación del proyecto

Planteles Educativos Sustentables: Compartiendo Saberes

Introducción

En este momento histórico, las instituciones de educación media y superior están llamadas a reconsiderar su función social, a reorientar los procesos de generación y aplicación del conocimiento y a replantear la formación de profesionales que contribuyan a la creación de una sociedad sustentable.

Las universidades deben asumir el liderazgo en el tránsito a la sustentabilidad con iniciativas que respondan a las necesidades de la sociedad y constituyan modelos para otros actores sociales.

Para responder a estos retos, las instituciones de educación media y superior requieren llevar a cabo una transformación estructural, epistemológica y metodológica.

Contexto de la evaluación

Este ejercicio de evaluación del proyecto Planteles Educativos Sustentables: Compartiendo Saberes (PES), sólo puede tener sentido si se explicitan al menos genéricamente las condiciones institucionales bajo las cuales ha estado operando, condiciones estructurales y coyunturales que permiten entender sus niveles de logro, procesos en marcha y resistencias, tanto institucionales, como de actores específicos. Esta primera sección apunta a señalar algunas de esas condiciones.

El Proyecto Planteles Educativos Sustentables: Compartiendo Saberes se llevó a cabo desde Noviembre 2012 a enero 2014. Su preparación incluyó varias actividades durante un año previo a su comienzo oficial, con la participación de miembros de las instituciones aquí mencionadas.

El proyecto que involucra a instituciones de dos países de diferente lengua; dos instituciones de educación públicas y una privada, y dos organismos de la Sociedad Civil (Ciudades Verdes y EarthValues). En estas instituciones existe una marcada diferenciación en las formas de tomar las decisiones y en las jerarquías institucionales que han participado en su administración, como en su estudiantado.

Por la naturaleza del proyecto están implicados en su operación, diferentes calendarios (fiscales, escolares); diferentes culturas académicas; diferentes concepciones sobre gestión ambiental y compromisos sobre el medio ambiente en cada una de esas instituciones.

Quizás una diferencia que debemos destacar, es la asimetría en experiencias previas sobre cómo administrar proyectos en general, no sólo proyectos internacionales o de gestión ambiental, con muy diferentes niveles de experiencia y conocimiento técnico de las implicaciones de participar en este tipo de proyectos.

Acerca del Proyecto Planteles educativos sustentables

Las instituciones educativas pueden convertirse en espacios sustentables en lo ambiental y lo social. Asimismo pueden forjar líderes para la acción social transformadora.

El logro de la sustentabilidad requiere modificaciones estructurales del actual modelo de desarrollo que no están en nuestras manos, pero que tampoco debe paralizarnos para transitar hacia este objetivo.

La colaboración y el diálogo interinstitucional Norte-Sur son la clave para encontrar nuevas medidas que busquen enfatizar las prácticas y políticas sustentables. El proyecto pretende promover la sustentabilidad en instituciones educativas en Canadá y México a través de la colaboración y el intercambio de experiencias.

Es necesario diseñar mecanismos para compartir conocimientos y experiencias con modelos para la colaboración Norte-Sur que apoye la sustentabilidad.

Planteles educativos sustentables promueve la colaboración entre las siguientes instituciones y programas: El Dawson College que estableció el Dawson Sustentable y la Universidad Pedagógica Nacional Morelos en sus tres campus (Cuernavaca, Galeana y Ayala) y la Escuela Normal Superior "Lic. Benito Juárez".

El proyecto de investigación participativa persiguió los siguientes objetivos.

1. Generar y compartir conocimientos sobre la sustentabilidad en las instituciones educativas de nivel medio superior y superior del Norte y del Sur.
2. Diseñar herramientas y mecanismos para compartir experiencias y conocimientos entre las instituciones participantes.
3. Diseñar un modelo flexible y replicable para alcanzar planteles sustentables
4. Promover la colaboración de la Comunidad Académica Norte-Sur, para llevar a cabo una educación de sustentabilidad basada en acciones.
5. Crear un "modelo didáctico en el que las prácticas actitudes que apoyan la sustentabilidad como referente de otras instituciones;
6. Establecer políticas institucionales (sistema administrativo y compromiso) que promueva la sustentabilidad ambiental.
7. Promover una actitud consciente e informada hacia el bien común,

La propuesta se basa en la colaboración y participación de la comunidad educativa, que comprende estudiantes, maestros, investigadores, personal administrativo y de mantenimiento en proyectos de gestión ambiental escolar. El proyecto tiene tres etapas que estimulan la definición local de problemas, el establecimiento de un plan de acción y un mecanismo reflexivo evaluativo para la generación y difusión de conocimientos.

La primera etapa planteada del proyecto fue un diagnóstico participativo para que los participantes identificaran los problemas de su propia institución y propusieran soluciones

La segunda etapa del proyecto consistió en el diseño y realización del plan de acción, basado en resultados de diagnóstico de participación.

La tercera etapa incluiría la sistematización de resultados, evaluación final y disseminación de resultados finales.

Se llevará a cabo una evaluación final del proyecto, a pesar de que cada actividad incorporará una técnica de recopilación de datos.

Técnicas e instrumentos de recolección de datos

La evaluación se inscribe en el ámbito de la investigación cualitativa (IC) ya que se pretende indagar, dar sentido o interpretar los procesos desde la voz de los actores. Lo que interesa en este tipo de evaluación, son las formas en las que el mundo social es interpretado, comprendido, experimentado y producido por los sujetos.

La investigación cualitativa:

- a) Trata de comprender contextos y sus procesos y de explicarlos recurriendo a la causalidad local.
- b) Permite el uso de métodos de generación de datos flexibles y sensibles al contexto social en el que se producen,
- c) Está sostenida con métodos de análisis y explicación que abarcan la comprensión de la complejidad, el detalle y el contexto.
- d) Es utilizada para estudiar organizaciones, instituciones, movimientos sociales, transformaciones estructurales, entre otros, por lo que es pertinente para el estudio de las representaciones sociales objeto de estudio de la presente investigación.

Taller de Evaluación y sus componentes

Para tener la interlocución con los actores se organizó un taller de evaluación que se llevó a cabo los días 11 y 12 de noviembre 2013, en las instalaciones de la Editorial Trillas, en Cuernavaca, Morelos. Participaron en la evaluación el equipo de coordinación del proyecto, la Mtra. Margarita Hurtado Badiola de Ciudades Verdes y la Dra. Gisela Frías del Dawson College. Hubieron representantes de tres planteles (de dos instituciones) del Estado de Morelos participantes en el proyecto. Estudiantes, maestros y directivos de la Normal Superior Benito Juárez y la Unidad de la Universidad Pedagógica Nacional, sedes Cuernavaca y Galeana estuvieron representados. También se contó con la participación de representantes de Dawson College, los coordinadores del programa Dawson Sustentable. Los evaluadores externos, la Mtra. Teresita del Niño Jesús Maldonado Salazar y el Dr. Miguel Ángel Izquierdo de la Universidad Pedagógica Nacional condujeron la evaluación.

La evaluación se realizó con base en preguntas generadoras organizadas en 9 bloques. Las preguntas se sistematizaron en el documento: Focos de la evaluación del proyecto: planteles sustentables, éste se repartió a cada participante en el taller. Cada bloque se trabajó en dos momentos:

- a) Reflexión individual en la que cada uno de los participantes registró por escrito su planteamiento acerca de cada uno de los tópicos.
- b) Construcción colectiva en la que los participantes compartieron sus reflexiones de respuesta a cada tópico
- c) Entrevistas con las coordinadoras del proyecto y actores implicados en el proceso

Los participantes entregaron a los evaluadores sus aportaciones por escrito, el análisis de la información contenida en estos instrumentos se sistematizó en los siguientes rubros.

I Dimensión pedagógica:

1.1 Cambios observados en los actores

- Comunidad educativa
- Institución
- Docentes
- Alumnos
- Trabajadores administrativos y de servicio
- Coordinadora del proyecto

1.2 Construcción saberes, conocimientos, actitudes, capacidades y valores

1.3 Curriculum

1.4 Proyectos de investigación e intercambio académico

- a) Formación de los estudiantes
- b) Participación de los diferentes actores de la comunidad educativa
- c) Producción conjunta de saberes, conocimientos, capacidades y valores

1.5 Construcción saberes, conocimientos, actitudes, capacidades y valores:

II Dimensión gestión ambiental

- 2.1 Organización para la operación del proyecto
- 2.2 Relaciones entre los actores del proceso
- 2.3 Vinculación interinstitucional e interinstitucionales
- 2.4 Liderazgo y toma de decisiones
- 2.5 Difusión
- 2.6 Coordinación del proyecto
- 2.7 Proyectos ambientales
- 2.8 Sugerencias de los actores de nuevas líneas de acción del proyecto

III. Fortalezas y limitaciones proyecto

IV Sugerencias del equipo evaluador

Participación de una evaluadora canadiense.

Por un golpe de suerte pudimos contar con la participación en la evaluación, de una consultora independiente experta en temas ambientales. Ella se encontraba de visita en Cuernavaca y por su relación de amistad y de trabajos anteriores con las coordinadoras del proyecto, se ofreció a acompañarnos en el proceso y posteriormente se dio a la tarea de elaborar un escrito para compartir sus observaciones. El equipo facilitador lo revisó e incorporó algunos de sus valiosos aportes al informe y acordó incluir el documento aportada por ella como parte de los anexos, con su perfil.

Actividad de apertura del Taller propuesta por las Coordinadoras

Para dar inicio al taller con un acento colaborativo, se propuso a cada asistente, redactar un "ingrediente" para ser cocinado en "La cazuela", como parte de su aporte personal al taller. La consigna presentada fue la siguiente:

"Durante este tiempo en el que estaremos juntos, vamos a cocinar algo, aquí está la cazuela y voy a poner el fuego, usaré como símbolo este suéter que intercambié con Gisela por una blusa bordada mexicana. Tiene el color del fuego y el calor de la amistad de hace ya varios años. Cada uno de los presentes puede poner ingredientes para nuestro platillo. Yo pongo amor, ¿quién quiere poner algo?"

Estos fueron los textos depositados en la cazuela por los asistentes.

- Dedicación
- Risktaking
- Compromiso
- Esperanza
- Responsabilidad
- Energía
- Enthusiasm
- Voluntad
- Alegría
- Tolerancia
- Gozo
- Cariño
- Felicidad, humor
- Gratitud

- Reflexión
- Conocimiento
- Profesionalismo
- Amor
- Dedicación
- Ilusión

Al término de esta sencilla y motivadora actividad, las Coordinadoras observaron a los asistentes: “Muy bien, muchas gracias, seguramente con todos estos ingredientes cocinaremos algo muy rico”.

Valoraciones de los evaluadores respecto a cada una de las dimensiones apuntadas

Dimensión pedagógica

1.1 Cambios observados en los actores

Comunidad educativa

- Construcción marcos teóricos comunes en torno a la problemática ambiental, la sustentabilidad y la gestión ambiental.
- Movilización y flujo de la información en las comunidades educativas de cada plantel en torno al proyecto (alumnos, maestros, personal de administración y de intendencia)
- Involucramiento de los alumnos, maestros, administradores y personal de intendencia en varias componentes del proyecto, dando espacio a sus intereses y capacidades
- Participación de estudiantes como embajadores de sus instituciones ante las comunidades de otras instituciones el proyecto
- Surgimiento de redes colaborativas para la resolución de problemas concretos
- Promoción de la confianza, el trabajo colaborativo y el compromiso entre los participantes
- Sentido de pertenencia al proyecto, como sentido de responsabilidad ante sí y los otros

Institución

- Trabajo conjunto a pesar de no contar con convenios firmados, pero con fuertes compromisos basados en la confianza
- Avances en la incorporación del enfoque de sustentabilidad en el curriculum
- Aprender a gestionar proyectos sin necesidad de “parámetros”, privilegiando el trabajo colaborativo y no la competencia
- Implementación de proyectos educativos incorporando iniciativas locales en el modelo dinámico
- Dawson College cumplió algunos de sus objetivos de internacionalización
- Dawson College tuvo oportunidad de movilizar desde varias de sus áreas, de manera colectiva, sus iniciativas y capacidades, como otras instituciones
- Por primera vez, estudiantes de la UPN Morelos, en tal calidad, visitaron oficialmente a otra institución educativa del extranjero
- Estudiantes de ambos países tuvieron valiosas experiencias como embajadores de sus instituciones
- La necesidad de liberar tiempo a docentes para conducir y apoyar este tipo de proyectos, lo cual resulta indispensable para su avance y consolidación

Docentes

- Inclusión de la dimensión ambiental en varias de las asignaturas que facilitan
- Diseño de estancias para fortalecer el estudio del medio ambiente
- Tránsito de ser docente a ser coordinadora de sustentabilidad
- Trabajo colaborativo entre académicos con diferentes funciones (docencia, investigación, gestión) ante las posibilidades que daba el proyecto, al incorporar sus iniciativas
- Transformación del rol de los profesores para asumirse como facilitadores del cambio
- Conciencia para compartir con éxito y resultados, conocimientos y capacidades profesionales relacionadas con la sustentabilidad
- Oportunidad para facilitar en sus estudiantes procesos de intervención social y educativa, y de parte de ellos de convertirse en facilitadores, rol novedoso

Alumnos

- Cambio en su forma de concebir el mundo y su relación con el entorno
 - Cambio en la forma de vivir. Incluyendo a su vida cotidiana con criterios de sustentabilidad
 - Crecimiento interior: afloraron sentimientos de orgullo, de pertenencia, de confianza al participar en equipos y con miembros de otras comunidades.
 - Nuevas maneras de ver al “otro”
 - Apertura a la comprensión de las circunstancias de los otros
 - Reconocimiento de realidades diferenciales. Descubrimiento del potencial de acción y elevación de autoestima
 - Fortalecimiento de su capacidad de trabajo en equipo
 - Interés por compartir saberes
 - Mayor compañerismo
 - Amor y entrega al proyecto, junto con la expresión de otros sentimientos, claro “síntoma del compromiso” que fueron adquiriendo
 - Se coinvierten en gestores de proyectos haciéndolos y promoviéndolos
 - Adquisición de capacidades al participar en proyectos útiles
 - Inclusión de la educación ambiental con otros temas emergentes
 - Ampliaron el conocimiento de la institución en la que estudian
- Trabajadores administrativos y de servicio
- En algunos casos tuvieron participación entusiasta
 - Ruptura de roles tradicionales, al tomar en varios casos roles protagónicos, con relación a los estatutarios
 - Reconocimiento mutuo de capacidades y aportaciones al proyecto

Coordinadoras del proyecto

- Acrecentamiento del valor de la confianza mutua, que fue base del proyecto desde sus inicios y en cada una de sus fases
- Poner atención en el establecimiento de relaciones de colaboración entre los miembros fue estratégico para el proyecto, dejando a un lado parámetros
- Mayor entendimiento de la sustentabilidad
- Fortalecimiento de sus capacidades de coordinación
- Capacitación en comunicación
- Impacto en la práctica docente “aprender haciendo”
- Mayor comprensión del concepto “comunidad educativa”
- Caminar con otros requiere flexibilidad, fue con ella que ante las dificultades se les pudo enfrentar y sobrepasar
- La relación entre instituciones educativas facilita compartir experiencias y asumir compromisos conjuntos, pese a sus diferencias, jerarquías, estilos organizacionales
- Lograron aprendizajes de carácter administrativo, fiscal y financiero al operar un proyecto en dos países y varias instituciones

1.2 Construcción saberes, conocimientos, actitudes, capacidades y valores

Valores

- Confianza
- Esperanza
- Respeto
- Solidaridad
- Compromiso
- Paciencia
- Respeto
- Perseverancia
- Tolerancia

Actitudes

- Orgullo de sentirse parte del proyecto
- Sentimiento de pertenencia
- Actitud de esperanza en la posibilidad de generar cambios en la sociedad

Conocimientos

- Procesos de gestión ambiental
- Medicina natural
- Ecotecnias
- Procesos de planeación
- Interés por otras lenguas y expresarse mediante ellas

Capacidades

- Gestión de proyectos
- Comunicación entre instituciones y de sus cuerpos de coordinadores
- Liderazgo y creación grupal de liderazgos
- Comunicación oral y escrita en estudiantes, específica para el proyecto

1.3 Curriculum

- En la UPN inclusión del enfoque de sustentabilidad en algunas materias de la licenciatura en Intervención Educativa
- Taller extracurricular de cuidado de sí
- En la materia de diseño de materiales didácticos, elaboración de material en apoyo a proyectos de sustentabilidad
- Inclusión de contenidos de dos materias: desarrollo sustentable y cultura ambiental
- Inclusión de contenidos ambientales a las materias de: Educación y valores; investigación acción; asesoría y trabajo con grupos; administración y gestión educativa y diseño curricular
- Modificación en las prácticas educativas
- Cambios en la manera de abordar la temática ambiental

1.4 Proyectos de Investigación e Intercambio académico

- Dos proyectos de investigación en la maestría y tres en la licenciatura, en calidad de tesis
- Estancias de los estudiantes de México en el Dawson College y viceversa
- Presentaciones en foros para el conocimiento del proyecto por las comunidades
- Recorridos por los planteles, durante visitas mutuas y capacitaciones
- Generación de videos y materiales

II Gestión ambiental**2.1 Organización para la operación del proyecto**

- La organización fue peculiar dadas las diferencias entre las instituciones, tanto en sus calendarios como en sus estilos de procesar la participación conjunta, interinstitucional
- Organización a partir de las capacidades de cada uno de los actores del grupo
- En algunos casos los equipos esperaban que “otros” tomaran la iniciativa y les dijeran qué hacer. Por lo mismo tuvo especial consecuencia el que algunos miembros la tomaran y atrajeran al resto para participar
- Desigual incorporación de los equipos al proyecto, dados los cambios en coordinadores o por la inexistencia inicial de responsables por plantel, destinados al proyecto
- El diseño inicial y modificado sobre la marcha, permitió realizar adaptaciones para el surgimiento de liderazgos locales, al margen de jerarquías tradicionales, pero incorporándolas, de manera que se respondiera en la colaboración, a los intereses locales como a sus iniciativas, esto ha dado eficacia a lo logrado.

2.2 Relación entre los actores del proceso

- Creación e instancias y momentos, como capacitaciones para el establecimiento de acuerdos conjuntos
- Colaboración con otros actores sociales para atender los objetivos
- Aprender de otros, internos al proyecto y externos
- Compartir saberes en relación a sus proyectos y a la forma de involucrar a la comunidad en ellos
- Colaboración entre docentes para generar investigación
- Reconocer a los otros en planos de interacción distintos a los normalizados
- Cercanía con las coordinadoras del proyecto
- Establecimiento de varios canales de comunicación entre los miembros, que fueron fortaleciéndose sobre la marcha, incluso a través de redes sociales

2.3 Vinculación interinstitucional e intrainstitucional**Vinculación interinstitucional**

- Establecimiento de vínculos de cooperación entre instituciones educativas y organizaciones de la sociedad civil
- Participación de dependencias gubernamentales en el ámbito federal, estatal y municipal.
- Alianzas entre las autoridades ambientales estatales y federales
- Trabajo conjunto de los estudiantes de las tres sedes de la UPN

Vinculación Intrainstitucional

- Organización diferencial en cada una de las instituciones
- Involucramiento de las diferentes categorías de personal de las instituciones
- En el Dawson College mayor vinculación entre sus asignaturas y el proyecto de sustentabilidad como entre diferentes áreas del College
- Potencial detonador de sinergias del proyecto, sobre otros proyectos en las propias instituciones

2.4 Liderazgo y toma de decisiones

- Rompimiento de las relaciones de poder típicas y de los esquemas verticales
- Modificación de los roles de los estudiantes, profesores y directores
- Surgimiento de nuevos liderazgos a partir del desarrollo del proyecto, entre ellos los estudiantiles
- Aprendizaje de la importancia de los liderazgos
- Los líderes naturales encontraron espacio para ejercerlo
- La tarea pendiente es hacer el proyecto más incluyente
- Los equipos coordinadores del proyecto se asumieron como líderes

2.5 Difusión

- Utilización de las TIC para la difusión
- Página Facebook,
- Skype
- Utilización de los medios de comunicación
- Barra programática
- Programas de radio y televisión
- Medios impresos, boletín en Dawson College
- Carteles y tarjetas de difusión sobre el proyecto
- Reportes compartidos

2.6 Coordinación**Limitaciones**

- Falta de estructura organizativa para el manejo de los recursos
- Problemas administrativos por no contar con alguien que conociera la manera de operar este tipo de

proyectos en las respectivas instituciones, y dadas las diferentes fiscalizaciones institucionales.

- Se requería generar tres tipos de registros del manejo de recursos financieros
- Los rubros para los que se etiquetan los gastos limitan el manejo de los recursos
- Tiempo de elaboración de los reportes
- Transparencia contra desconfianza

Inherentes a los planteles

- Dificultad de los planteles para planear sus necesidades y compromisos limitaba el ejercicio de los recursos
- Capacidad diferenciada para el ejercicio de los recursos en las instituciones mexicanas

Fortalezas

- El trabajo se realizó basado en la confianza
- Las coordinadoras potenciaron su capacidad de gestión
- La comunicación con estudiantes fue clave para dinamizar el proyecto en etapas críticas

2.7 Proyectos ambientales

- Instalación de una bicibomba
- Jardín de plantas medicinales.
- Jardín de la paz
- Aula viva
- Mural por la paz
- Captación de agua
- Separación de residuos
- Recuperación de espacios en la escuela
- Rehabilitación de áreas
- No utilización de desechables
- Elaboración de composta
- Utilización de hojas de papel para reuso
- Jornadas de limpieza
- Proyectos emergentes como museo vivo, registro de plantas, entre otros.
- Cálculo de la huella del carbono de la Sede Ayala

2.8 Sugerencias de los actores de nuevas líneas de acción

- Implementación de baños secos
- Lombricomposta
- Tratamiento del agua
- Naturación de muros
- Instalación de centros de acopio
- Lámparas solares
- Diseño de un nuevo curso
- Estudios de medio ambiente
- Estancias e intercambios
- Curso para diseñar proyectos ambientales en la escuela
- Implementar estrategias de formación docente en materia ambiental
- calcular la huella del carbono de la Sede Ayala

III Fortalezas y limitaciones del proyecto

El proyecto sentó las bases para establecer una comunidad de aprendizaje entre las instituciones participantes. La operación del mismo permitió explorar posibilidades para promover de la educación para la sustentabilidad.

El tránsito a la sustentabilidad requiere que los sujetos reconozcan el impacto negativo del actual modelo de desarrollo en el medio ambiente y la necesidad de construir un mundo más justo y equitativo.

Se avanzó la propuesta de un modelo adaptable, flexible para promover la sustentabilidad en las instituciones.

Se promovieron procesos de aprendizaje en la comunidad estudiantil, si bien el mayor impacto alcanzado fue en los equipos que coordinaron el proyecto. Los estudiantes lograron diseñar y operar proyectos ambientales, los principales logros se consiguieron en los ámbitos de los valores y actitudes. Los estudiantes consideran que el proyecto les cambió la vida, se promovió la búsqueda del bien común. Se logró que las comunidades tengan un mayor aprecio por la naturaleza. Esto es relevante, dado que en varios de ellos de ellos (ellas), por primera vez en su vida o en su plantel, participaron administrando recursos directamente, con responsabilidad de rendir cuentas a las Coordinadoras generales del proyecto. Esa fórmula de participación, permitió evitar probables retrasos en la administración, de haberse entregado recursos directamente a la UPN Morelos, dado su esquema administrativo.

En relación a la investigación para la sustentabilidad logró generar propuestas de investigación en la Universidad Pedagógica Nacional que potencialmente se iniciarán en el siguiente semestre.

Otros de los beneficios de la operación del proyecto fueron proyectos ambientales en las escuelas tendientes a mejorar las áreas: la incorporación de contenidos ambientales al curriculum de algunas asignaturas de diversos cursos y actividades de investigación académica, incrementar la capacidad de los estudiantes de comprometerse con proyectos sustentables.

Fortalezas

- Propuesta flexible que permitió la generación de conocimiento, el trabajo y el intercambio
- Proyecto abierto y flexible que da pie al surgimiento de nuevas formas de actuación
- Surgimiento de nuevos liderazgos
- Participación activa de los diferentes
- Visibilidad de los proyectos de sustentabilidad en los talleres
- Libertad de decisión
- Visibilidad de la experiencia
- Relaciones interinstitucionales
- Replicabilidad

Limitaciones en el proceso

- Cambios de coordinadores del proyecto en los planteles
- Desgaste de los equipos coordinadores del proyecto
- Resistencia a la participación de algunas comunidades educativas
- Falta de comunicación y conocimiento de lo que se hace en otras instituciones
- En algunos casos el proyecto se asocia al líder y no a la institución
- Insuficiente vinculación con la comunidad
- Insuficiente diagnóstico, evaluación, pendiente la sistematización

Por institución

- En Ayala- al darse el desalojo de la Sede por laudo agrario, se suspendió el trabajo a finales de septiembre-
- En Cuernavaca- Hubo desgaste del grupo inicial, pero se ha recuperado con el dinamismo estudiantil y la asignación de coordinadora
- En la Normal Superior- Escasa implicación de los estudiantes y muy favorable de sus autoridades

IV Sugerencias del equipo evaluador

Ámbito institucional

Las instituciones educativas como gestoras de sustentabilidad requieren favorecer el trabajo interdisciplinario, redefinir su propuesta de formación, impulsar líneas de investigación coherentes con la sustentabilidad, promover procesos de formación ambiental para los docentes, incorporar sistemas de gestión ambiental y responder a las necesidades sociales de este momento histórico.

Es fundamental que cada institución participante por el estado de Morelos, elabore una política que considere la sustentabilidad como eje articulador de sus funciones.

La viabilidad del proyecto requiere de recursos financieros, humanos y materiales indispensables para asegurar que el enfoque de la sustentabilidad permee en las instituciones. Esto supone la permanencia del financiamiento.

Las instituciones deben promover la conformación de grupos interdisciplinarios que orienten su trabajo hacia la sustentabilidad, estimular la adopción de líneas de investigación que apunten a la transformación de las relaciones entre la sociedad y la naturaleza y contribuyan a la prevención y solución de los problemas ambientales, así como fomentar la vinculación entre la investigación y la docencia.

- Fortalecimiento del proyecto desde la institución
- Canalizar recursos para la realización del proyecto
- Nombrar coordinadores permanentes del proyecto de sustentabilidad
- Conformar una base organizativa en las instituciones
- Conformar una estructura de coordinación entre los planteles

Planes y programas de estudio

Los planes de estudio deben incorporar contenidos, estrategias, metodologías y prácticas que permitan a los estudiantes desarrollar las competencias para identificar y dar respuesta a los problemas socio-ambientales.

La propuesta pedagógica debe tomar en cuenta los aportes del paradigma de la complejidad y promover la conformación de un pensamiento sistémico que permita al profesional acceder a una perspectiva compleja de la realidad y acercarse a los enfoques, métodos y técnicas que le posibiliten innovar su quehacer.

Un espacio para apuntalar y evaluar la incorporación de la dimensión ambiental en la formación profesional son los diferentes mecanismos para obtener el grado académico, tales como las tesis, tesinas y reportes de experiencia profesional, ya que permiten a los estudiantes reflexionar, analizar, investigar, articular y consolidar saberes, así como concretar propuestas relacionadas con la sustentabilidad.

Formación docente

Antes y durante la ambientalización se deben efectuar reuniones con los grupos colegiados y/o las academias de cada institución participante para conocer el interés y la disponibilidad de los profesores para participar en el proceso, su formación en tópicos ambientales y su percepción sobre la necesidad de transformar el currículum.

Es imprescindible diseñar una estrategia permanente de capacitación docente que les proporcione los principios conceptuales, éticos y metodológicos de la educación ambiental.

Es fundamental la vinculación de la institución con la comunidad, la entidad y la región. La relación con el entorno inmediato permitirá realizar proyectos que beneficien a la comunidad, así como promover procesos de investigación-acción que favorezcan la interrelación entre la teoría y la práctica.

Colaboración interinstitucional

Se visualiza potencial para la creación de redes inter-universitarias, dada la experiencia adquirida, las capacidades desarrolladas para la gestión de proyectos y el apoyo de oficinas gubernamentales. Esto es más probable que ocurra si se integra la preocupación ambiental en las diversas esferas del quehacer institucional, lo que es promovido por los planes nacional y estatal de gobierno en el caso de Morelos. Cabe apuntar, que al menos en dos planteles participantes (Ayala y Galeana), por primera vez participan en un proyecto que implica administración por parte de los estudiantes, lo que es un logro a replicar y sostener.

Vinculación con la comunidad

La institución educativa debe abrir sus puertas a la comunidad, comunicarse permanentemente con ella y definir líneas de acción con el concurso de los docentes y alumnos. Esto beneficiará a la comunidad y al mismo tiempo permitirá que los estudiantes vinculen la teoría y la práctica, adquieran diversos aprendizajes y desarrollen una conciencia social. Hubo varias de estas interacciones durante el proyecto, a

través de organismos de la sociedad civil, y es de esperar que se intensifiquen.

Además, es necesario que cada institución organice actividades culturales, de difusión, divulgación y recreación que propicien la educación ambiental de la comunidad. Esto es factible que ocurra con más constancia y profundidad, dada la operación de una radio TV por internet de la Escuela Normal Superior Benito Juárez, miembro del proyecto.

Elaboración de recursos y materiales de apoyo

Las instituciones participantes deben tener un programa para elaborar recursos didácticos que consideren el desarrollo de recursos y materiales que apoyen el proceso. Hay indicios de que esto se ha realizado a pequeña escala, pero con otra organización, puede potenciarse, dado el carácter educativo de todas las instituciones participantes.

ANEXOS

ANEXO I

Focos de la Evaluación: Proyecto Planteles Educativos Sustentables. Nov 2013

Se buscan efectos en cada uno de los siguientes, a partir de variedad de evidencias:

1. Actores: a) estudiantes; b) trabajadores académicos, administrativos y directivos; c) la comunidad.
 - ¿Qué cambió en mí a partir de participar en el proyecto?
 - ¿Qué cambios advierto en los otros actores?
2. Instituciones: a) Dawson College; ENS Benito Juárez; UPN (tres Sedes).
 - ¿Qué efectos observo en mi institución, producto de participar en el proyecto?
 - a) En gestión ambiental
 - b) En relaciones de gestión interinstitucionales
 - c) En relaciones de gestión internacionales
3. Relaciones entre actores e instituciones: flujo y producción conjunta de saberes, conocimientos, actitudes, capacidades, valores.
 - a) ¿Qué efectos observo en las relaciones entre los actores respecto a estos flujos?
 - b) ¿Qué efectos observo en las relaciones entre esas instituciones?
 - c) ¿Qué efectos observo en la conducción conjunta del proyecto?
4. Cambios en los procesos y en las prácticas de gestión ambiental
 - a) ¿Qué procesos han cambiado en mi institución?
 - b) ¿Qué nuevas prácticas de gestión ambiental se han producido?
 - c) ¿Cuáles están a punto de ocurrir?
5. Currículum institucional
 - a) ¿Qué novedades hay respecto a cambios curriculares?
 - b) ¿Cómo impactó el proyecto en el currículum?
6. Efectos en el ambiente derivados del proyecto.
 - a) Efectos en las instituciones
 - b) Efectos en las comunidades de los actores
7. Liderazgo y toma de decisiones
 - a) ¿Qué liderazgos se produjeron durante la operación del proyecto?
 - b) ¿Cómo se dio la toma de decisiones durante el proyecto?
8. Efectos “no buscados” y otros.

Respecto a los objetivos del proyecto, describe otros efectos logrados que no se buscaban en el mismo, en los actores participantes, en los grupos de trabajo, en las instituciones, en la comunidad.

ANEXO II

Perfil y aportes de la evaluadora complementaria, Janice Astbury

Janice Astbury

Independent consultant in Program Management, Research, Evaluation and Facilitation/training. Actualmente es investigadora y maestra en la Universidad de Manchester en donde está por concluir sus estudios de doctorado. Ha sido consultora para organismos de diferentes lugares del mundo incluyendo el Programa de Naciones Unidas para el Desarrollo (United Nations Development Programme).

Obtuvo el grado de maestría en el departamento de Geografía de la Universidad de McGill con su tesis titulada: Cultural constructions of the environment among Mexican and Canadian environmentalist and implications for EGO partnerships.

Feedback based on observations during evaluation workshop for 'Proyecto Plantales Educativos Sustentables', Cuernavaca, 11-12 November 2013

Janice Astbury, Independent Consultant and PhD researcher, University of Manchester

This feedback is offered as a contribution to reflections on the project and may be used in reporting to stakeholders.

I very much appreciated the opportunity to observe this evaluation process. I have been directly involved in sustainable campus projects as both student and teacher and have followed a variety of initiatives across Canada through my work with the J.W. McConnell Family Foundation. In the context of my background in this field I was very impressed with both the evaluation process and what it surfaced about the project, specifically the following strengths:

Social Innovation versus benchmarking

Plantales Educativos Sustentables is an excellent model of a sustainable campus initiative oriented towards social innovation. Many initiatives to date have operated within an Environmental Management System (EMS) framework where the focus is on meeting a series of benchmarks. While this approach has been very helpful in defining the characteristics of a sustainable campus and providing a framework for institutional commitment, it does not generally take full advantage of the energy and creativity of stakeholders. Plantales Educativos Sustentables has created space for students, teachers, administrators, support staff, and in some cases the surrounding community, to engage fully with the initiative. The evaluation surfaced many examples of how this range of actors had initiated and were carrying out projects that incorporated their skills and interests.

The EMS approach also tends to put universities and colleges in competition with one other as they vie for the highest score which they can then announce in their marketing material. The very collaborative nature of this project within and across campuses reflects the sort of multi-stakeholder and multi-institution collaboration that is necessary to achieve social, economic and environmental transformation.

Focus on building relationships

The designers of this initiative understood that in order to create the space for innovation, they needed to invest extensively in building relationships within and among the campuses before they determined specific project activities (and they fought the necessary battles within their institutions to not pre-define activities and thus keep this space open). The investment paid off; it was very clear during the evaluation process that the success of this project was directly linked to it being driven by dedicated people in relationships of trust. The importance of relationships extended to the initiation and overall management

of the project where the long-standing friendship between the project initiators/coordinators helped to overcome numerous challenges.

The trust that exists at all levels has encouraged commitment and perseverance in project implementation, as well as providing space for experimentation and for documenting failures as well as successes. The close-knit network that has developed over the course of the project has served as a continual source of motivation and support; providing inspiration and information, as well as materials and physical labour to bring projects to fruition on participating campuses. If one campus is struggling, the larger 'system' of the network has been able to rally around and sustain it until things turn around.

As is common among projects involving international exchange, the learning and inspiration offered by cross-cultural experiences were considerable. The fact that this project focused so much on building relationships and reflecting on practice, as well as fully engaging so many members of the campus community, made these effects even more significant.

Fully engaging the capacities of all stakeholders

The ability to fully engage the capacities of all stakeholders was supported by explicit reference within the project to the hierarchies of power that characterize most educational institutions. It was made clear through a variety of means that relationships of power must be recognized and reconfigured in ways that allow ideas and solutions to come from any part of the system; people must learn to recognize one another and work together outside of their roles.

One important strategy was having an engaged and engaging project coordinator present the project to the campus community as a whole and invite any member of this community to take leadership within the initiative. This created an open and supportive space while simultaneously communicating and transferring a clear and interesting mission to promote sustainability. As a result, everyone was invited and encouraged to appropriate the space in ways that aligned with their own capacities and interests. The leadership that was demonstrated by the students participating in the evaluation workshop and the collaborative relationships among students, teachers, support staff, directors and members of the surrounding community that were in evidence during the evaluation made it clear that efforts to allow leadership to come from any part of the campus system had been effective.

Multiple forms of complementary support and capacity building with demonstrable impact on students. The project partners ensured on-going capacity building opportunities through both workshops provided by the project as well as activities incorporated into the curriculum of participating institutions. Responsive support was also provided when challenges were faced and it was mentioned how one coordinator was constantly keeping an eye out to see who needed support—and who needed recognition. The effect of these opportunities on the students was particularly evident. Students participating in the evaluation described how training opportunities and coursework, as well as support from various mentors (including students from other campuses with whom the project allowed them to interact) impacted on their capacity to work together, engage others and carry out projects with tangible results on the ground.

Teachers also mentioned specific examples of having learned from approaches used by teachers on other campuses and of applying these in their own teaching, which in turn had an impact on students.

Facilitating engaged learning

Students spoke of how much they had learned from specific mentors who taught them things about which the mentors themselves were passionate. It was clear that not only knowledge and skills but also inspiration and motivation had been transferred.

Students were also motivated by the fact that they were learning things that could be immediately applied in their projects. Sometimes the application touched another campus as in the example of students on a fundraising course at Dawson College raising funds for a project on one of the Mexican campuses. The enhanced learning opportunities provided by having students undertake internships related to specific projects at partner campuses, as opposed to more typical student exchanges, were also noted.

The project furthermore made links between more theoretical coursework and activities on the ground. For example students studying free trade agreements and the commodification of seeds participated in saving seeds from the campus garden for next year's tomatoes, giving them something in common, and in solidarity, with small producers.

Smart use of social media and other communication tools

Social media was used very effectively in this project, helping the partners to feel continually connected despite their geographic separation and allowing them to share their learning and excitement. Students were able to communicate their experiences on their home campuses and during visits/internships at other campuses using blogs, photos, videos, etc. A teacher reported how he had received a message from another institution wanting to learn about and possibly replicate the project. This interest was inspired by the Facebook page, which managed to convey the spirit of the project in such a way that it inspired someone from another institution to say, "I don't know exactly what you're doing but we want it!" Social media was also combined with other communication tools to engage a range of people in the campus projects. The other tools included presentations, site visits, posters and postcards that were designed in an 'Educational materials' course. Students demonstrated thoughtful analysis of how to formulate their messages and get them across to different audiences

Teachers shared their reflections and materials through a variety of means, including via bjmedia's 'Cosa de profes' (<http://bjmedia.mx>) taking advantage of the multi-media website and high quality video broadcasting from one of the participating campuses.

Institutional and Personal Transformation

The project reconfigured relationships among participants in ways that are likely to be enduring and influence the institutional cultures of the participating campuses. It was also reported that institutional boundaries were affected by the implementation requirements of this sustainable campus initiative where lines between education, research, fundraising and facility management blurred.

One student stated that the project made the campus community put mission and objectives related to sustainability into practice. The importance of students (including many who will become teachers) seeing stated aspirations translated into reality cannot be overstated when many students worldwide express cynicism about real commitment on the part of institutions. A teacher spoke about moving from teaching about composting to actually practicing it at home and about how the project had caused him to overcome his cynicism about 'sustainability' as meaningless political discourse. It was also mentioned that the empowering nature of the project and the tangible results generated hope in the current context in Mexico where there is "a feeling of submission to violence".

Physical changes are visible on the campuses, which now benefit from new green infrastructure facilitating delivery of a variety of ecosystem services. In addition to new infrastructure, there were also examples of greater use by a broader community of existing green facilities. This not only has an immediate positive environmental impact but also provides 'learning and doing' spaces for students and teachers to carry on transforming their campus and themselves. It also sends a strong message to everyone who comes to the campus that it is not just feasible but also normal that campuses incorporate sustainable practices.

Living laboratories facilitating adaptive experimentation and learning--and offering significant research opportunities

The open and experimental space created by PlantelesEducativosSustentables, along with the broad range of expertise and support provided by the many people who engaged with this initiative has meant that each campus has developed its own unique set of projects. These projects generally emphasize particular sustainability themes such as food systems, water or energy, combined with practices common to all, such as improving reuse and recycling and expanding climate-regulating vegetation cover.

As each campus also has its own particular context and conditions and the whole initiative is framed as a participatory action research project, the result is a series of living laboratories. Students reported that they got the message that this was a space of experimentation, a safe place to try things and sometimes to fail. They were encouraged and supported to analyze their actions and the results. Teachers and other actors enjoyed similar support for risk taking. The adaptive experimentation and learning approach that was therefore present in these 'living labs' means that there has been a continual process of reflection and adaptation of strategies within each project and well as within PlantelesEducativosSustentables overall. The fact that this has been shared across the network makes it even more powerful. There is an opportunity to continuing capturing and systemizing this learning so that effective approaches are documented and tools are developed in support of future efforts at these campuses and across a broader network.

There is also room for deeper analysis of what is going on within each living lab. Additional resources could be brought to bear to create more explicit 'laboratory conditions' such as establishing baselines and monitoring changes, capturing the perspectives of different stakeholders throughout the process, modelling drivers of change in social-technical-ecological systems, etc.

Several of the participating students were sufficiently interested and able to collect enough information to lead them to focus their undergraduate dissertations or equivalent projects on aspects of PlantelesEducativosSustentables. There may also be an opportunity to involve post-graduate students and possibly identify a group of interested academics who could set up a collaborative long-term research project. Thank you for the opportunity to participate in the collaborative learning opportunity offered by this evaluation process!

Anexo III

Breve información sobre los evaluadores.

Teresita del Niño Jesús Maldonado Salazar es Subdirectora de educación Básica y Normal del Centro de Educación y Capacitación (CECADESU) de la Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) y académica de la Universidad Pedagógica Nacional desde 1997. Miembro de la Academia Nacional de Educación Ambiental. Coordinó el Grupo de Transversalidad SEP-SEMARNAT para la inclusión del enfoque de educación ambiental en los planes y programas de educación básica en la Reforma Integral de Educación Básica (RIEB). Diseñó el Programa Escuela Verde que se opera 4000 escuelas del país y el Modelo de Evaluación y Acreditación para Centros de Educación y Cultura Ambiental, con base en el cual se evalúan los centros en México a partir de 2010. Ha dictaminado programas y proyectos de educación ambiental en los ámbitos formal y no formal.

Miguel A. Izquierdo Sánchez es académico de tiempo completo de la Unidad Morelos, Universidad Pedagógica Nacional desde 1981. Es profesor investigador en programas de licenciatura y posgrado. Miembro del Consejo Mexicano de Investigación Educativa desde 1998 y dictaminador de varias revistas educativas. Ha participado en evaluación de programas educativos en varias instituciones, entre ellas el Consejo Nacional de Ciencia y Tecnología. Ha fungido en el pasado como director de la UPN Morelos y como consultor en otras dependencias públicas.

Cuernavaca, Morelos, noviembre 30 de 2013

Project Evaluation

Sustainable Campuses: Sharing our Knowledge for Social and Environmental Sustainability

**Project Financed by
International Development Research Center**

Project Coordinators:

**Gisela Frías
Dawson College
Margarita Hurtado Badiola
Instituto Mexicano para el Desarrollo de Ciudades Verdes, S.C.**

Evaluators:

**Teresita del Niño Jesús Maldonado Salazar
Miguel A. Izquierdo Sánchez**

Collaborators:

**Universidad Pedagógica Nacional, Morelos
Escuela Particular Normal Superior Benito Juárez**

Introduction

At this point in time in history, post-secondary educational institutions are called upon to reconsider their social role in order to reorient knowledge generation and application processes and to educate professionals capable of contributing to the creation of a sustainable society.

Colleges and universities should assume leadership in the transition to sustainability via initiatives which respond to societal needs as well as models for other stakeholders in society.

In order to respond to these challenges, post-secondary educational institutions need to carry out structural, epistemological and methodological innovation.

Evaluation context

The Sustainable Campuses: Sharing our Knowledge for Environmental Sustainability (Sustainable Campuses) project evaluation can only be understood by first explaining, if only in general terms, the institutional and structural circumstances and conditions under which the project operated. This allows us to better understand achievement levels, ongoing processes and resistance to change, on behalf of institutions and specific stakeholders. This first section addresses such aspects.

The Sustainable Campuses Project was carried out from November 2012 through January 2014. Project preparations included several activities entailing the participation of institutional members one year

prior to the official project launch.

The project involves institutions from two countries with different languages, two public education institutions, one private institution, and two civil society institutions (Ciudades Verdes and Earth Values). Each institution's decision-making process and institutional hierarchy at the administrative and student body levels are all markedly distinct.

Different fiscal and school calendars were involved in project operation, as well as different academic cultures. Each institution held differing concepts regarding environmental management and commitment to the environment.

The asymmetry of each institution's general project management experience should also be stressed, let alone international or environmental project management experience. Institutions had very different levels of technical knowledge and understanding of the implications of participating in this kind of project.

Sustainable Campuses Project background

Educational institutions can be transformed into environmentally and socially sustainable spaces. They can also shape the leaders needed for transformative social action.

Although modifications to the current development model's structure - a necessary part of achieving sustainability - may be out of our grasp, we should not be hindered in moving towards our objective.

North-South inter-institutional dialogue and collaboration is key to finding new measures emphasizing sustainable practices and policies. The project aimed to promote sustainability in educational institutions in Canada and Mexico through collaboration and experience exchange.

North-South collaboration models which support sustainability are needed in the design of knowledge and experience-sharing mechanisms.

The Sustainable Campuses Project promoted collaboration between the following institutions and programs: Dawson College, which established "Sustainable Dawson", the Universidad Pedagógica Nacional Morelos on its three campuses (Cuernavaca, Galeana and Ayala) and the Escuela Normal Superior "Lic. Benito Juárez".

The participatory action research project pursued the following objectives:

1. Generate and share knowledge regarding sustainability in post-secondary educational institutions in the North and South.
2. Design tools and mechanisms to share experiences and knowledge among the participating institutions.
3. Design a flexible and replicable model in order to achieve sustainable campuses.
4. Promote North-South Academic Community collaboration to carry out action-based sustainable education.
5. Create a "didactic model" in which the attitude practices supporting sustainability serve as a reference for other institutions.
6. Establish institutional policies (at administrative and commitment levels) that promote environmental sustainability.
7. Promote a conscious and informed attitude regarding the common good.

The proposal was based on the collaboration and participation of the educational community as a whole, involving students, teachers, investigators, administrative and maintenance personnel in school environmental projects. The project consisted of three stages to stimulate the local definition of problems, the establishment of an action plan and an evaluative reflective mechanism for knowledge sharing and generation.

The first stage proposed in the project was a participatory assessment process where participants identified their own institution's problems and suggested solutions.

The second stage consisted of action plan design and implementation, based on results of the initial participatory assessment.

The third stage includes results systematization, final evaluation and dissemination of final results. The final evaluation was carried out despite the fact that each activity already incorporate data-gathering techniques.

Data collection techniques and instruments

This evaluation can be located within the field of qualitative research because its aim is to investigate, make sense of or interpret processes based on project participants' voices. The objective of this type of evaluation is to represent the way in which the social world is interpreted, understood, experienced and produced by the subjects.

Qualitative research:

- a) tries to understand contexts and processes and explain them using local causality.
- b) allows flexible data generation methods sensitive to the social contexts in which they are produced.
- c) is sustained with analysis and explanation methods that include understanding detail and context in all their complexity.
- d) is used to study organizations, institutions, social movements, and structural transformations, among others; therefore it is appropriate for the analysis of the social representations which are this investigation's object of study.

Evaluation workshop and its components

In order to have a dialogue with direct project stakeholders an evaluation workshop was carried out on November 11 and 12, 2013, at the offices of Editorial Trillas, in Cuernavaca, Morelos. The evaluation was coordinated by Margarita Hurtado Badiola from Ciudades Verdes and Dr. Gisela Frías from Dawson College, the Sustainable Campuses Project coordinators. Representatives of three campuses (two participating institutions) of the State of Morelos were also present. Students, teachers and directors of the Normal Superior Benito Juárez and the Unidad de la Universidad Pedagógica Nacional, from Cuernavaca and Galeana campuses, were also represented. Dawson College representatives were also present, including the coordinators of "Sustainable Dawson". The evaluation was conducted by external evaluators Mtra. Teresita del Niño Jesús Maldonado Salazar and Dr. Miguel Ángel Izquierdo of the Universidad Pedagógica Nacional.

The evaluation workshop was carried out based on a series of questions designed to generate reflection, systematized in the document: Focos de la evaluación del proyecto: planteles sustentables, (Evaluation spotlights: Sustainable Campuses Project). This was distributed to each participant during the workshop.

There were two periods of reflection for each question:

- a) Individual reflection in which each participant first wrote down his or her assessment regarding each topic.
- b) Collective construction in which participants shared their reflections for each topic.

Additionally, project coordinators and direct stakeholders were interviewed individually.

Participants handed in their written reflections to the evaluators, who then analyzed the information according to the following categories:

I Pedagogical sphere

- 1.1 Changes noted in project stakeholders
 - Educational community
 - Institution

- Teachers
- Students
- Administration and service workers
- Project coordinator
 - 1.2 Construction of wisdom, knowledge, attitudes, abilities and values
 - 1.3 Curriculum
 - 1.4 Academic exchange and research projects
 - a) Student capacity building
 - b) Participation of the educational community as a whole
 - c) Joint generation of wisdom, knowledge, abilities and values

II Environmental management sphere

- 2.1 Project organization and implementation
- 2.2 Relationship between project stakeholders
- 2.3 Inter-institutional and internal institutional linkages
- 2.4 Leadership and decision-making
- 2.5 Dissemination
- 2.6 Project coordination
- 2.7 Environmental projects
- 2.8 Stakeholder suggestions for new action areas

III Project strengths and limitations

IV Evaluation team suggestions

Participation of a Canadian evaluator

Due to a stroke of luck, a skilled independent environmental issues consultant attended the evaluation workshop. She was visiting Cuernavaca and due to her friendship and former work with the project's coordinators, she offered to accompany us in the process and later made a brief written evaluation of her observations. This was reviewed by the facilitator team who have incorporated aspects of her valuable contribution within the report. The evaluator's profile and complete text is included in this report's annexes.

Workshop inauguration

In order to initiate the workshop with a collaborative approach, the project coordinators proposed an opening ceremony for the evaluation. Each participant was invited to write an "ingredient" to be added to the "the casserole" to be cooked that day, as part of their personal contribution to the workshop. These were the instructions:

During the time that we will be together, we will cook something. Here is the casserole pot and I will start the fire - I will use as a symbol this sweater I exchanged with Gisela for a Mexican embroidered blouse. It has the color of fire and the warmth of long-lasting friendship. Each of the participants may put ingredients for our dish. I will put love. Who wants to put something else?

These were the texts that the participants deposited in "the casserole".

- Dedication
- Risk-taking
- Commitment
- Hope
- Responsibility
- Energy
- Enthusiasm
- Willingness

- Joy
- Tolerance
- Enjoyment
- Affection
- Happiness, humor
- Gratitude
- Reflection
- Knowledge
- Professionalism
- Love
- Devotion
- Excitement

After this simple and motivating activity, the coordinators told the group: "Very well, thank you very much, surely with all these ingredients we will cook something very tasty and nutritious".

Evaluator assessment

Pedagogical sphere

1.1 Changes noted in stakeholders

Educational community

- Construction of common theoretical frameworks regarding environmental issues, sustainability and environmental management.
- Mobilization and information sharing in educational communities on each campus regarding the project (students, teachers, administrative and service personnel)
- Involvement of students, teachers, administrators and service personnel in several components of the project, giving room for their interests and abilities
- Student participation as ambassadors of their institutions to communities of other collaborating institutions
- Emergence of collaboration networks for specific problem-solving
- Promotion of confidence, collaborative work and engagement among participants
- Sense of belonging to the project, as part of a feeling of personal responsibility and with others

Institutional

- Joint work achieved in spite of having no signed agreements, but with strong commitments based on trust
- Progress in the incorporation of a sustainability focus in curriculum
- Learning to manage projects without needing set "parameters", favoring collaborative work and not competition
- Implementation of educational projects which incorporate local initiatives in a dynamic model
- Dawson College fulfilled some of its internationalization objectives
- Dawson College had the opportunity to collectively mobilize initiatives and capacity in several of its areas, as did other institutions
- For the first time, students of UPN Morelos were representatives in an official visit to another foreign educational institution
- Students from both countries obtained valuable experiences as ambassadors of their institutions
- Teachers need time specifically granted to properly lead and support these kinds of projects to ensure their progress and consolidation

Teachers

- Inclusion of an environmental dimension in several of the subjects that they teach

- Design of prolonged visits to support the study of environmental issues
- Transformation from teacher to sustainability coordinator
- Collaborative work between teachers holding different roles (teaching, research, negotiations) was made possible by the project, due to the incorporation of their initiatives
- Teachers' roles transformed as they recognized themselves as facilitators of change
- Awareness of the importance of sharing successes, results, knowledge, and professional skill regarding sustainability
- Opportunity to facilitate social and educational intervention processes with their students and to assume an innovative role as facilitators

Students

- Changes in their way of conceiving the world and their relationship with the environment
- Changes in their way of living, including incorporating sustainability criteria in their daily activities
- Internal growth: feelings of pride arose, as well as belonging, confidence in participating in teams and with members of other communities
- New ways to see the "other"
- Openness to understanding circumstances of others
- Recognition of different realities
- Discovery of the potential of taking action and increasing self-confidence
- Strengthening of their ability to work in teams
- Interest in knowledge-sharing
- Greater companionship and team sentiment
- Love and dedication to the project, combined with the expression of other feelings, a clear "engagement symptom" acquired
- They became project managers, developing and promoting projects themselves
- Skills acquisition for participating in practical projects
- Inclusion of environmental education with other emerging subjects
- They increased the knowledge of the institution where they study

Administrative and service workers

- In some cases they participated with enthusiasm
- In some cases these staff assumed leading roles although not formally assigned to do so, breaking out of traditional roles
- Mutual recognition of abilities and contributions to the project

Project coordinators

- Increased and confirmed faith in the value of mutual trust, a pillar of the project since the beginning and in each one of its phases
- Prioritizing the establishment of collaborative relationships between project partners over set parameters was strategic to the project
- Better understanding of sustainability
- Strengthening of their coordination abilities
- Communications training
- Impact on the teaching practice "learning by doing"
- Better understanding of the concept of "educational community"
- Walking with others requires flexibility to face difficulties and move forward
- Building relationships between educational institutions enables experience sharing and the ability to take up joint commitments, in spite of differences, hierarchies, organizational styles
- Achieved increased insight regarding administrative, fiscal and financial matters entailed in running a

project in two countries with several institutions

1.2 Construction of wisdom, knowledge, attitudes, abilities and values

Values

- Confidence
- Hope
- Respect
- Solidarity
- Engagement
- Patience
- Respect
- Perseverance
- Tolerance

Attitudes

- Pride at being part of the project
- Feeling of belonging
- Hopefulness regarding the possibility of generating changes in society

Knowledge

- Environmental management processes
- Natural medicine
- Ecotechniques
- Planning processes
- Interest in other languages and ability to express themselves in them

Abilities

- Project management
- Communication between institutions and coordinator teams
- Leadership and creation of leadership groups
- Oral and written communication by students, specific for the project

1.3 Curriculum

- Inclusion of sustainability focus by the UPN in some Educational Intervention master's degree courses
- Extracurricula workshop on self care
- Elaboration of material that supports sustainability projects included in the didactic materials design course
- Inclusion of contents in two subjects: Sustainable Development and Environmental Culture
- Inclusion of environmental contents in the following courses: Education and Values, Action Research, Group Work and Consultancy, Educational Administration and Management and Curriculum Design
- Modification of educational practices
- Changes in the way of approaching the environment as a topic of study

1.4 Academic exchange and research projects

- Two research projects at the Masters' level and three undergraduate theses
- Lengthy visit of Mexico students in Dawson College and vice versa
- Public forum presentations regarding the project to share with communities
- Participating campus tours, during mutual visits and training.
- Videos and materials development

II Environmental sphere

2.1 Project organization and implementation

- Organization was challenging due to differences between the institutions, in their calendars as well as in their way of processing joint, inter-institutional participation.
- The starting point for project implementation was each participating group's capacities
- In some cases groups believed that "others" would take the initiative and would tell them what to do. As a result, it was especially significant that some members took initiative, drawing in participation from the rest
- Uneven establishment and involvement of project teams, due to change of coordinators or because of the initial lack of people assigned to take charge of the project on a particular campus
- The initial project design itself as well as adjustments as it evolved allowed for adaptation as local leaders emerged, aside from existing traditional hierarchies. Both were incorporated in such a way that they could respond collaboratively to local interests and their own initiatives, making achievements efficient

2.2 Relationship between project stakeholders

- Creation of opportunities and spaces for training and the development of joint agreements
- Collaboration with other societal stakeholders in order to address and achieve project objectives
- Learning from others involved in the project as well as external stakeholders
- Knowledge sharing regarding specific projects and ways to increase community involvement
- Collaboration between teachers for research purposes
- Recognition of and interaction with others increased in comparison with previously existing processes
- Close and warm companionship of project coordinators
- Establishment of several communication channels between participants that were strengthened over time, including through internet social networks

2.3 Inter-institutional and internal institutional linkages

Inter-institutional

- Establishment of cooperation links between educational institutions and civil society organizations
- Participation of government offices at the federal, state and municipal levels
- Links between state and federal environmental authorities
- Joint work of students from the three UPN campuses

Internal institutional

- Organizational change in each of the institutions
- Involvement of personnel of differing ranks in the institutions
- In Dawson College there is a greater link within their courses and the sustainability project as well as between different areas of the College
- Project is a potential detonator of synergies with other projects within the institutions

2.4 Leadership and decision-making

- Typical, vertical power structures were broken
- Modification of the roles of students, teachers and directors
- Emergence of new leaderships as the project developed, students among them
- Learning of the importance of leaderships
- Natural leaders found the space to exercise leadership
- Pending task is to make the project more inclusive
- Coordination teams of the projects began to see themselves as leaders

2.5 Dissemination

- Use of information and communication technologies (ICT) for dissemination

- Facebook page
- Skype
- Use of mass media
- Thematic programming calendar
- Radio and television broadcasting
- Printed media, Dawson College bulletin
- Project posters and postcards
- Shared reports

2.6 Coordination

Limitations

- Lack of organizational structure for the handling of resources.
- Administrative problems due to lack of someone who knew the way in which this kind of project should be handled in the respective institutions, given differing institutional supervision mechanisms
- Three different processes for financial resource record-keeping were required
- Financial resource management was hindered due to the way in which expenditures were labeled in the project proposal
- Time entailed for report writing
- Transparency versus lack of trust

Related to the campuses

- Campus difficulty planning requirements and commitments limited the reception and application of resources
- Mexican institutions had differential capacities for receiving and applying resources

Strengths

- Work was carried out based on trust
- Coordinators strengthened their management abilities
- Communication with students was key to energizing the project in critical stages

2.7 Environmental projects

- Bicycle pump installation
- Medicinal plants garden
- Peace garden
- Living classroom
- Peace mural
- Rainwater collection
- Waste separation
- Recovery of school grounds
- Rehabilitation of areas
- Elimination of use of disposable products
- Composting
- Reusing paper
- Cleaning days
- Emerging projects such as a living museum, plant registry, among others.
- Calculation of Ayala campus' carbon footprint

2.8 Stakeholder suggestions for new action areas

- Implementation of dry latrine bathrooms
- Worm composting

- Water treatment
- Green walls
- Installation of recycling collection centers
- Solar lamps
- Design of a new course
- Environmental study
- Visits and exchanges
- Course to design school environmental projects
- Implementation of training strategies for teachers regarding the environment
- Calculation of Ayala campus' carbon footprint

III Project strengths and limitations

The project laid the groundwork for establishing a community of learning between participating institutions. The process of project implementation explored possibilities for promoting education for sustainability.

People must recognize the negative impact of the current development model on the environment and the necessity of building a more just and equitable world in order to transition to sustainability.

The proposal of an adaptable and flexible model to promote sustainability in institutions progressed. Learning processes in student communities in general were promoted, although the greatest impact was achieved in the student project coordination teams. Students were able to design and operate environmental projects, with significant achievements in the areas of values and attitudes. Students feel that the project changed their lives, the pursuit of the common good was prioritized. Communities have greater appreciation of nature. This is important, since several students, for the first time in their lives or on their campus, participated in managing resources directly, and were responsible for reporting and accountability to the general project coordinators. This formula of participation avoided probable delays in project administration, given bureaucratic difficulties of channeling resources through the UPN Morelos' existing administrative structure.

Regarding sustainability research, investigation proposals were developed at the Universidad Pedagógica Nacional and will likely begin next semester.

Other project benefits include school environmental projects improving environmental content in several course curricula and academic research activities, and increasing student capacity to become involved with sustainable projects.

Strengths

- Flexible proposal that enabled the generation of knowledge, work and interchange
- Open and flexible project that provokes the emergence of new forms of action
- Emergence of new leaderships
- Active participation of different stakeholders
- Visibility of sustainability projects in workshops
- Free choice
- Visibility of the experience
- Interinstitutional relationships
- Replicability

Process limitations

- Changes of campus project coordinators
- Project coordination teams' over-commitment and fatigue
- Resistance to participation in some educational communities
- Lack of communication and knowledge of what is being done in other institutions

- In some cases the project is associated with the leader and not with the institution
- Insufficient community outreach
- Insufficient preliminary assessment, evaluation, pending systematization

By institution

- Work had to be suspended in late September when an agricultural court's decree ordered eviction of the Ayala campus grounds
- In Cuernavaca, the initial project group wore out. However, this was solved due to student dynamism and the naming of a coordinator
- In Normal Superior- limited involvement from students but very favorable support from authorities

IV Suggestions of the evaluating team

Institutional Scope

In order for educational institutions to become sustainability managers they must prioritize interdisciplinary work, redefine their proposal for training and formation, inspire lines of research consistent with sustainability, promote environmental training for teachers, incorporate systems of environmental management and respond to societal needs of the moment.

It is essential that each participating institution for the State of Morelos develop a policy that considers sustainability as a guiding principle for its work.

The viability of the project requires financial, human and material resources essential to ensure that a sustainability approach permeates institutions. This implies continued financing.

Institutions should promote the formation of interdisciplinary teams to guide their work towards sustainability, stimulate the adoption of research areas aimed at the transformation of relationships between society and nature, contribute to the prevention and solution of environmental problems, as well as foster the link between research and teaching.

- Strengthen the project from within the institution
- Channel resources to the project
- Name permanent coordinators for sustainability projects
- Establish an organizational base within institutions
- Establish a structure for coordination between campuses

Study plans and programs

Study plans should incorporate content, strategies, methodologies and practices that allow students to develop skills to identify and respond to social and environmental problems.

The pedagogical proposal must take into account the contributions of the paradigm of complexity and promote the creation of systematic thinking which permits professionals to access a complex view of reality and draw closer to approaches, methods and techniques that enable them to innovate their work.

One area to bolster and evaluate incorporation of the environmental dimension in professional training is through mechanisms used to obtain one's academic degree - such as theses, dissertations and professional experience reports - given that they permit students to reflect, analyze, investigate, articulate and consolidate knowledge, as well as firm up sustainability proposals.

Teacher training and formation

Before and during "environmentalization", meetings with school groups and/or academics from each participating institution should be held in order measure teacher interest and availability for participation in the process, their knowledge regarding environmental issues and their perception about the need to transform the curriculum.

The design of a permanent, ongoing teacher training and formation strategy to provide teachers with conceptual, ethical and methodological principles of environmental education is essential.

Institutional links with local community, the State and in the region are also vital. The institution's relationship with its immediate surroundings will facilitate creation and implementation of projects which benefit the community, as well as promote action-research processes that favor connections between theory and practice.

Inter-institutional collaboration

There is now apparent potential to create inter-university networks given the experience gained, project management abilities developed and the support of government offices. This is more likely to occur if environmental concerns are integrated throughout institutional work, as is promoted in national and State of Morelos government plans. It should be noted, that at least on two participating campuses (Ayala and Galeana), for the first time ever students were involved in project administration, an achievement to replicate and sustain.

Link with the community

Educational institutions must open their doors to the community, be in constant communication with them and define lines of action with the help of teachers and students. This will benefit the community and at the same time allow students to link theory and practice, acquire different learning and develop social awareness. There were several such interactions during the project, through civil society organizations, and it is hoped that they will continue and grow.

In addition, institutions should organize cultural, dissemination, promotion and recreational activities to foster community environmental education. This is likely to occur with more consistency and depth given the opportunity for TV and radio broadcasting via internet offered by the Benito Juárez Normal Superior School, project member.

Development of resources and supporting materials

In support of the process, institutions should have a program to develop teaching resources and materials. While initial progress has been made on a small scale, the educational character of all participating institutions would suggest significant potential for growth in this area.

Annexes

Annex I

Evaluation spotlights: Sustainable Schools Project Nov 2013

Through diverse sources of evidence, project effects were examined in each of the following areas:

1. Project stakeholders: a) students; (b) academic workers, administrators and managers; (c) the community.

What changed in me from participating in the project?

What changes do I notice in others?

2. Institutions: Dawson College; ENS Benito Juárez; UPN (three locations). What effects do I see in my institution, as a result of project participation?

- In environmental management
- In inter-institutional management relations
- In international management relations

3. Relationship between participants and institutions: flow and joint production of wisdom, knowledge,

attitudes, skills, and values.

- a) What effects do I note in the relationship between participants regarding the above?
 - b) What effects do I see in the relationship between institutions?
 - c) What effects do I see in the joint coordination of the project?
4. Changes in the processes and practices of environmental management
 - a) Which processes have changed in my institution?
 - b) Which new practices of environmental management have been produced?
 - c) Which are in the process of occurring?
 5. Institutional Curriculum
 - a) Are their innovations in curriculum changes?
 - b) How did the project influence curriculum?
 6. Environmental effects derived from the project.
 - a) Effects on the institutions
 - b) Effects on the communities of different stakeholders
 7. Leadership and decision-making
 - a) Which leaderships were produced during the management of the project?
 - b) How did decision-making take place during the project?
 8. "Unintended" effects and others.

With project objectives in mind, describe other unintended effects on participants, working groups, within institutions and in the community.

Annex II

Profile and contributions of the complementary evaluator, Janice Atsbury

Independent consultant in Program Management, Research, Evaluation and Facilitation/training. She is currently a researcher and teacher at the University of Manchester, where she is finalizing her doctorate studies. She has been a consultant for organizations from different parts of the world including the United Nations Development Programme.

She obtained master's degree in the Department of Geography at McGill University with her thesis entitled: Cultural constructions of the environmental among Mexican and Canadian environmentalist and implications for NGO (Non Governmental Organizations) partnerships.

Feedback based on observations during evaluation workshop for 'Proyecto Planteles Educativos Sustentables', Cuernavaca, 11-12 November 2013

Janice Astbury, Independent Consultant and PhD researcher, University of Manchester

This feedback is offered as a contribution to reflections on the project and may be used in reporting to stakeholders.

I very much appreciated the opportunity to observe this evaluation process. I have been directly involved in sustainable campus projects as both student and teacher and have followed a variety of initiatives across Canada through my work with the J.W. McConnell Family Foundation. In the context of my background in this field I was very impressed with both the evaluation process and what it surfaced about the project, specifically the following strengths:

Social Innovation versus benchmarking

Planteles Educativos Sustentables is an excellent model of a sustainable campus initiative oriented towards social innovation. Many initiatives to date have operated within an Environmental Management System (EMS) framework where the focus is on meeting a series of benchmarks. While this approach has been very helpful in defining the characteristics of a sustainable campus and providing a framework for institutional commitment, it does not generally take full advantage of the energy and creativity of stakeholders. Planteles Educativos Sustentables has created space for students, teachers, administrators, support staff, and in some cases the surrounding community, to engage fully with the initiative. The evaluation surfaced many examples of how this range of actors had initiated and were carrying out projects that incorporated their skills and interests.

The EMS approach also tends to put universities and colleges in competition with one other as they vie for the highest score which they can then announce in their marketing material. The very collaborative nature of this project within and across campuses reflects the sort of multi-stakeholder and multi-institution collaboration that is necessary to achieve social, economic and environmental transformation.

Focus on building relationships

The designers of this initiative understood that in order to create the space for innovation, they needed to invest extensively in building relationships within and among the campuses before they determined specific project activities (and they fought the necessary battles within their institutions to not pre-define activities and thus keep this space open). The investment paid off; it was very clear during the evaluation process that the success of this project was directly linked to it being driven by dedicated people in relationships of trust. The importance of relationships extended to the initiation and overall management of the project where the long-standing friendship between the project initiators/coordinators helped to overcome numerous challenges.

The trust that exists at all levels has encouraged commitment and perseverance in project implementation, as well as providing space for experimentation and for documenting failures as well as successes. The close-knit network that has developed over the course of the project has served as a continual source of motivation and support; providing inspiration and information, as well as materials and physical labour to bring projects to fruition on participating campuses. If one campus is struggling, the larger 'system' of the network has been able to rally around and sustain it until things turn around.

As is common among projects involving international exchange, the learning and inspiration offered by cross-cultural experiences were considerable. The fact that this project focused so much on building relationships and reflecting on practice, as well as fully engaging so many members of the campus community, made these effects even more significant.

Fully engaging the capacities of all stakeholders

The ability to fully engage the capacities of all stakeholders was supported by explicit reference within the project to the hierarchies of power that characterize most educational institutions. It was made clear through a variety of means that relationships of power must be recognized and reconfigured in ways that allow ideas and solutions to come from any part of the system; people must learn to recognize one another and work together outside of their roles.

One important strategy was having an engaged and engaging project coordinator present the project to the campus community as a whole and invite any member of this community to take leadership within the initiative. This created an open and supportive space while simultaneously communicating and transferring a clear and interesting mission to promote sustainability. As a result, everyone was invited and encouraged to appropriate the space in ways that aligned with their own capacities and interests. The leadership that was demonstrated by the students participating in the evaluation workshop and the collaborative relationships among students, teachers, support staff, directors and members of the surrounding community that were in evidence during the evaluation made it clear that efforts to allow

leadership to come from any part of the campus system had been effective.

Multiple forms of complementary support and capacity building with demonstrable impact on students

The project partners ensured on-going capacity building opportunities through both workshops provided by the project as well as activities incorporated into the curriculum of participating institutions. Responsive support was also provided when challenges were faced and it was mentioned how one coordinator was constantly keeping an eye out to see who needed support—and who needed recognition. The effect of these opportunities on the students was particularly evident. Students participating in the evaluation described how training opportunities and coursework, as well as support from various mentors (including students from other campuses with whom the project allowed them to interact) impacted on their capacity to work together, engage others and carry out projects with tangible results on the ground.

Teachers also mentioned specific examples of having learned from approaches used by teachers on other campuses and of applying these in their own teaching, which in turn had an impact on students.

Facilitating engaged learning

Students spoke of how much they had learned from specific mentors who taught them things about which the mentors themselves were passionate. It was clear that not only knowledge and skills but also inspiration and motivation had been transferred.

Students were also motivated by the fact that they were learning things that could be immediately applied in their projects. Sometimes the application touched another campus as in the example of students on a fundraising course at Dawson College raising funds for a project on one of the Mexican campuses. The enhanced learning opportunities provided by having students undertake internships related to specific projects at partner campuses, as opposed to more typical student exchanges, were also noted.

The project furthermore made links between more theoretical coursework and activities on the ground. For example students studying free trade agreements and the commodification of seeds participated in saving seeds from the campus garden for next year's tomatoes, giving them something in common, and in solidarity, with small producers.

Smart use of social media and other communication tools

Social media was used very effectively in this project, helping the partners to feel continually connected despite their geographic separation and allowing them to share their learning and excitement. Students were able to communicate their experiences on their home campuses and during visits/internships at other campuses using blogs, photos, videos, etc. A teacher reported how he had received a message from another institution wanting to learn about and possibly replicate the project. This interest was inspired by the Facebook page, which managed to convey the spirit of the project in such a way that it inspired someone from another institution to say, "I don't know exactly what you're doing but we want it!"

Social media was also combined with other communication tools to engage a range of people in the campus projects. The other tools included presentations, site visits, posters and postcards that were designed in an 'Educational materials' course. Students demonstrated thoughtful analysis of how to formulate their messages and get them across to different audiences.

Teachers shared their reflections and materials through a variety of means, including via bjmedia's 'Cosa de profes' (<http://bjmedia.mx>) taking advantage of the multi-media website and high quality video broadcasting from one of the participating campuses.

Institutional and Personal Transformation

The project reconfigured relationships among participants in ways that are likely to be enduring and influence the institutional cultures of the participating campuses. It was also reported that institution-

al boundaries were affected by the implementation requirements of this sustainable campus initiative where lines between education, research, fundraising and facility management blurred.

One student stated that the project made the campus community put mission and objectives related to sustainability into practice. The importance of students (including many who will become teachers) seeing stated aspirations translated into reality cannot be overstated when many students worldwide express cynicism about real commitment on the part of institutions. A teacher spoke about moving from teaching about composting to actually practicing it at home and about how the project had caused him to overcome his cynicism about 'sustainability' as meaningless political discourse. It was also mentioned that the empowering nature of the project and the tangible results generated hope in the current context in Mexico where there is "a feeling of submission to violence".

Physical changes are visible on the campuses, which now benefit from new green infrastructure facilitating delivery of a variety of ecosystem services. In addition to new infrastructure, there were also examples of greater use by a broader community of existing green facilities. This not only has an immediate positive environmental impact but also provides 'learning and doing' spaces for students and teachers to carry on transforming their campus and themselves. It also sends a strong message to everyone who comes to the campus that it is not just feasible but also normal that campuses incorporate sustainable practices.

Living laboratories facilitating adaptive experimentation and learning--and offering significant research opportunities

The open and experimental space created by Planteles Educativos Sustentables, along with the broad range of expertise and support provided by the many people who engaged with this initiative has meant that each campus has developed its own unique set of projects. These projects generally emphasize particular sustainability themes such as food systems, water or energy, combined with practices common to all, such as improving reuse and recycling and expanding climate-regulating vegetation cover. As each campus also has its own particular context and conditions and the whole initiative is framed as a participatory action research project, the result is a series of living laboratories.

Students reported that they got the message that this was a space of experimentation, a safe place to try things and sometimes to fail. They were encouraged and supported to analyze their actions and the results. Teachers and other actors enjoyed similar support for risk taking. The adaptive experimentation and learning approach that was therefore present in these 'living labs' means that there has been a continual process of reflection and adaptation of strategies within each project and well as within Planteles Educativos Sustentables overall. The fact that this has been shared across the network makes it even more powerful. There is an opportunity to continuing capturing and systemizing this learning so that effective approaches are documented and tools are developed in support of future efforts at these campuses and across a broader network.

There is also room for deeper analysis of what is going on within each living lab. Additional resources could be brought to bear to create more explicit 'laboratory conditions' such as establishing baselines and monitoring changes, capturing the perspectives of different stakeholders throughout the process, modelling drivers of change in social-technical-ecological systems, etc.

Several of the participating students were sufficiently interested and able to collect enough information to lead them to focus their undergraduate dissertations or equivalent projects on aspects of Planteles Educativos Sustentables. There may also be an opportunity to involve post-graduate students and possibly identify a group of interested academics who could set up a collaborative long-term research project.

Thank you for the opportunity to participate in the collaborative learning opportunity offered by this evaluation process!

Annex III

Brief information about evaluators

Teresita del Niño Jesus Maldonado Salazar is Deputy Director of basic education at the Center for Education and Training Teacher's School (CECADESU) of the Environment and Natural Resources Secretariat (SEMARNAT) as well as an academic of the National Pedagogical University since 1997. She is a member of the National Academy of Environmental Education. She coordinated the SEP-SEMARNAT Mainstreaming Group to include an environmental education approach in plans and programs for the Comprehensive Basic Education Reform (Reforma Integral de Educación Básica - RIEB). She designed the green school program that operates in the country's 4,000 schools and the evaluation model and accreditation system for education and environmental culture centers based on which yearly evaluations have been carried out since 2010. She has been asked to judge programs and projects of formal and non-formal environmental education spheres.

Miguel A. Izquierdo Sanchez is a full-time academic in the Unidad Morelos, Universidad Pedagógica Nacional since 1981. He is a research professor in undergraduate and graduate programs. He has been a member of the Mexican Council for Educational Research since 1998 and judge of several educational magazines. He has participated in evaluations of educational programs at several institutions, including the National Council of Science and Technology. He has served in the past as director of the UPN Morelos and as a consultant in other public agencies.

Cuernavaca, Morelos, November 30, 2013

Annex V



Research Ethics Board
Dawson College
3040 Sherbrooke Street West
Westmount, QC H3Z 1A4

Tel: (514) 931-8731
Email: rebapply@dawsoncollege.qc.ca
Website: <http://www.dawsoncollege.qc.ca/research-ethics-review>

Dawson College Research Ethics Board Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 2013-14 006

Project Title: Secondary Use of identifiable information for periods June 2011-November 2012 (Pre-Project Stage) and November 2012 to February 2013 (Participatory Diagnosis Stage)
Linked to the project: *Sustainable campuses - sharing our knowledge for social and environmental sustainability*

Principal Investigator: Gisela Frias, PhD

Institution: Dawson College **Department:** Geography Department

Co-Investigator, Collaborator: Margarita Hurtado (Instituto Mexicano para el desarrollo de ciudades verdes A.C.)

This project was reviewed by delegated review.

Sacha Young, REB Chair

Approval Period: __ 19 December 2013 _____ to ____ 18 December 2014 __

The Research Ethics Board at Dawson College, mandated to provide approval for research projects involving humans, examined the aforementioned research project. This project was approved in accordance with the requirements of the Dawson College Policy on the Ethical Conduct of Research Involving Humans (2011) and with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (2010).

IMPORTANT

Renewal: All research involving human participants requires review on an annual basis. A request for renewal application form should be submitted at least 1 month before the above expiry date.

Closure: When a project has been completed or terminated a Study Closure form must be submitted.

Modification: Should any modification or other unanticipated development occur before the next required review, the REB must be informed and any modification must be approved prior to implementation.



Research Ethics Board
Dawson College
3040 Sherbrooke Street West
Westmount, QC H3Z 1A4

Tel: (514) 931-8731
Email: rebapply@dawsoncollege.qc.ca
Website: <http://www.dawsoncollege.qc.ca/research-ethics-review>

Dawson College Research Ethics Board
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 2012-13-014

Project Title: Sustainable Campuses: Sharing our Knowledge for Social and Environmental Sustainability

Principal Investigator: Dr. Gisela Frias

Institution: Dawson College Department: Geography

Co-Investigator: Margarita Hurtado (Instituto Mexicano para el desarrollo de ciudades verdes A.C.)

This project was reviewed by full board review.

Julie Mooney, REB Chair

Approval Period: 21 May 2013 to 20 May 2014

The Research Ethics Board at Dawson College, mandated to provide approval for research projects involving humans, examined the aforementioned research project. This project was approved in accordance with the requirements of the Dawson College Policy on the Ethical Conduct of Research Involving Humans (2011) and with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (2010).

The REB would like to remind the principle investigator of your obligation to obtain ethics approval from partner institutions or partner countries prior to commencing research outside of Dawson College. In order to ensure this obligation has been met, please provide a copy of the ethics certificate or its equivalent from the appropriate authority in the partner institution/country before commencing research outside of Dawson College.

IMPORTANT

Renewal: All research involving human participants requires review on an annual basis. A request for renewal application form should be submitted at least 1 month before the above expiry date.

Closure: When a project has been completed or terminated a Study Closure form must be submitted.

Modification: Should any modification or other unanticipated development occur before the next required review, the REB must be informed and any modification must be approved prior to implementation.



Instituto de la
**Educación Básica del
Estado de Morelos**

Dirección: Unidad UPN 17-A Morelos
U. Admva: Dirección
Oficio No.: DUP/0362/2013

"2013: Año de Belisario Domínguez"

Cuernavaca, Mor., a 04 de Mayo de 2013.

Asunto:

Título del proyecto: Uso secundario de información para los periodos junio 2011 a noviembre 2012 (Etapa Pre-Proyecto) y noviembre 2012-febrero 2013 (Etapa Diagnóstico Participativo) vinculado con el proyecto: Planteles Sustentables: Compartiendo Saberes para la sustentabilidad socio-ambiental.

Dra. Gisela Frias
Departamento de Geografía
Dawson College
3040 Sherbrooke St. West Montreal, Quebec
H3Z 1A4 Canadá

Mtra. Margarita Hurtado Badiola
Educación ambiental
Instituto Mexicano para el Desarrollo de Ciudades Verdes, S.C.
Rayón 30, Centro, Cuernavaca, Morelos, c.p. 62000, México

Investigadora principal: Dra. Gisela Frias
Colaboradores: Mtra. Margarita Hurtado Badiola

Estimadas Dra. Frias y Mtra. Hurtado:

Nuestra institución considera de gran aporte los vínculos inter institucionales que se están estableciendo por medio del proyecto de investigación-acción que ustedes coordinan.

Les agradecemos por su reciente solicitud de aprobación para el uso de datos adquiridos hasta este momento vinculados con el proceso vivido en torno al proyecto: Planteles educativos sustentables: Compartiendo saberes y para implementar la próxima etapa de éste.



Institución Educativa con sistema de gestión de la calidad certificado bajo la Norma Internacional ISO 9001:2008



www.iebem.edu.mx



Instituto de la Educación Básica del Estado de Morelos

Dirección:
U. Admiva
Oficio No.:

Después de revisar la documentación proporcionada que detalla todos los instrumentos de investigación que se han utilizado de junio de 2011 a febrero de 2013 y los propuestos para la etapa de marzo 2013 a agosto de 2014, le otorgamos el permiso necesario para utilizar los datos recaudados y llevar a cabo la investigación propuesta.

La revisión de su documentación nos da constancia de que el proceso que protege los derechos de los participantes ha sido planeado de manera apropiada y respeta las normas éticas de la investigación.

Con la certeza de que su trabajo de investigación traerá consigo beneficios sociales y ambientales, les deseamos éxito y esperamos mantenemos al tanto del proceso y de los resultados que seguramente tendrán una amplia difusión.

Me despido enviándoles un cordial saludo.

ATENTAMENTE
"EDUCAR PARA TRANSFORMAR"

Maria de la Concepción Tonda Mazón

MTRA. MARIA DE LA CONCEPCIÓN TONDA MAZÓN
DIRECTORA DE LA UPN- MORELOS



Recibido en + 8 min / 07 - Mayo / 2013

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ESCUELA PARTICULAR NORMAL SUPERIOR
"LIC. BENITO JUÁREZ" A.C.

"Por una educación superior al alcance de todos"

CUERNAVACA, MORELOS, a 13 de mayo de 2013.



Profa. Ana Angélica Muñoz Buitrago
Secretaría General de la Escuela UPN

Profr. Carlos Gallardo Sánchez
Jefe del Consejo de Docentes

Dr. Juan Rodríguez Salazar
Tesorero del Consejo de Docentes

Dra. Gisela Frías
Departamento de Geografía Dawson College
3040 Sherbrooke St. West Montreal, Quebec
H3Z 1A4 Canadá
(Investigadora principal)

Mtra. Margarita Hurtado Badiola
Educación Ambiental
Instituto Mexicano para el Desarrollo de Ciudades Verdes, SC
Rayón 30, Centro, Cuernavaca, Morelos, CP 62000, México
(Coolaboradora)

Asunto: Autorización para segunda etapa de investigación

Estimadas Dra. Frías y Mtra. Hurtado

Nuestra escuela considera relevante fortalecer los vínculos interinstitucionales que se están estableciendo por medio del proyecto de investigación que ustedes coordinan y que lleva por título "Uso secundario de información", y que procede a la implementación de su segunda etapa.

Es así, que agradecido por su reciente solicitud de aprobación para el uso de datos adquiridos hasta este momento vinculados al proyecto "Planteles educativos sustentables. Compartiendo saberes", le comunico que:

Una vez revisados los documentos que detallan los instrumentos de investigación que se han utilizado de junio de 2011 a febrero de 2013, así como los propuestos para la etapa de marzo de 2013 a agosto de 2014, me es grato otorgar el permiso necesario para utilizar los datos recaudados y llevar a cabo la investigación propuesta, pues dicha documentación da constancia de que el proceso que protege los derechos de los participantes ha sido planeado de manera apropiada y respeta las normas éticas de la investigación.

Con la certeza de que su trabajo de investigación traerá consigo beneficios sociales y ambientales, les deseo éxito y manifiesto mi interés por mantenerme al tanto del proceso y de los resultados que seguramente tendrán una amplia difusión.

Me despido enviándoles un cordial saludo

Atentamente

Carlos Gallardo Sánchez

Professor Carlos Gallardo Sánchez
Director General

c.c.p. Archivo

Equipo de Trabajo de Investigación
DIRECCIÓN GENERAL DE INVESTIGACIÓN
DIRECCIÓN DE INVESTIGACIÓN EDUCATIVA

Privada Narzajos # 10, col. Lázaro Cárdenas, Cuernavaca Morelos. 62080.
Teléfono (777) 318 52 48, fax (777) 312 7929 / Correo: normal@epnsbj.edu.mx, http://www.epnsbj.edu.mx

Sustainable Campuses: Sharing our Knowledge for Social and Environmental Sustainability

SAMPLE Consent Form Interviews with Dawson College Students

Researcher(s): Dr. Gisela Frias (Dawson College) –Principal Investigator
Ms. Margarita Hurtado (Instituto Mexicano para el desarrollo de ciudades verdes s.a)- Research Collaborator

The interview has been designed and will be facilitated by Gisela Frias (Dawson College)

Funding Agency: This project is partially funded by the International Development Research Center

1. WHAT IS THIS FORM?

This form is called a Consent Form. It will give you information about the study so you can make an informed decision your about participation in this research.

2. WHO IS ELIGIBLE TO PARTICIPATE?

You are being asked to participate in this interview because you have been identified as a key participant in the Sustainable Campuses: Sharing our Knowledge for Social and Environmental Sustainability project. You must be 18 years or older to participate.

3. WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this research study is:

1. To generate and share knowledge about the process of moving towards sustainability in post-secondary educational institutions of the North and South;
2. To create a model campus where practices and attitudes that support sustainability can be showcased to other institutions;
3. To foster a conscious and informed attitude towards the common good, respect for values that support community and an appreciation of biodiversity.

4. WHERE WILL THE STUDY TAKE PLACE AND HOW LONG WILL IT LAST?

The overall study has a life span of 15 months. The interview however will take place on [insert date].

5. WHAT WILL I BE ASKED TO DO?

If you agree to take part in this study, you will be asked to review the attached questionnaire. The day of the interview we will begin by discussing this consent form, answer any questions and make any modifications to it that you may suggest. You will be asked to give your verbal consent to participate in the interview. We will then proceed to discuss the questions. You may add or delete any questions. The interview will be recorded. You however can turn the recorded off any time you feel it is necessary. The signing of the consent form will only take place at the end of the interview and you may specify if there is anything you would like to not be used in the research.

With the information generated from these interviews the researcher will generate a preliminary document to be reviewed collectively by the participants in a forum. We will collectively then identify the

main findings and decide how to disseminate the results.

6. WHAT ARE MY BENEFITS OF BEING IN THIS STUDY?

The objective of these interviews lies in understanding your participation in the Sustainable Campus: Sharing our Knowledge project and to contribute to the efforts of how to make your campus more sustainable.

7. WHAT ARE MY RISKS OF BEING IN THIS STUDY?

We believe you must assess the following risks before agreeing to participate:

1. Repercussions for challenging conventional authoritarian power dynamics in their educational institutions.

Relationships between the members of a conventional educational community are defined by the roles of its members. While harmony can exist in a classroom, teachers enjoy power over students and the administration can exert power over teachers. The nature of this project challenges participants to become active community members identifying problems and organizing to change them. As project participants engage in research and action they redefine their roles and vis a vis their relationship with others. Their actions have the potential of challenging current power dynamics. As such they may become vulnerable to those who exercise power over them.

2. Information generated by the “project participants” can highlight current practices perceived as negative at the institution and thus have the administration retaliate against them.

Measures however have been taken to minimize the risks.

1. There is support for the initiative at the highest levels of authority within the participating institution.
2. Your continuous participation in the generation of this knowledge will allow you to identify if there are any potential risks at sharing information. You may decide to strike any information from the study.

8. HOW WILL MY PERSONAL INFORMATION BE PROTECTED?

The following procedures will be used to protect the confidentiality of your study records.

Gisela Frias will be the only person to have direct access to the answers you provide. You are assured confidentiality in the reports generated with the data

The data will be held at Dawson College. All electronic files containing identifiable information will be password protected. Any computer hosting such files will also have password protection to prevent access by unauthorized users. At the conclusion of this study, the researcher may publish the findings of the consented final documents. Information will be presented in summary format and you will not be identified in any publications or presentations.

9. WHAT IF I HAVE QUESTIONS?

I will be happy to answer any question you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact the researcher, Gisela Frias. giselafrias@hotmail.com

10. CAN I STOP BEING IN THE STUDY?

Participation in the project is voluntary and you may terminate your participation at any time. If you agree to this interview, but later change your mind, you may drop out at any time. You may withdraw your participation and have the data you have shared withdrawn anytime before December 31, 2013. You may do so by submitting a written request via email to Gisela Frias. There are no penalties or consequences of any kind if you decide that you do not want to participate.

11. STATEMENT OF VOLUNTARY CONSENT

When signing this form I am agreeing to voluntarily participate in the interview. I have had a chance to read this consent form, and it was explained to me in a language which I use and understand. I have had the opportunity to ask questions and have received satisfactory answers. I understand that I can

withdraw at any time. Please do not sign until after the interview is finished.

I would like to make the following modifications to this consent form:

Participant Signature:

Print Name:

Date:

By signing below I indicate that the participant has read and, to the best of my knowledge, understands the details contained in this document and has been given a copy.

**Signature of Person
Obtaining Consent**

Print Name:

Date:

Campus responsables : partager nos connaissances pour une durabilité sociale et écologique

Formulaire de consentement Entretiens avec les étudiants du collège Dawson

Chercheuse (s) : Dre Gisela Frias, collège Dawson – chercheuse principale
Mme Margarita Hurtado, Instituto Mexicano para el desarrollo de ciudades verdes s.a (Institut mexicain pour le développement des villes vertes) – col laboratrice de recherche

L'entretien a été préparé et sera conduit par la Dre Gisela Frias du collège Dawson.

Organisme subventionnaire : Ce projet reçoit une aide financière du Centre de recherches pour le développement international (CRDI).

1. À QUOI SERT CE FORMULAIRE?

Il s'agit d'un formulaire de consentement qui vous renseigne sur l'étude à laquelle nous vous proposons de participer afin que vous puissiez prendre votre décision en toute connaissance de cause.

2. QUI PEUT PARTICIPER?

Vous avez été choisi pour cet entretien en raison du rôle majeur que vous avez tenu dans le projet « Campus responsables : partager nos connaissances pour une durabilité sociale et écologique ». Les participants doivent avoir 18 ans ou plus.

3. QUEL EST L'OBJET DE L'ÉTUDE?

Cette étude s'articule autour de trois enjeux :

4. La production et le partage de connaissances sur l'évolution vers la durabilité dans les établisse-

ments d'enseignement postsecondaires du Nord et du Sud.

5. La création d'un campus modèle où les pratiques et les attitudes qui favorisent la durabilité peuvent être présentées à d'autres établissements d'enseignement.

6. La promotion de la conscientisation et de l'information pour favoriser le bien commun, le respect des valeurs de la communauté et la reconnaissance de la biodiversité.

4. QUAND ET PENDANT COMBIEN DE TEMPS L'ÉTUDE DOIT-ELLE SE TENIR?

L'étude s'étend sur une période de 15 mois. Toutefois, l'entretien aura lieu le [inscrire la date ici].

5. QU'AURAI-JE À FAIRE?

Si vous acceptez de participer à cette étude, vous devrez examiner le questionnaire ci-joint. Le jour de l'entretien, nous discuterons tout d'abord du formulaire de consentement, puis nous répondrons à vos questions et apporterons les modifications que vous souhaitez. Vous devrez aussi donner votre accord verbalement pour participer à l'entretien. Nous allons ensuite discuter des questions qui seront abordées. Vous êtes libre d'en ajouter ou d'en supprimer. L'entretien sera enregistré, mais vous pourrez interrompre l'enregistrement si vous le jugez nécessaire. Le formulaire de consentement ne devant être signé qu'après l'entretien, vous pourrez préciser, s'il y a lieu, quelles sont les informations que vous ne voulez pas voir utiliser dans le cadre de la recherche.

À la lumière des informations recueillies lors des entretiens, la chercheuse préparera un document préliminaire qui sera étudié par les participants lors d'un forum. Ensemble, ils dresseront une liste des principales conclusions et décideront de la manière de les diffuser.

6. QUEL INTÉRÊT AI-JE À PARTICIPER À CETTE ÉTUDE?

L'entretien a pour but de nous aider à comprendre votre participation au projet « Campus responsables : partager nos connaissances » et de nous permettre de contribuer aux efforts qui sont faits pour rendre votre campus plus responsable.

7. QUELS SONT LES RISQUES AUXQUELS JE M'EXPOSE EN ACCEPTANT D'Y PARTICIPER?

Avant de donner votre accord, évaluez les risques suivants :

3. Les répercussions que pourrait avoir le fait de contester la dynamique de pouvoir de l'autorité reconnue dans votre établissement d'enseignement.

Les relations entre les membres d'une communauté éducative classique sont définies par les rôles de ses membres. Bien que l'harmonie puisse exister dans une classe, les étudiants dépendent du pouvoir dont jouissent leurs enseignants et la direction est en mesure d'exercer un pouvoir sur ces derniers. La nature de ce projet d'étude incite les participants à jouer un rôle actif dans la communauté pour en découvrir les problèmes et s'employer à les régler. En s'engageant dans la recherche et l'action, les participants redéfinissent leur rôle et leurs relations au sein du groupe. Leurs actions pourraient remettre en cause la dynamique du pouvoir en place, les rendant vulnérables face aux personnes qui exercent ce pouvoir.

4. Les informations obtenues par les participants risquent de mettre en lumière certaines pratiques courantes perçues comme négatives, ce qui pourrait inciter la direction de l'établissement à exercer des représailles contre eux.

Des mesures ont cependant été prises pour réduire les risques.

3. L'initiative est soutenue aux plus hauts échelons de la direction dans les établissements participants.

4. Le fait de collaborer de façon continue à la production de cette connaissance vous permet de déterminer si le partage de l'information présente des risques. Vous êtes libre de supprimer de l'étude toute information que vous jugez problématique.

8. DE QUELLE FAÇON MES RENSEIGNEMENTS PERSONNELS SERONT-ILS PROTÉGÉS?

Les procédures suivantes seront mises en place pour protéger la confidentialité de vos rapports.

Gisela Frias sera la seule personne à avoir directement accès aux réponses que vous fournirez. La confidentialité sera assurée dans les rapports qui seront produits grâce aux données obtenues.

Les données seront conservées au collège Dawson. Tous les fichiers électroniques contenant des renseignements identifiables seront protégés par un mot de passe. Tous les ordinateurs qui hébergeront ces fichiers seront aussi protégés par un mot de passe pour que les utilisateurs non autorisés ne puissent y avoir accès. Au terme de cette étude, la chercheuse pourra publier les conclusions des documents finaux contenant les données que les participants auront accepté de fournir. Les informations seront présentées sous une forme résumée et vous ne serez identifié ni dans les publications ni dans les présentations.

9. À QUI M'ADRESSER SI J'AI DES QUESTIONS?

Je répondrai avec plaisir à toutes vos questions sur cette recherche. Si plus tard vous avez de nouvelles questions, ou que vous éprouvez des problèmes concernant l'étude, n'hésitez pas à communiquer avec Gisela Frias qui peut être jointe à l'adresse giselafrías@hotmail.com.

10. PUIS-JE ME RETIRER DE L'ÉTUDE?

Votre participation au projet se fait à titre volontaire et vous pouvez y mettre fin quand vous voulez. Si vous acceptez cet entretien, mais que vous changez ensuite d'idée, vous pourrez vous retirer à tout moment. Jusqu'au 31 décembre 2013, vous pouvez interrompre votre participation à n'importe quel moment et les données que vous aurez transmises seront retirées de l'étude. Il suffit pour ce faire d'envoyer une demande par courriel à Gisela Frias. Il n'y aura aucune sanction ni conséquence si vous décidez de ne plus participer.

11. DÉCLARATION DE CONSENTEMENT VOLONTAIRE

En signant le présent formulaire de consentement, j'accepte de participer à l'étude de mon plein gré. J'ai pris connaissance du formulaire qui m'a été expliqué dans une langue que j'utilise et que je comprends. J'ai obtenu des réponses satisfaisantes à toutes les questions que j'ai posées. Je comprends en outre que je peux me retirer de l'étude à tout moment.

S.v.p. ne signer le formulaire qu'une fois l'entretien terminé.

Je désire apporter les modifications suivantes au formulaire :

Signature du participant	Nom en lettres moulées	Date
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Par la présente, j'atteste que le participant a lu et compris, pour autant que je puisse en juger, les renseignements contenus dans le présent document et qu'il en a reçu copie.

Signature de la personne ayant obtenu le consentement	Nom en lettres moulées	Date
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Annex VI

Curso-taller: Herramientas y estrategias para crear planteles educativos sustentables

Presentación general:

El curso taller: Herramientas y estrategias para la creación de planteles educativos sustentables, se enmarca en el proyecto: "Planteles educativos sustentables: Compartiendo saberes" es el resultado de un esfuerzo colectivo tanto de instituciones gubernamentales como de la sociedad civil de México y Canadá:

- Escuela Particular Normal Superior Lic. Benito Juarez
- Dawson College
- Instituto Mexicano para el Desarrollo de Ciudades Verdes S.C.
- Centro de Capacitación para el Desarrollo Sustentable (CECADESU-SEMARNAT)
- Earthvalues Institute, A.C.
- Secretaría de Desarrollo Sustentable
- Universidad Pedagógica Nacional sede Morelos

El principal aporte financiero para el proyecto proviene de la corporación pública creada por el gobierno de Canadá: International Development Research Center (IDRC).

Equipo coordinador:

Está conformado por grupo de docentes e investigadores expertos mexicanos y canadienses que compartirá sus saberes para lograr el objetivo de crear planteles educativos sustentables, como una acción concreta para responder a la crisis ambiental global.

Participantes:

El curso-taller está dirigido a integrantes de comunidades educativas (directivos, estudiantes, docentes, administrativos, personal de intendencia, apoyos técnico-pedagógicos) de escuelas para la formación de profesionistas de la educación y a promotores culturales, líderes de la sociedad civil vinculados con el tema de la sustentabilidad.

Perfil de los participantes:

- Sensibilidad hacia los problemas ambientales
- Interés y disponibilidad para el trabajo grupal
- Capacidad de gestión
- Compromiso social y ambiental
- Actitud de apertura y disposición para compartir saberes

Duración:

El Curso-taller tendrá una duración de 62 horas presenciales.

Calendario:

Del sábado 6 al jueves 18 de julio de 2013.

Horario:

Sábado 6, de 9 de la mañana hasta el domingo 7 a las 2 de la tarde (con estadía en lugar ex profeso)

Del lunes 8 al viernes 12, de 9 de la mañana a 2 de la tarde

Del lunes 15 al jueves 18, de 9 de la mañana a 2 de la tarde

Lugar:

El inicio del curso se realizará en un espacio exprofeso durante los días sábado y domingo. La sede del curso-taller será la Escuela Particular Normal Superior “Lic. Benito Juárez” Priv.

Naranjos No. 10. Col. Lázaro Cárdenas. C. P. 62080, Cuernavaca, Morelos.

Algunas actividades se realizarán en lugares específicos que se mencionan en el programa.

Fundamentación:

Uno de los retos actuales que enfrenta la educación es cómo responder a la crisis ambiental que estamos viviendo como comunidad mundial. Las instituciones educativas, de todos los niveles, deben ser capaces de entender, informar y alentar la acción local y mundial, convertirse en agentes de acción social transformadora hacia la sustentabilidad. Las instituciones de nivel medio superior y superior tienen el potencial de ofrecer soluciones novedosas a algunos de nuestros mayores retos mundiales a través de su enseñanza y actividades de investigación. Tienen el potencial, a través de políticas que puedan establecer para normar la vida cotidiana en ellas y así ser ejemplo de espacios sustentables en lo ambiental y lo social. Son las bases de entrenamiento para los futuros líderes e incubadoras para la acción social transformadora. Además, la gestión ambiental escolar es una estrategia que contribuye a incluir los criterios de sustentabilidad en la formación de estudiantes y docentes, la participación comunitaria y la incorporación transversal del enfoque de la educación ambiental en el currículum.

Propósito general:

Generar ambientes de aprendizaje que permitan a los participantes, la apropiación de herramientas teórico conceptuales, metodológicas, tecnológicas y procedimentales, para avanzar hacia la sustentabilidad en planteles educativos.

Objetivos particulares:

- Contribuir a la formación de al menos 20 participantes en temas de sustentabilidad socio-ambiental a fin de que sean capaces de impulsar el desarrollo de planteles sustentables en diferentes niveles educativos.
- Brindar la oportunidad a los participantes de desarrollar una visión y sensibilidad de su ser interior y su interacción con los otros y el entorno natural.
- Propiciar el desarrollo de liderazgo individual y grupal a fin de que los participantes sean capaces de promover/facilitar/coordinar proyectos de sustentabilidad con la comunidad educativa.
- Propiciar ambientes de aprendizaje que favorezcan el ejercicio de vinculación permanente entre la situación ambiental global y lo local.
- Generar condiciones que permitan a los/las participantes, poner en práctica los conocimientos adquiridos por medio del diseño e implementación de proyectos en el plantel sede del curso-taller, como experiencia piloto.

Perfil de egreso:

Al término del curso-taller, los participantes serán capaces de innovar su práctica profesional al incorporar la perspectiva de la educación ambiental para la sustentabilidad, con base en un enfoque estratégico y de competencias, desde una visión sistémica y prospectiva, esperanzadora y una ética ambiental.

Mapa conceptual:



Descripción general:

Ejes	Descripción
Eje teórico-conceptual	<ul style="list-style-type: none"> • Conocimientos básicos para la comprensión del concepto de sustentabilidad • Institucionalización de la sustentabilidad • Dimensiones de la sustentabilidad en un plantel educativo (manejo operativo de las instalaciones, currículo, investigación, política institucional, relaciones interpersonales entre la los integrantes de la comunidad educativa) • Conocimientos acerca de la situación global ambiental en relación con el agua, el suelo, la biodiversidad, la energía, el cambio climático y su impacto en lo social. • Concepto de grupo, liderazgo, manejo de conflicto
Eje metodológico	<ul style="list-style-type: none"> • Proceso metodológico para la participación social hacia la sustentabilidad en planteles educativos • Diagnóstico, indicadores, diseño, gestión, operación, seguimiento, evaluación, sistematización y comunicación de proyectos
Eje procedimental/tecnológico	<ul style="list-style-type: none"> • Uso, aplicación de energías alternas(solar, eólica, dinámica) en los planteles • Eco-tecnias para promover el ahorro del agua, la energía y el cuidado del suelo • Bases para el diseño curricular que promuevan la sustentabilidad • Técnicas para favorecer la integración y el trabajo grupal
Eje Paz y Sustentabilidad	<ul style="list-style-type: none"> • Trabajo colaborativo e incluyente • Construcción de ambientes de paz • Los valores como componentes esenciales para la sustentabilidad y la paz (cordialidad, apertura a la diversidad, convivencia, alegría, amistad, compañerismo, compasión, empatía, respeto, esperanza)

Descripción del Programa:

Todas las sesiones iniciarán con una actividad para propiciar la integración grupal y recuperación de saberes y se cerrarán con un momento de evaluación por medio del uso de diversas técnicas y herramientas.

Sábado 6 de julio (10:00 am) al domingo 7 de julio (2:00pm)

Objetivo:
Identificar y practicar estrategias para optimizar el trabajo grupal y caminar hacia la sustentabilidad en planteles educativos

Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> • Concepto de grupo • Concepto de liderazgo • Estrategias para formar un grupo • Establecimiento de normas para el funcionamiento de un grupo • Roles y funciones de quienes integran un grupo • Equilibrio de las funciones y las tareas para el funcionamiento y mantenimiento de un grupo • Identificación de actitudes que dificultan el trabajo grupal. • La naturaleza como oportunidad para el aprendizaje y la interacción. • Importancia del uso de habilidades individuales en el diseño de un proyecto de intervención para hacer sustentable un plantel escolar. 	<ul style="list-style-type: none"> • Ejercicios diversos de integración grupal • Formas diversas de expresión artística • Ejercicios de contacto/interacción con la naturaleza de manera personal y grupal. • Actividades de trabajo grupal. • Participación en proceso de evolución. 	<ul style="list-style-type: none"> • Chris Adams • Margarita Hurtado • Gisela Frías

Lunes 8 de Julio 2013
9:00 am a las 2:00 pm

Objetivo:
Adquirir una visión global de la situación ambiental e identificar sus formas de expresión en un plantel escolar para intervenir a través de proyectos educativos sustentables.

Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> • Panorama global de la crisis ambiental relacionados con el agua, suelo, biodiversidad, energía, población y consumo y cambio climático • Vinculación de lo global con lo específico de un plantel educativo • Concepto de sustentabilidad 	<ul style="list-style-type: none"> • Panel de expertos sobre la situación ambiental global • Construcción colectiva del concepto de sustentabilidad • Elaboración de mapa conceptual –plantel educativo sustentable • Participación en una charla-taller para el manejo integral de los 	<ul style="list-style-type: none"> • Margarita Hurtado • Chris Adam • Jeffrey Barnes • Teresita Maldonado • Gisela Frías • Virginia Espino • Oscar Castañeda • Amin Nicolás Rodríguez

<ul style="list-style-type: none"> • Dimensiones de la sustentabilidad en un plantel educativo • Manejo integral de residuos sólidos 	residuos solidos
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Martes 9 de Julio 2013
9:00 am a las 2:00 pm

Objetivos:
Ampliar conocimiento sobre el cambio climático y conocer herramientas para medir y mitigar la huella de carbono en un plantel educativo

Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> • Cambio climático • Huella de carbono 	<ul style="list-style-type: none"> • Aplicación del instrumento Naranja dulce limón partido: Un juego para refrescar el planeta. • Exposición sobre cambio climático • Presentación y aplicación de la herramienta "huella de carbono". • Tren de la participación 	<ul style="list-style-type: none"> • Margarita Hurtado • Jeffrey Barnes • Chris Adam • Katie Wheatley • Gisela Frías

Miércoles 10 de Julio 2013-06-24
9:00 am a las 2:00 pm

Objetivos:
Compartir una visión global sobre la biodiversidad, realizando un ejercicio que permita conocer, valorar, divulgar, conservar y propagar la biodiversidad en el plantel.

Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> • Biodiversidad 	<ul style="list-style-type: none"> • Charla sobre biodiversidad • Nuestros vecinos verdes • Inventario de biodiversidad/liderazgo trabajo en grupo • Diseño y trabajo en proyectos 	<ul style="list-style-type: none"> • Jeffrey Barnes • Julio Mora • Katie Wheatly

Jueves 11 de Julio 2013
9:00 am a las 2:00 pm

Objetivo:
Conocer espacios donde se aplican diversas eco-tecnias para su aprendizaje y puesta en práctica en planteles educativos. Aprender a construir un Jardín vertical.

Tema	Actividad	Facilitadores
<ul style="list-style-type: none"> • Eco-tecnias 	<ul style="list-style-type: none"> • Visita a "El Fresno" • Construcción de jardines verticales 	<ul style="list-style-type: none"> • Blanca Pastrana • Felipe de Jesús Tijera

Viernes 12 de Julio 9:00 am a las 2:00 pm		
Objetivo: Obtener una visión global de la crisis energética e identificar oportunidades para el manejo sustentable de este recurso en el plantel educativo.		
Tema	Actividad	Facilitadores
<ul style="list-style-type: none"> Energía para el uso sustentable 	<ul style="list-style-type: none"> Estudio comparativo de casos de presas hidroeléctricas Canadá-México Construcción de indicadores de sustentabilidad en un plantel Auditoria del uso de energía en el plantel/liderazgo y trabajo grupal Estrategias educativas para el ahorro de energía Actividad de Integración-aplicación de aprendizajes adquiridos 	<ul style="list-style-type: none"> Jeffrey Barnes Chris Adam Rosalinda Uribe FIDE Luisa Montes

Lunes 14 de Julio 2013 9:00 am a las 2:00 pm		
Objetivo: Identificar la problemática del agua a nivel global, conocer herramientas para realizar un diagnóstico de la situación del agua y formas de hacer un uso sustentable en el plantel.		
Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> Agua 	<ul style="list-style-type: none"> Aplicación de Aquajuego Construcción de Indicadores de manejo sustentable del agua Herramientas de diagnóstico: Huella hídrica 	<ul style="list-style-type: none"> Margarita Hurtado Rosalinda Uribe Gisela Frias

Martes 15 de Julio 2013 9:00 am a las 2:00 pm		
Objetivo: Dar herramientas para el análisis del contenido curricular para avanzar hacia un currículo que apoye el conocimiento y practica de la sustentabilidad, "ambientalizar" el currículo.		
Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> Curriculo como herramienta de sustentabilidad en un plantel 	<ul style="list-style-type: none"> Presentación de experiencias nacionales de sustentabilidad en planteles educativos. Exposición de elementos Básicos para el diseño curricular aplicado a la sustentabilidad Trabajo en proyectos 	<ul style="list-style-type: none"> Claudia Gómez Teresita Maldonado (CECADESU)

Miércoles 16 de Julio 2013 9:00 am a las 2:00 pm		
Objetivos: Conocer técnicas y practicas para el manejo sustentable del agua dentro de un plantel educativo.		
Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> Agua 	<ul style="list-style-type: none"> Conocimiento y aplicación de sistemas para el manejo sustentable del agua en un plantel Trabajo en proyectos 	<ul style="list-style-type: none"> Centro de Innovación en Tecnología Alternativa, A.C

Jueves 17 de Julio 2013 9:00 am a las 2:00 pm		
Objetivos: Establecer una red de intercambio de conocimientos, experiencias y capacidades para facilitar la continuidad del desarrollo de planteles educativos sustentables.		
Tema	Actividades	Facilitadores
<ul style="list-style-type: none"> Tecnologías amigables con el ambiente Intercambio de experiencias Estrategias para la organización entre planteles educativos sustentables 	<ul style="list-style-type: none"> Visita al Parque ecológico Chapultepec Visita a casa ecológica para aprender la aplicación de eco-tecnias Foro de intercambio de experiencias de sustentabilidad en planteles educativos Establecimiento de acuerdos 	<ul style="list-style-type: none"> Mercedes Pesqueira y personal de la Secretaría de Desarrollo Sustentable

Informe
**Curso-taller
"Herramientas
y estrategias
para crear
planteles
sustentables"**

Compartiendo saberes

Descripción general

Eje teórico-conceptual

- Conocimientos básicos para la comprensión del concepto de sustentabilidad.
- Institucionalización de la sustentabilidad.
- Dimensiones de la sustentabilidad en un plantel educativo (manejo operativo de las instalaciones, currículo, investigación, política institucional, relaciones interpersonales entre los integrantes de la comunidad educativa).
- Conocimientos acerca de la situación global ambiental en relación con el agua, el suelo, la biodiversidad, la energía, el cambio climático y su impacto en lo social.
- Concepto de grupos, liderazgo, manejo de conflicto.

Eje metodológico

- Proceso metodológico para la participación social hacia la sustentabilidad en planteles educativos.
- Diagnóstico, indicadores, diseño, gestión, operación, seguimiento, evaluación, sistematización y comunicación de proyectos.

Eje procedimental/tecnológico

- Uso, aplicación de energías alternativas (solar, eólica, dinámica) en los planteles.
- Eco-tecnias para promover el ahorro del agua, energía y el cuidado del suelo.
- Bases para el diseño curricular que promuevan la sustentabilidad.
- Técnicas para favorecer la integración y el trabajo grupal.

Eje paz y sustentabilidad

- Trabajo colaborativo e incluyente.
- Construcción de ambientes de paz.
- Los valores como componentes esenciales para la sustentabilidad y la paz (cordialidad, apertura a la diversidad, convivencia, alegría, amistad, compañerismo, compasión, empatía, respeto, esperanza).



Uno de los retos actuales que enfrenta la educación es cómo responder a la crisis ambiental que estamos viviendo como comunidad mundial. Las instituciones educativas, de todos los niveles, deben ser capaces de entender, informar y alentar la acción local y mundial, convertirse en agentes de cambio hacia la sustentabilidad.

El curso-taller "Herramientas y estrategias para crear planteles educativos sustentables" se enmarcó como parte del proyecto "Planteles educativos sustentables: Compartiendo saberes". Su objetivo principal fue el generar un ambiente de aprendizaje que permitiera a los participantes, la apropiación de herramientas teórico conceptuales, metodológicas, tecnológicas y procedimentales, para avanzar hacia la sustentabilidad en planteles educativos.

El curso-taller es el resultado de un

esfuerzo colectivo tanto de instituciones gubernamentales como de la sociedad civil de México y Canadá.

Fue diseñado por Margarita Hurtado, del Instituto Mexicano para el Desarrollo de Ciudades Verdes S.C. y Gisela Frias de Dawson College. El equipo coordinador y de apoyo contó con la participación de docentes e investigadores expertos de varias instituciones mexicanas y canadienses. Las instituciones convocantes fueron:

- o Escuela Particular Normal Superior Lic. Benito Juárez
- o Dawson College
- o Instituto Mexicano para el Desarrollo de Ciudades Verdes S.C.
- o Centro de Capacitación para el Desarrollo Sustentable (CECADESU-SEMAR NAT)
- o Earthvalues Institute, A.C.

- o Secretaría de Desarrollo Sustentable del Estado de Morelos
- o Universidad Pedagógica Nacional sede Morelos

El principal aporte financiero para el proyecto proviene de la corporación pública creada por el gobierno de Canadá: International Development Research Centre (IDRC).

Los participantes

La convocatoria al curso-taller se dirigió a integrantes de comunidades educativas (directivos, estudiantes, docentes, administrativos, personal de intendencia, apoyos técnico-pedagógicos) de escuelas para la formación de profesionistas de la educación y a promotores culturales, líderes de la sociedad civil vinculados con el tema de la sustentabilidad. El grupo participante quedó integrado por un total de trece personas: cinco hombres y ocho mujeres, incluyendo estudiantes de varias instituciones y niveles educativos, docentes y miembros de organizaciones civiles.



Calendario:
Del sábado 6 al jueves 18 de julio de 2013.

RESUMEN DE ACTIVIDADES

6 y 7 de julio de 2013

Se dio comienzo al curso-taller "Herramientas y estrategias para construir planteles educativos sustentables" con un retiro en Tashirat, en Santo Domingo, Tepoztlán. Durante el fin de semana los participantes trabajaron el tema del liderazgo y las dinámicas de grupo como el pilar que sostiene el trabajo para la sustentabilidad en una comunidad educativa. El coordinador de estas actividades fue Chris Adams, profesor de Dawson College y representante de Earth Values. Chris destacó que la comunicación y la capacidad de liderazgo son claves para el buen funcionamiento de los grupos y la importancia de mantenerlos para que la productividad se incremente cuando se trabaja en conjunto. Durante el fin de semana Chris compartió con los participantes, herramientas de liderazgo y mantenimiento de buenas dinámicas de grupo.

8 de julio de 2013

En esta sesión trabajamos el panorama global de la crisis ambiental enfocándonos en la globalización, el cambio climático, biodiversidad y energía. Entre los ponentes contamos con Jeffrey Barnes, Chris Adam y Gisela Frias de Dawson College y a Juan Manuel Rivas investigador de la Universidad Autónoma del Estado de Morelos (UAEM). También explo-



ramos qué significa para nosotros el concepto de sustentabilidad y se contó con la participación de Virginia Espino quien nos dio un taller de compostaje.

9 de julio de 2013

Trabajamos mapas conceptuales como una herramienta para organizar nuestras ideas y así exploramos qué es para nosotros un plan educativo sustentable. También tuvimos la oportunidad de aprender más sobre el cambio climático con una charla dinámica de Jeffrey Barnes y jugando **Naranja dulce limón partido, un juego para refrescar el planeta**, de Margarita Hurtado. Se compartieron herramientas para la elaboración de proyectos. Por medio de **El tren de la participación** revisamos las diferentes etapas necesarias para elaborar un proyecto de comienzo a fin.

10 de julio de 2013

Durante esta sesión se compartieron más herramientas que pueden apoyar a una institución en su camino a la sustentabilidad. Aprendimos a hacer un inventario de la basura. Juntando y luego separando toda la basura

3

11 de julio de 2013

Este fue un día para aprender de Ecotecnias. Como parte del curso-taller visitamos **El Fresno. Jardín de Cultura Ambiental**. Fue una rica experiencia para todos. Parte importante de la visita fue el taller impartido por Felipe Tijera sobre Muros o jardines verticales.

4



12 de julio de 2013

Este día seguimos con el tema de la biodiversidad y trabajamos la importancia de la pertenencia cultural en los proyectos de desarrollo sustentable. También aprendimos sobre el uso de indicadores de sustentabilidad y de la importancia de tener claro cuál es el punto de partida para así poder fijar nuestras metas. Tuvimos la visita de una representante del Fideicomiso para el ahorro de Energía Eléctrica (FIDE) quien nos habló sobre estrategias para el ahorro de energía y también nos ayudó a identificar recursos para hacer un inventario de energía y para acceder a créditos para la implementación de

energías alternativas.

15 de julio de 2013

Una de nuestras tareas fue trabajar un proyecto de sustentabilidad. Ese lunes nos dedicamos a planear y a ejecutar nuestro proyecto, a poner en práctica lo aprendido. Como grupo decidimos hacer un muro verde en la sede de la Normal Superior. Para esto contamos con el apoyo de Felipe Tijera.

16 de julio de 2013

Teresita Maldonado de CECADESU-SEMARNAT nos acompañó ese día. Nos dio una charla sobre la importancia de **Ambien-**

talizar el curriculum. Compartió con el grupo las bases de la educación ambiental y de sus principios. Luego nos enriquecimos con una presentación de Gisela Frias sobre Estrategias de organización para planteles educativos sustentables. Aprendimos sobre diferentes formas de organización en una comunidad educativa. Luego Katie Wheatley, estudiante de Dawson College compartió con nosotros su experiencia como miembro del grupo **Planeta Verde**, grupo estudiantil de Dawson College.

17 de julio de 2013

Este día fuimos a visitar la casa de César Añorve quien nos recibió con gran calidez. César compartió con nosotros una perspectiva crítica pero también esperanzadora sobre el uso del agua. Tendrán ustedes mismos que visitar este mágico lugar y ver el baño seco, los sistemas de filtraje de aguas jabonosas, los sistemas de captación de agua de lluvia, los filtros para bebederos públicos y muchas ecotecnias más.

18 de julio de 2013

Fue la clausura del curso-taller. Un día de aprendizaje y de hacer redes para la sustentabilidad en planteles educativos. Contamos con la presencia de Mercedes Pesqueira, Alberto Miranda y el secretario de Desarrollo Sustentable, Topilzin Contreras y de Carlos Gallardo Sánchez, director de la Escuela Normal Superior Lic. Benito Juárez.

Liderazgo
(6 y 7 de julio de 2013)



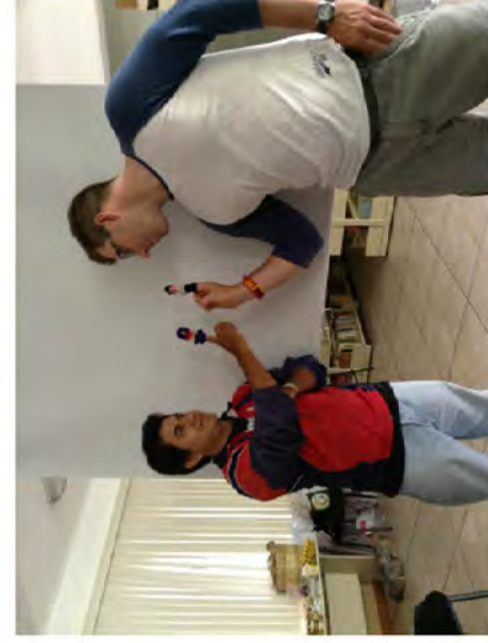
5

Guidados por Chris Adam los participantes se conformaron como grupo para trabajar juntos en transformar sus planteles educativos en instituciones sustentables.

6



Crisis ambiental
(8 de julio de 2013)



Objetivo: Adquirir una visión global de la situación ambiental e identificar sus formas de expresión en un plantel escolar para intervenir a través de proyectos educativos sustentables.

Diagnósticos (9 de julio de 2013)



7

Objetivo: Ampliar nuestro conocimiento sobre el cambio climático y conocer herramientas para medir y mitigar la huella de carbono en cada plantel educativo.

Biodiversidad (10 de julio de 2013)



8

Objetivos: Compartir una visión global sobre la biodiversidad, realizando un ejercicio que permita conocer, valorar, divulgar, conservar y promover la biodiversidad en cada plantel.

Ecotecnias

(11 de julio de 2013)



Conocimos espacios donde se aplican diversas ecotecnias para su aprendizaje y puesta en práctica en planteles educativos. Aprendimos también a construir un jardín vertical.

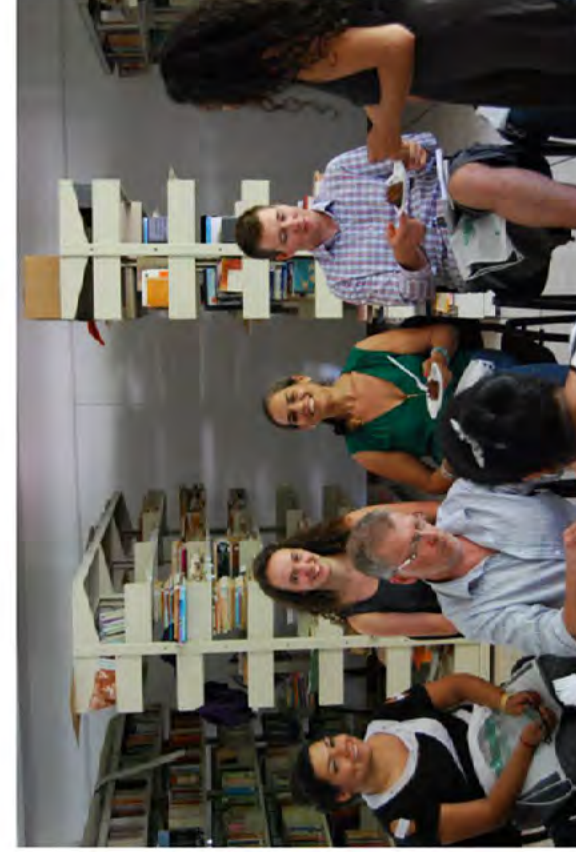


9

10

Energía

(12 de julio de 2013)



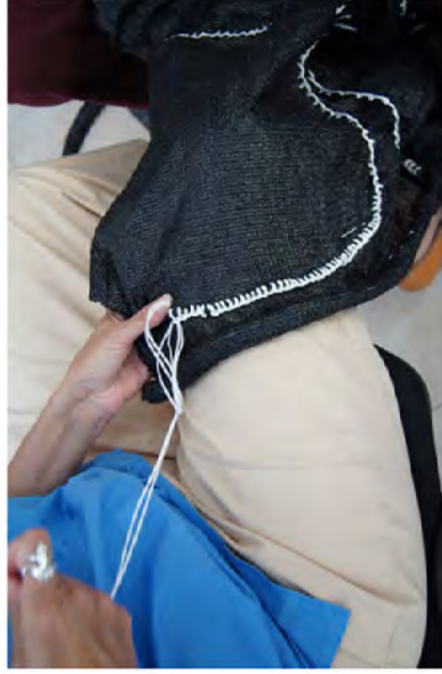
Objetivo: Obtener una visión global de la crisis energética e identificar oportunidades para el manejo sustentable de este recurso en el plantel educativo.

Muros verdes
(15 de julio de 2013)



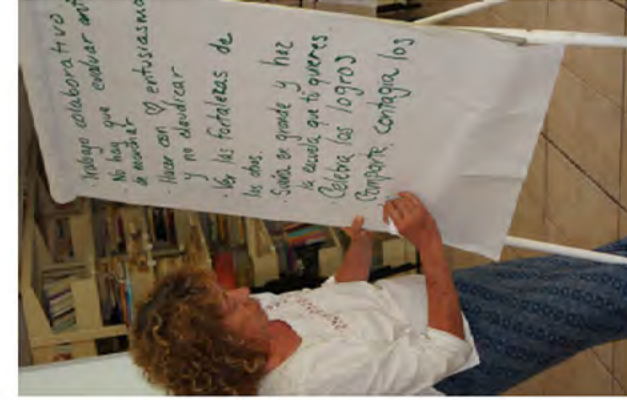
Seguimiento al Jardín por la paz de la Escuela Particular Normal Superior Lic. Benito Juárez

11



12

Currículum
(16 de julio de 2013)



Objetivo:
Dar herramientas para el análisis del contenido curricular para avanzar hacia un currículo que apoye el conocimiento y práctica de la sustentabilidad, "ambientalizar" el currículo.

Agua
(17 de julio de 2013)



Objetivos:
Conocer técnicas y prácticas para el manejo sustentable del agua dentro de un plantel educativo.



13



Clausura del curso-taller
(18 de julio de 2013)



14



Annex VII

Sustainability @ DAWSON

Sustainable News for the Dawson College Community

September 2012

In this issue:

Dawson is Rooftop Gardening

Upcoming Monarch Butterfly Tagging Program

Attracting Mason Bees to the Garden

Pilot Project on Phragmite Stems as Mulch

Peace Garden: native planting this summer

Medicinal Garden for Nursing Program

Documenting Biodiversity of the Garden

Events/Announcements

Carbon Neutral Dawson
Yoga for Peace / Teacher's Forum
Sustainability Short Video Contest

Dawson is Rooftop Gardening

Sustainable Dawson and a class from the Environmental Studies profile started a partnership with Alternatives - "The Rooftop Garden Project" in April. Alternatives is a non-governmental organization involved with urban agriculture. The Alternative Eco Leaders Cathorino and Anne-Claude, under the direction of Gaëlle Janvier, have taught our team a comprehensive program in rooftop gardening. We have benefited from workshops on creating self-watering containers, maintaining a rooftop garden and all aspects of vegetable gardening. Currently, we have 35 self-watering containers on the 4H rooftop patio as well as the Conrads rooftop garden on the 2F corridor. Tomatoes, eggplant, zucchini, cucumbers, strawberries, raspberries, peppers and herbs are just some of the vegetables planted. We plan to continue this pilot project and share our knowledge with the Dawson Community in the coming years. Next spring; look for a workshop on creating your own self-watering containers. For more information on rooftop gardening, and a resource booklet on how to make your own container, you can access the link to the Alternatives website at: <http://rooftopgardens.ca/?q=en/resources> And the Facebook page at: <https://www.facebook.com/DawsonCollegeRooftopGardensProject>

" A Better Planet Begins With Each One of Us "

page 1

Monarchs are Coming to Dawson College

A 'Monarch Butterfly Tagging Program' will be implemented in September with Sustainable Dawson and an Environmental Studies course led by Jeffrey Barnes. Over 50 milkweed plants, the only plant that the monarch will lay eggs on, are growing in the garden. The garden is the perfect feeding/resting place for them as they make their way on their long migration to Mexico.

Award of Excellence

Attracting Mason Bees to the Peace Garden

You may notice small holes drilled in some of the logs in the EcoZone Garden loop. These are to attract a solitary mason bee that is an excellent pollinator. With the continuing decline of the honeybee population in Canada, (Hum, 2012) it is essential that we attract the solitary mason bee, which do not sting unless injured (females can sting- very mild, male cannot). If you would like more information, please read the article written last year for a gardening publication on the Sustainable Dawson website (Mason Bee Info). We held a number of workshops on how to attract mason bees to an area and plan to offer workshops next year as well.

We are proud to announce that Dawson achieved the Award of Excellence for the third consecutive year at the Awards ceremony of *Environnement Jeunesse*, on June 15th, 2012. Dawson's Ecological Peace Garden was also honoured with *special mention* for sustainable landscaping.

Chris Adam & Cindy Dale Elliott represent Dawson College at the annual awards ceremony of *Environnement Jeunesse*.

Amanda De Cicco also known as the mason bee project intern, is posing next to the drilled holes she and some volunteers made during her presentations.

Sustainability Short Video Contest

For the third year, we plan to promote a video contest for students. The videos have to address a sustainability issue.

Photographers!!!

If you would like to showcase your photos during Sustainability Week in April of 2013, we will reserve a display panel for your best shots. The photos can include individual flowers, insects, birds and community activities that will further enable us to share with others what happens in the garden. Please register by sending an email to cdelliott@dawsoncollege.qc.ca and we will send you the display criteria when we are ready.

page 2

Pilot Project of Phragmite Stems as Mulch

Phragmite stems come from an invasive plant in Quebec that is taking over our ditches and wild areas throughout the province. These tall (2-2.5 m) fluffy grasses, commonly known as reed grass, are seen virtually everywhere. We are collaborating with Francols Hsenga, an engineer, who is researching possible uses of this plant. Last year, two small garden areas were covered with reed grass mulch and we found it to be very efficient in retaining moisture and discouraging weed growth. This year we have used the shredded stems as mulch on the entire perimeter of the garden.

Peace Garden - Planting Native Species This Summer

The gardening team planted over 1,000 native plants in the "Chief's Garden" loop and the EcoZone loop. Our goal is to attract native wildlife to the garden and present waves of colour throughout. Visit the garden and have a look.



Medicinal Garden for Nursing Program



We have reserved a small section of Conrods rooftop garden to cultivate medicinal plants. These include calendula, chamomile, lavender, mint and mullain, to name a few. We will let you know about the progress of this project in upcoming newsletters.

Documenting Biodiversity of the Garden

We are documenting different species of insects, mammals and birds that visit the garden this summer. We have already seen woodpeckers, sparrows, chick-a-dees, a groundhog, as well as numerous insects, including a praying mantis, hummingbird moths and monarch butterflies.

Concordia University Intern

Peter Kajaks completed a 120-hour intern placement with Sustainable Dawson. He has started a wonderful blog at this address: <http://dawsongardens.tumblr.com>

page 3

Events/Announcements

Carbon Neutral Dawson

Breaking News!!!! We are undergoing a 3rd party audit of Dawson's CO2(e) emissions. Our goal is to attempt to become a carbon neutral college. We will let you know how you can help soon.

Friday, September 21st - International Day of Peace

• U.N. Peace Bus

Ten Dawson students will represent Canada as youth delegates at the student observance at the U.N. in New York. They will also be flag bearers at the ceremony in the rose garden of the United Nations. One lucky student will proudly hold the Canadian flag.

• Peace Event at Montreal City Hall

CRLT students will be involved in planning an event at Montreal City Hall, with Mayor Tremblay in which a "minute of silence, moment of peace" observance will be shared with mayors from across the world. There is a live-feed organized by *Cerise de Paix* to enable mayors from other countries to join us.

Yoga For Peace

We will hold the 2nd annual Yoga for Peace event at the Dawson Peace Garden on **Sunday, September 23rd**. Check out 'Yoga for Peace' on Facebook for more information.

Teachers' Forum

The Faculty Sustainability Forum is for teachers across the disciplines who want to collaborate on the development of curricular materials and approaches that address sustainability-related issues and themes.

This is an opportunity to share best practices and brainstorm ideas of integrating the topic of sustainability in your course content. Please join us for informal get-togethers in 3E2 as follows:

Dates:

- Thursday, October 4th, 4pm - 5pm - Topic - Using the Peace Garden as a Pedagogical Tool.
- Thursday, November 1st, 4pm - 5pm - Carbon Neutral Project - How Can You Help?
- Thursday, December 6th, 4pm - 5pm - Sustainability Short Video Contest - Getting Students Involved Next Semester

Fall Garden Event

Tuesday, October 16th, we will hold our annual fall outdoor garden event. We plan to plant tulip bulbs, collect seeds, sell a variety of bulbs and phragmite mulch, and implement a picnic table painting event for students. Please check the Sustainable Dawson Facebook page for updates.

Our Gardening Team:

Gabrielle Caron, Team Leader,

Samantha Manty, Co-Team Leader,

Amanda De Cicco, gardener and mason

bay project intern

Kendall Birker, gardener and transplant-er extraordinaire

Peter Kajaks, Concordia Intern

Vincent Giampalma, regular volunteer

Evan Smirnow, regular volunteer

Mitchell Warjeik, regular volunteer

...and many others of the Dawson Community.

What do volunteers do in the garden?

Please see the Sustainable Dawson website (Volunteer Info pdf) for more information.

Events/Announcements (continued)

Class visits to the Peace Garden

We request that teachers let us know of classes and events held in the Peace Garden in order that we can record the use of this outdoor classroom space. Please send a quick email to cdelliott@dawsoncollege.qc.ca with your name, class, program and number of students. Thank you for your help.

Composting

We have recently installed a rooftop composter in Conrods, thanks to a generous donation from Jora Kompost. Watch for more composting news to come.

Veterans Affairs Canada Event - November 6th, 2012

A commemorative event will be held from 10am - 11am on Nov. 6th in the Peace Garden. There will be approximately 50 veterans participating in the event. If your class or individuals would like to participate, please let us know via email, cdelliott@dawsoncollege.qc.ca

Want to get involved within your community?

Contact:

Coordinator Sustainable Dawson:

Cindy Dale Elliott, Ex. 5096

E-mail: sustainability@dawsoncollege.qc.ca



Follow us on Facebook: <https://www.facebook.com/pages/Sustainable-Dawson/121479001240144>

Sustainable Dawson website:

<http://www.dawsoncollege.qc.ca/our-communities/sustainable-dawson>

page 4 Sustainability @ Dawson September 2012 Newsletter editor: Cindy D. Elliott / Layout design: Marissa O'Neil

Sustainability @ DAWSON

Sustainable News for the Dawson College Community



SUSTAINABLE
DAWSON

April 2013

In this issue:

Dawson Goes Carbon Neutral

Earth Week:

Mexico Delegation Visit
Peace Garden Clean-Up
Green Earth Display
Photo Documentary
Environmental Studies Seminar
Teachers Workshop
Self-Watering Container Workshop for students only, registration for rest of Dawson Community in May, 2013.

Cin/Comm

Mexico News

Monarchs Without Borders

Earth Week 2013



Celebrating
EARTH WEEK

April 22-26

Plans are underway for Earth Week, April 22 - 26th, 2013. Our Mexico sustainability partners are visiting; workshops and seminars will be presented to students and faculty. A photo documentary of sustainability at Dawson will be showcased as well as displays from GreenEarth and others. Please contact us ASAP if you would like to have panels or a table to showcase projects, displays and information concerning sustainability within our community. The carbon neutral celebration will take place on the Thursday of Earth Week. We plan a workshop on the construction of self-watering containers for students and registration for further workshops in May to the rest of the Dawson Community. Watch for notices and posters throughout the college for more information, including the 'Sustainable Dawson' Facebook page & the back page of this newsletter!

Annual Report

You can find the Sustainable Dawson annual report and indicators on the website at this link:
<http://www.dawsoncollege.qc.ca/our-communities/sustainable-dawson>

page 1

Newsletter editor: Cindy D. Elliott / Layout design: Rosalia Cerro



Carbon Neutral Project

Sustainable Dawson completed an audit of the amount of greenhouse gases our College released into the atmosphere through energy use, non-commuting transportation and waste production last year. This benchmark of 915 mt of CO2(e) was calculated after substantial greenhouse gas reduction measures. We will continue to put initiatives in place to further reduce our CO2(e) footprint and to purchase carbon credits to offset our emissions. Our goal is to become carbon neutral for the last fiscal year!

GreenEarth Environmental Club



The GreenEarth Club held an awareness campaign on the impact of disposable plastic water bottle use. The event began on Monday, March 18 and ended on Friday 22 (World Water Day). The GreenEarth club members want to avoid the purchase of bottled water and organized a petition for the community. The Dawson community can ask for a free reusable water bottle from the DSU office in room (2F.2) and use water fountains or the water bottle refill stations located around the college.

Cin/Comm



Phil Vitone's Cinema Communications class have once again created a beautiful "EcoJournal" website on sustainability. To view the website, click on this link:
<http://2012.ejreview.net/> it's fabulous!
In December they held the "Trashing for Fashion" event, a sustainable fashion show to raise awareness of reusing, recycling and reducing through fashion. This year's theme, in line with the fashion show, is the DIY way to reuse. To see photos of this event please go to this link:
<http://dawsonfashionshow2012.tumblr.com>

Photo Documentary

Would you like to participate in showcasing your photos? We know many of the community have taken photos of the Peace Garden, (flowers, insects, etc.), and sustainable events, campaigns or projects. We offer anyone interested a panel to display their photos and the opportunity for Dawson people to 'see' how we live as a sustainable community. Please contact Cindy Elliott (cdelliott@dawsoncollege.qc.ca) to reserve display panels.



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Sustainability @ DAWSON Apr 2013

Mexico News

Dawson Geography teacher, Gisela Frias, in collaboration with Sustainable Dawson, spearheaded a grant proposal for a participatory action research project, which was accepted by the International Development Research Centre (IDRC). The project, "Sustainable Campuses: Sharing Our Knowledge for Social and Environmental Sustainability", establishes a partnership between Dawson College and two universities with four campuses in Mexico. With the participation of a Mexican environmental non-profit organization, we are implementing numerous projects at all campuses. Last November, Gisela Frias, Chris Adam and Cindy Elliott travelled to the four campuses to share our experience and initiate many new projects. We met with Federal and State ministry officials, whom support this project. Our trip was jam-packed with media interviews, student presentations, professional development training and tours. You can follow us through the Facebook project page "Planteles Educativos Sustentables UPN-Normal Superior-Dawson". Together in March, we created a peace garden at Normal Superior, in the Mexican state of Morelos. In addition, Dawson CRLT student, Gabrielle Caron, spent the past month at the UPN Ayala campus. From the Facebook page, you are able to access Gabrielle's blog of her month spent with other students in Mexico on sustainability projects. Mexico has heart!!! What follows is a brief description of current projects at each campus.

Normal Superior

The Normal Superior's Academic Dean, Leon Felipe, has embraced sustainability in the curriculum and involved the university community in a presentation by Margarita Hurtado Badiola and Cindy Elliott to faculty and staff along with the Director, Carlos Gallardo.

The students have also held radio shows that inform the university community of new initiatives to move towards sustainable campus, as well as a beautiful film depicting Mexico culture and environment through sustainable initiatives with the project.

Working with five classes of students, we started the creation of the newly formed Peace Garden with medicinal plants from the Cuernavaca Ethnobotanical gardens. The second half of the Peace Garden will showcase native cacti. Normal Superior students have held two conferences on the importance that Mexico plays in the conservation of cacti species and their cultural relevance.



Front row: Jorge Dominguez (UPN Cuernavaca), Margarita Hurtado Badiola (Coordinator of the project in Mexico), Luiza Montes (Sustainability Coordinator Normal Superior). Back row: Cindy Elliott (Dawson Sustainability Coordinator), Jorge Hernandez (Faculty Normal Superior) and Leon Felipe (Academic Dean Normal Superior).



Universidad Pedagogica Nacional: Ayala Campus



At the Ayala campus students and teachers are actively promoting sustainability. Some of their activities included an on-campus reforestation campaign; Noni and Neem native trees were planted throughout the campus; an ecological farm fieldtrip to learn about sustainable alternatives, as well as a mural, painted by the students, of different ecosystems to exhibit at the school. Popular educator Margarita Hurtado designed the game: "Sweet oranges and lemons to refresh the planet". She held a workshop to engage participants in discussions of climate change.

This semester, Dawson Alumni Kendall Birker also spent a month at the Ayala campus with Gabrielle. They completed a compost area, made self-watering containers, established a medicinal garden, rejuvenated existing gardens and helped create a Peace mural with the school community. They also introduced students to ball hockey, organizing an inter-campus game that brought our many spectators.

Universidad Pedagogica Nacional: Cuernavaca Campus



The Cuernavaca campus has been busy organizing its student body. In November 2012 students organized a workshop and invited Margarita Hurtado to facilitate and play the game "Sweet oranges and lemons to refresh the planet". The entire campus got together in a cleanup of their green areas. We had a tour of their beautiful grounds and the university.

Universidad Pedagogica Nacional: Galeana Campus



This campus has also carried out several activities to motivate students and teachers to organize themselves and work towards making their campus sustainable. In October, students held a workshop and invited environmental educators, Margarita Hurtado and Rocio Arcanda to facilitate and play the game "Sweet oranges and lemons to refresh the planet". They have planted numerous medicinal Noni and Neem trees around their campus.

Monarchs Without Borders



After a successful monarch tagging pilot project in the fall of 2012, Sustainable Dawson will be expanding this program. If your program or department is interested in acquiring a monarch kit, please contact us (cdelliott@dawsoncollege.qc.ca) ASAP as there are a limited number of kits. This is on a first come, first serve basis. Delivery of the kits is early September 2013.

Want to get involved within your community?



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Contact:

Coordinator Sustainable Dawson:

Cindy Dale Elliott, Ex. 5096

E-mail: sustainability@dawsoncollege.qc.ca

Follow us on Facebook:

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Sustainable Dawson website:

<http://www.dawsoncollege.qc.ca/our-communities/sustainable-dawson>

" A Better Planet Begins With Each One of Us "

Celebrating EARTH WEEK
April 22-26

- Peace Garden Spring Clean Up**
April 22 - 25 : 10 am - 2 pm
in the Dawson Ecological Peace Garden
- Self-Watering Containers Workshop**
April 23 : 12 pm - 1 pm
in the Conrods, upper Atrium
FOR STUDENTS ONLY
Registration for rest of the Dawson Community in May, 2013.
- Sustainability @ Dawson Photo Documentary**
April 22 - 26 : 10 am - 2 pm
in the Conrods, upper Atrium
- Mexico Sustainability Partners Workshops & Seminars**
TO BE ANNOUNCED
- Sustainable Booths & Displays**
GreenEarth & EcoQuarter

Sustainability @ DAWSON

Sustainable News for the Dawson College Community



SUSTAINABLE DAWSON

October 2013





Ecological Peace Garden

In this issue:

- Mexico Report**
Sharing our Knowledge for Social and Environmental Sustainability
- Monarchs without Borders**
- Trip to Waskaganish**

UPCOMING EVENT:
Veterans event:
November 6th,
in the
Peace Garden



The Ecological Peace Garden continues to attract the surrounding community. This summer we saw the Westmount Science Camp visit the garden for learning activities on a weekly basis. We were visited by the Wildside Day Camp and Centre Green day camp. The Redpath Museum arranged a tour in the peace garden and the American Women's Club of Montreal donated a beautiful wooden bench with the unveiling in September. Yoga for Peace was held on the weekend of International Day of Peace and an anti-human trafficking rally was organized by Freedom Relay Canada. The Peace Garden continues to grow and becomes more abundant every year. We plan to hold a horticultural sale next spring, so stay tuned for the sale of new varieties of plants for your own gardens.

page 1
Newsletter editors: Cindy D. Elliott & Dr. Frank Runcie / Layout design Rosalia Cerro

Monarchs

The Monarch without Borders project has been hugely successful. This project has shared 15 kits throughout the Dawson community. Students, teachers, support staff, Dawson daycare children and administrators have all felt the sense of wonder in raising a monarch butterfly, then tagging and releasing it in the peace garden. From Dawson's Peace Garden they will journey 4,000 km to mountaintops in Mexico. Sustainable Dawson plans to expand this project in 2014. The Dawson community will be notified to order kits to raise monarchs next year. Stay tuned for an update in March 2014.



Photo credit: Anita Linecker

Awards & Accomplishments:



Dawson Industrial Design student Nicholas Desjardins won 1st prize in Sustainability for his design of a refugee tent that can be connected to others forming family units. The roof has a carbon cloth filter to catch and clean water that then drips into a barrel inside the tent.



The Community Recreation Leadership Training program received an award from Claude Poudrier, Director of **Le programme en éducation à l'environnement et à la citoyenneté (PEEC)** in recognition of implementing 5 years of action research projects that benefited the environment and the community.



Interior Design had two winners who shared the 1st prize of the Haworth Sustainable Design \$500.00 scholarship. Congratulations to Stephanie Rossignol and CamilleDundas-Dion.

The evaluation committee of the CEGEP Vert network reviewed Dawson's sustainability report and again awarded the college with the "Level of Excellence" for the 5th consecutive year.

page 2
Sustainability @ DAWSON Oct 2013

Trip to Waskaganish... By Jeffrey Barnes



The Waskaganish trip was an outstanding success for the seven Dawson students and three teachers who participated. At the end of the winter semester, we spent 9 days in Northern Quebec; mainly in the welcoming community of Waskaganish. The main objectives of the project were to foster knowledge, experience, and understanding among Dawson environmental profile and photography students with respect to Cree and northern Quebec culture. The trip was designed to investigate the impacts of Hydro-Quebec's James Bay Project and the subsequent diversion of the Rupert River. In particular we were interested in learning how these developments have impacted socially, culturally, economically and environmentally the communities of Waskaganish and Hemaska. The group was composed of three teachers - Jeffrey Barnes, Cory Legassic and Gisela Frias - and seven students from Environmental Studies, North South Studies, Environmental Science and Professional Photography. Prior to the trip we had several meetings to familiarize ourselves with one another, and to learn as much as possible about the Cree people and communities. Each person in the group contributed to an unforgettable travel and learning experience.

Living Classroom – Ecological Peace Garden

At least 35 classes have used the Peace Garden, that we know of, as a living classroom since the start of classes in August. Programs and profiles such as physical education, religious studies, environmental science, environmental studies, humanities, professional photography, fine arts and others have all participated in the living classroom.

Anthony Berkens' Physical Education
and Johanne Rabbit's Religious Studies
Photography credit to Claudio Calligaris



page 3

Dawson's Rooftop Gardens Project by Anna-Liisa Aunio

Thanks in part to generous funding from L' AQPERE (*L'Association québécoise pour la promotion de l'éducation relative à l'environnement*), students at Dawson College have had the opportunity to volunteer, work, and benefit from the lessons of the rooftop gardens regardless of their program affiliation this past year.

In the winter semester 2013, students from the Environmental Studies Profile participated in a variety of activities that benefitted the garden as well as their learning. For example, students in Jeff Barnes' Introduction to the Environment class learned how to make self-watering containers that were used in the garden in class. Students in Anna-Liisa Aunio's classes in sociology were involved in preparing the garden for planting as well as learning about the significance of urban agriculture as it relates to Montreal.

The rooftop gardens were planted by a diverse team; including Sustainable Dawson's student gardening team, volunteers, and interns from spring to fall. In particular, Urban Agriculture Intern Roxanne Bennett prepared materials evaluating the biodiversity of the gardens as well as the relative merits of a variety of different planting methods used on three sites across Dawson. This will build the institutional knowledge of the college and help us determine what we should plant and how we should plant in 2014. Finally, several interns went to Mexico to exchange knowledge about sustainability (including urban agriculture) during the semester and over the summer under the guidance of Gisela Frias. The students in Mexico learned how to make self-watering containers and manage gardens, which they had learned from Dawson students. They even made an instructional video on building self-watering containers in Spanish!

Finally, in the fall semester 2013, several classes within the Environmental Studies profile as well as in general social sciences used the gardens for teaching their classes. The most creative was a Research Methods class taught by Jennifer Smith, facilitated by Cindy Elliott of Sustainable Dawson, who engaged students in a participant observation exercise as they harvested the gardens. Finally, students in the Sociology of Food and the Environment class taught by Anna-Liisa Aunio cooked a meal with the harvest from the gardens and had dinner with Sustainable Dawson, teachers, and two representatives from l'AQPERE.

The garden closing and a final rooftop garden event were held October 3rd, 2013. Thanks to all teachers, students, and volunteers for all the hard work you have put in to make this project successful. We look forward to growing in 2014!



page 4 Sustainability @ DAWSON Oct 2013

Bees

Feasibility studies are almost complete and we hope to introduce honey bees to the Dawson rooftop gardens next Spring. Peace Garden honey to be available soon!

Projects in Africa

Sustainable Dawson was represented at the World Environmental Education Conference in Marrakesh, Morocco and was involved in developing plans for a "teaching peace garden" in Rabat. Plans are underway for a student project between a rural and urban school.

DAWSON -
proud to be
designated
Level of Excellence
for five
consecutive years
by CEGEP Vert.



"A Better Planet Begins
With Each One of Us"

Mexico
by Gisela Frias, Jeffrey Barnes and Katie Wheatley



By Gisela Frias

It has been nine months since the "Sustainable Campuses: Sharing our Knowledge for Social and Environmental Sustainability" project began. An exchange of knowledge and experience on issues of campus sustainability has brought students, teachers and staff from Dawson College and two Mexican Universities, the Normal Superior Benito Juarez and the Universidad Pedagógica Nacional closer together. Five Dawson students became sustainability ambassadors as they carried out internships in Mexico, to share their experience in environmental action and support student-driven sustainability projects in Mexico. Sustainable Dawson Coordinator travelled to Mexico to assist the Normal Superior in their efforts to start their own Peace Garden. Also, several Dawson students have created audio-visual materials to share with our partners about Sustainable Dawson. In return, our Mexican partners have been sharing with us their own challenges and initiatives as they embark on a journey towards sustainability. We had the privilege of hosting three Mexican representatives in our institution. They visited our campus and celebrated with us our shared accomplishments. Our latest initiative involved the co-design and implementation of a Campus Sustainability Course in Mexico. This summer three Dawson teachers and one student participated in a two-week course aimed at sharing strategies and tools for campus sustainability.

What have we learned from this participatory-action research project so far? Sustainability is so much more than becoming green. It is about collectively finding new and sometimes going back to traditional ways of living. We have also learned that we cannot act out of fear in order to create a new future for ourselves. Instead, we must ground our actions in the enthusiasm, creativity, ingenuity, knowledge, skills, competencies and experience held by our collectivity, our educational community of students, teachers and staff.

By Jeffrey Barnes



I spent nine days in Mexico, teaching, and participating in workshops at National Pedagogical University in Cuernavaca. This was an inspiring experience that united members of the university campus, teachers, and key members of Mexican civil society under the umbrella of sustainability. We engaged in a process of knowledge sharing and group building that brought participants closer together in a common struggle towards sustainable development. Teachers and facilitators used a holistic approach to sustainability by uniting practical and theoretical tools within a participatory learning environment. Activities such as garbage audits, leadership training and green wall construction delivered practical tools within a nearly contagious context of cooperation.



A Student's Perspective ...
By Katie Wheatley

As an engaged student and a graduate of Dawson's Environmental Studies profile last spring, I was chosen for an internship in Mexico last July. For three weeks, I stayed in Morelos state, to participate and offer support in a course of "Campus Sustainability" held at the Escuela Particular Normal Superior Lic. Benito Juarez university.

I offered my perspective on the challenges and possibilities of school greening initiatives, presenting my experience within Dawson's Green Earth Club. The participatory course engaged students, administrators, teachers and community members in examining environmental issues and sustainable practices.

Once the course wrapped up, I also assisted in supporting several projects at the Escuela Normal Superior. Working closely with Luisa Montes, the school's Sustainability Coordinator, I helped maintain their Peace Garden, created in March, followed up on several initiatives begun during the course, and examined the feasibility of integrating sustainability material into the university's curriculum.

As one of several representatives from Dawson College, my time in Mexico allowed me to participate in a unique international dialogue between allies in action. The experience united an exceptional group of passionate individuals, who hope to make our world a better place by integrating sustainability initiatives into our educational campuses.

Want to get involved within your community?



Contact:
Coordinator Sustainable Dawson:
Cindy Dale Elliott, Ex. 5096
E-mail: sustainability@dawsoncollege.qc.ca

Follow us on Facebook:
<https://www.facebook.com/pages/Sustainable-Dawson/121479001240144>
Sustainable Dawson website:
<http://www.dawsoncollege.qc.ca/our-communities/sustainable-dawson>

Proyecto: Planteles educativos sustentables. Compartiendo saberes

Actividad: Tour Cinema Planeta

Se llevó a cabo un ciclo de cine del 19 de septiembre al 7 de noviembre en el auditorio de la Normal Superior, en el que se proyectaron 8 filmes de actualidad abordando desde diversas ópticas y desde distintas partes del mundo, temas acordes a la difusión de una cultura de cuidado y protección del medio ambiente.

Lo anterior se realizó en coordinación con el Biólogo Rubén Brito, de Educación Ambiental de la Secretaría del Medio Ambiente y Recursos Naturales (SEMARNAT), delegación Morelos.

Actividad: Conferencias sobre cactáceas

Se llevaron a cabo dos conferencias sobre cactáceas en la Normal. La primera, a cargo de la Maestra en Ciencias, Domitila Martínez, investigadora de la UAEM, invitada por el biólogo Miguel Bastida, director de Biodiversidad y la segunda, el 6 de noviembre del 2012, presentada por el biólogo José Luis Calderón, premio al maestro ambientalista 2012 que tiene una colección abierta al público de 600 especies.

En ambas conferencias estuvieron presentes estudiantes de la carrera de Biología, en quienes se vio el potencial para conformar el grupo de líderes de la biodiversidad del proyecto Planteles educativos sustentables.

Las presentaciones resaltaron la importancia de las cactáceas al ser nuestro país el que tiene el primer lugar mundial por su riqueza en este campo. Uno de los grandes valores de los jardines xerófitos estriba en su capacidad de mantenerse con mínimas cantidades de agua y en su resistencia a los cambios climáticos. Estas características los hacen relevantes como estrategia de adaptación al cambio climático por lo que existen ya programas de estímulos fiscales para quienes cultiven estas especies en lugar de pastos.

Una virtud más de las cactáceas es su longevidad y la diversidad de beneficios que nos dan, entre los que resaltan sus usos comestibles, medicinales, como material de construcción muy resistente y como objetos de ornato por su exótica belleza.

Los cactus, son también un elemento que nos da identidad cultural, ocupando un lugar especial el nopal como elemento presente en la bandera nacional y como base para la preparación de una gran variedad de platillos y dulces típicos.

Por lo anterior, se explora la necesidad de conocer, valorar, propagar y poner atención especial en su conservación ya que algunas de estas especies se encuentran en peligro de extinción.

Tour Cinema Planeta

"La era de la estupidez" / Fanny Armstrong (Reino Unido 2006)

"Efecto Recidaje" / Ben Walsh (Brasil 2010)

"Naica, la cueva de los cristales" / Gonzalo Infante (México 2010)

"Green" / Patrick Rouxel (Francia)

"La medida del hombre" / Marianne Körver (Estonia 2009)

"Flores en el desierto" / José Álvarez (México 2009)

"El hombre de las serpientes" / Eric Fiandin (Francia 2009)

"Sammy y el pasaje secreto" / Bélgica 2010

La información presentada por José Luis Calderón, sirvió como sustento para trabajar en el diseño de un espacio para el cultivo de cactáceas en el plantel, a fin de poner en práctica acciones sustentables en favor del ambiente empezando en casa para propagarlas posteriormente como profesores de secundaria.

Actividad: Presentación del proyecto y conformación de equipos

El día 7 de noviembre de 2012 se llevó a cabo una reunión con el fin de conformar equipos de trabajo la cual estuvo coordinada por Margarita Hurtado Badola como coordinadora general del proyecto y Alberto Miranda Manzanilla como responsable en el citado plantel. Ellos realizaron una presentación del proyecto ante un grupo de 156 integrantes de la comunidad escolar. La perspectiva de asistencia era de 25 personas y la convocatoria rebasó con mucho lo esperado.

Al finalizar la presentación del proyecto algunos estudiantes mostraron su interés por participar y se anotaron en diferentes grupos de trabajo; acordando reunirse en fecha posterior con el maestro coordinador.

Actividad: Visita de representantes de Dawson College

En noviembre, recibimos en la Normal la grata visita de Cindy Elliott, Chris Adams, Gisela Frías, Margarita Hurtado y Rocío Aranda.

Durante la visita compartimos un desayuno de bienvenida, los micrófonos en el programa de radio por internet y una sesión de trabajo con los alumnos y alumnas interesados en sumarse al proyecto.

El día 21 de noviembre de 2012 se realizó una jornada de trabajo con representantes del proyecto Planteles Educativos Sustentables de México y Canadá, que incluyó un desayuno de bienvenida con el Director General y otras autoridades, su participación en el programa de radio de la Normal "Cosas de Profes", y una visita al plantel; durante su estancia en esta casa de estudios, los visitantes Gisela Frías, coordinadora del proyecto Planteles educativos Sustentables en Canadá y Cindy Elliott y Chris Adams, responsables del proyecto Dawson Sustentable participaron de la Ceremonia Cívica durante la cual hicieron entrega de un cactus como símbolo del inicio de la construcción de un jardín por la paz y como muestra de mutua colaboración.

Posteriormente se reunieron con representantes alumnos y docentes de la comunidad normalista. En esta última reunión, se hizo una presentación del proyecto Dawson Sustentable y se motivó a los asistentes a sumarse al grupo de líderes ambientales.

De esta visita se informó a la prensa y como resultado se publicaron notas alusivas en los principales diarios del Estado de Morelos.

Los cactus, son un elemento que nos da identidad cultural, ocupando un lugar especial el nopal como elemento presente en la bandera nacional y como base para la preparación de una gran variedad de platillos y dulces típicos.

Actividad: Reunión de trabajo

El 13 de diciembre de 2012, en casa de Margarita, (Ailes 272#2), Participaron en una reunión, Carlos Gallardo Sánchez, director de la Escuela Particular Normal Superior "Lic. Benito Juárez", María Luisa Montes Mendoza, docente de la citada institución, Margarita Hurtado Badiola, coordinadora del proyecto en México, Isaura Paola del Castillo Haddad, apoyo logístico.

Esta reunión tuvo como objetivo comentar la situación de la Normal en relación con el proyecto y definir estrategias que permitan avanzar con mayor precisión.

Tras la citada reunión se llegó a los siguientes puntos y acuerdos:

- Asignación de comisión de Luisa Montes como coordinadora del proyecto en la Normal y dos docentes más que apoyarán su trabajo.
- Revisión del estado actual de la Normal en relación con el proyecto: no cuentan con la información acerca de las personas que se anotaron en los grupos de líderes, sólo los nombres de las chicas que quedaron como apoyo en la coordinación general y que asistieron al taller. Van a retomar todo, la manera de hacerlo será visitando grupo por grupo para hablarles del proyecto e invitarlos a participar. También se retomará el contacto con los estudiantes y la profesora Esperanza Corona, quien fungió como intérprete durante la visita de los profesores canadienses y algunos estudiantes de la especialidad en la enseñanza del inglés quienes desean un mayor involucramiento.
- Se acordó que en el programa de radio de la Normal se dedicará un espacio para hablar de sustentabilidad, empezar por una "cápsula verde" o "capsus" (cápsula sustentable) para lo cual Luisa pide apoyo en los contenidos. Se comentó del potencial que hay en cuanto al espacio radiofónico como un medio para comunicar acerca del proyecto, no sólo del acontecer de la Normal, sino de todos los planteles participantes. Se mantiene la idea de establecer la estación en la Normal para tener mayor tiempo de transmisión y dedicarlo más al tema de sustentabilidad.
- Otro acuerdo es involucrar más al director académico de la escuela en el proyecto, señalando que su potencial como vocero a través de eventos puede ser orientado hacia el fortalecimiento y difusión del proyecto.
- En relación con la cultura y educación se ve la posibilidad de diseñar y promover algún diplomado relacionado con sustentabilidad y ligado a temas como paz, salud y nutrición, de los cuales ya existen precedentes en la Normal. Se destaca que este último *Diplomado en Nutrición humana y su aplicación en ámbitos escolares*, tuvo mucha aceptación por parte de la comunidad estudiantil y se propone trabajarlo nuevamente, enfatizando en la sustentabilidad. El profesor Carlos Gallardo sugiere pensar en un nombre atractivo para el curso. (Come sabroso, saludable y sustentable, Prácticas sustentables para el buen comer, etc).

Sustencápsula

El programa de radio por internet "Cosas de Profes" que se transmite en vivo todos los martes a las 10:30 horas en www.elregional.com.mx/online asignará una cápsula informativa para difundir las actividades realizadas y proyectadas.

Esta *sustencápsula* informativa también estará presente en la ceremonia semanal de honores a la bandera y en la publicación digital "Normalario" que es compartida con los docentes en servicio del Estado de Morelos vía correo electrónico

- Se acordó enviar a Luisa el proyecto completo, una versión sintética e información sobre FIDE para empezar a ver la posibilidad de instalar celdas fotovoltaicas en el plantel y de recibir asesoría y capacitación en relación con el tema de la energía.
- Carlos expresó su interés y disposición para emprender ya alguna acción que motive a la comunidad escolar a impulsar el proyecto de sustentabilidad. El Jardín por la paz podría iniciarse desde enero con recursos de la Normal y con orientación de Dawson por la profesora Cindy Elliott; propone sea de cactáceas, y procurar la participación del biólogo José Luis Calderón en el diseño y como proveedor de plantas e involucrando a la comunidad escolar pues hay estudiantes que saben de jardinería o que estudian biología. Otra acción concreta podría ser la instalación de mingitorios secos.
- Se acordó realizar otras reuniones para seguir avanzando e invitar a las estudiantes que forman parte de la coordinación general.
- Aunque en este momento de arranque del proyecto pareciera complicado, se van a buscar formas en las que la participación de estudiantes en el proyecto no sea una carga extra-clase sino que se le dé reconocimiento académico, podría hacerse como prácticas profesionales o en el caso de Inglés, como tratamiento y divulgación de temas de sustentabilidad dentro de las clases, en los programas de radio y en comunicación con Dawson College.
- Se menciona la posibilidad de diseñar materias optativas relacionadas con la sustentabilidad aprovechando que el mapa curricular de las distintas licenciaturas contemplan la figura de *materias optativas*.



El 16 de enero de 2013, la Normal comisiona formalmente a los líderes ambientales que se han sumado al proyecto y de manera simbólica y solidaria el Director de la Escuela da el banderazo de salida, garantizando el apoyo necesario a los maestros y alumnos en la consecución de esta meta

Actividad: Desayuno para comisionar líderes del proyecto

El 16 de enero de 2013 se llevó a cabo una reunión convocada por el director general de la Normal Superior Lic. Benito Juárez, maestro Carlos Gallardo Sánchez quien ofreció un desayuno en el que se comisionó formalmente a los estudiantes que se sumaron como líderes ambientales en el proyecto.

Estuvieron presentes cuatro docentes: León Felipe Figueroa Aguilar, Director académico; Mireya Rivera Salgado y Jorge Hernández Brod, quienes fungen como equipo de apoyo y María Luisa Montes Mendoza quien fue ratificada como coordinadora del proyecto en el plantel en sustitución del profesor Miranda; por la coordinación general del proyecto estuvo presente Margarita Hurtado Badiola acompañada por la asistente Isaura Paola del Castillo.

El director del plantel expresó su interés por llevar a cabo el proyecto y su disposición de apoyar todas las acciones encaminadas al logro del objetivo.

Las estudiantes y su coordinadora mencionaron algunas actividades realizadas, entre ellas destacan el haber realizado un programas de radio relacionado al proyecto en el que invitaron a los tres planteles de la UPN que forman parte del éste y con quienes están abiertos a compartir el micrófono en el programa "Cosas de profes".

Un acuerdo importante en relación con este programa es el dedicar un espacio para abordar el tema de sustentabilidad a través de la presentación de cápsulas que serán presentadas semanalmente por el equipo de líderes de comunicación.

Estas mismas cápsulas se presentarán durante las ceremonias de honores a la bandera que tienen lugar una vez a la semana, en la cual está presente toda la comunidad escolar.

Asimismo el boletín *Normalario* y la página web de la institución destinarán espacios para divulgar por vía electrónica información sobre el proyecto y se dará continuidad al uso del *facebook* como un espacio de comunicación en el que participa la Normal junto con el resto de los actores del proyecto tanto de México como de Canadá.

Las estudiantes informaron que están preparando como sorpresa un video sobre su proyecto de sustentabilidad con el apoyo del profesor Julio Mora, coordinador académico del Centro de Estudios de Posgrado; lo anterior estuvo motivado por el video que vieron de sus compañeros de Dawson College y en un gesto de correspondencia.

Se acordó realizar un taller sobre metodología para el diseño de diagnóstico y proyectos de intervención social que estará a cargo de la maestra Margarita Hurtado Badiola dirigido a todos los líderes del proyecto.

Actividad: Taller de diagnóstico y planeación

El día 18 de enero de 2013 se llevó a cabo el taller de diagnóstico y planeación en la biblioteca de la Escuela Normal Superior Benito Juárez, coordinado por la maestra Margarita Hurtado Badiola con el apoyo de la doctora Rocío Aranda Franco.

Asistieron 13 personas de los cuales 11 lo conformaban estudiantes y dos docentes; los estudiantes son los líderes de los diferentes campos de acción: energía, agua, biodiversidad; los docentes fungen como equipo coordinador.

El taller tuvo como finalidad presentar los pasos necesarios para llevar a cabo un buen diagnóstico que represente el punto de partida para el diseño de un proyecto. Dentro de este proceso metodológico se destacan también la evaluación, sistematización y divulgación de las actividades que conforman el plan de acción.

Se utilizó como herramienta metodológica para llevar a cabo el taller el folleto: El tren de la participación e imágenes en las que el diagnóstico se representa como una máquina del tren que va jalando una serie de vagones para representar los objetivos, metas, actividades, recursos, tiempo, y los momentos de evaluación, sistematización y divulgación.

Como complemento de los pasos para construir el proyecto, se mencionaron los indicadores, cabe señalar que hubo una intervención de Azucena [ra]s Morales coordinadora del equipo de líderes quien participó en el taller con el equipo canadiense que tuvo lugar el pasado mes de noviembre.

Un buen diagnóstico es la base sobre la que se construye un buen proyecto.

El tren de la participación está integrado por:

- Diagnóstico
- Objetivo
- Metas
- Recursos
- Actividades
- Responsables
- Tiempo
- Evaluación
- Sistematización
- Difusión

Al finalizar la actividad el grupo expresó lo significativo del aprendizaje y la apropiación de herramientas para el trabajo que realizarán.

Se les entregó un folleto del tren de la participación social para que continuaran trabajando en sus proyectos y acordaron reunirse para esta tarea.

Actividad: Reunión para trabajar en el diagnóstico

Lunes 21 de enero de 2013

Los líderes ambientales y la coordinadora del proyecto en el plantel se reúnen para definir los indicadores que guiarán el proceso de diagnóstico de los diferentes rubros, Azucena Morales, coordinadora de líderes presenta una propuesta de indicadores basada en los elaborados por Dawson College y adaptados al contexto de la Normal.

Posterior a esto, se dio banderazo de salida para que aplicaran dichos indicadores para la elaboración de los diagnósticos, acordando presentar avances en una reunión el día viernes 25 de enero.

El sábado 26 de enero, participamos en el Tercer Encuentro Estatal de Jóvenes Líderes B1010 Plan y Proyecto de vida

Otras actividades:

- ✓ La coordinadora del proyecto en el plantel trabajó con la líder ambiental de cultura y educación, para iniciar el análisis de los programas de estudio de primer año a fin de identificar contenidos que aborden explícitamente temas relacionados con la sustentabilidad y el cuidado del medio ambiente, así como aquellas que pudieran vincularse.
- ✓ Se inició un plan de acción de comunicación al interior del plantel, para dar a conocer los avances del proyecto a la comunidad estudiantil mediante el diseño y elaboración de mantas con mensajes intercambiables elaboradas con materiales bioamigables.

Un acuerdo importante ha sido el de establecer tiempos definidos para reunirse e ir valorando los avances de los líderes e identificar nuevas necesidades.

Entre las actividades proyectadas destaca la del diseño y construcción del jardín por la paz, se está haciendo la gestión para contar con el apoyo de Cindy Elliott quien es responsable de este proyecto en Dawson Sustentable.

La líder ambiental de comunicación y su equipo trabajan en el diseño y producción de las primeras Sustencápsulas que serán dadas a conocer a partir del mes de febrero.

inicia el análisis de los programas de estudio de primer año para identificar los contenidos que abordan

El sábado 26 de enero de 2013, la coordinadora del plantel y cuatro líderes ambientales participaron en el primer encuentro de jóvenes emprendedores que organizó la Universidad Fray Luca Pacdoli, mismo que tendrá continuidad en el próximo mes de febrero, aquí, recibieron una conferencia taller en la que conocieron algunas estrategias para desarrollar con éxito proyectos a corto, mediano y largo plazo.

Anexos



Segunda reunión talentos y voluntades al proyecto Plantales Sustentables Normal



21 de enero 2013. Definición de indicadores. Inicio proceso diagnóstico



10 enero. Los nuevos líderes ambientales visus equipos asuman al proyecto



26 de enero. Conferencia Taller "Plan y proyecto de vida"



16 de enero 2013. Comisión a los alumnos líderes ambientales en un desayuno



18 de enero 2013. Taller con Margarita Hurtado. Diagnóstico y Planeación



8 de enero 2013. Programa de radio con líderes ambientales

El encuentro con nuestros visitantes Canadienses fue mencionado en los principales diarios locales



Promueven profes canadienses creación de Jardines por la Paz

Redacción El Regional Del Sur

Viernes, 25 de Noviembre de 2011 09:28



Promueven profesores canadienses la creación de jardines por la paz


Written by Staff



Canadienses impulsan la escuela sustentable

*Recorren las Normales de Morelos

El Sol de Cuernavaca
14 de noviembre de 2012



Informe de actividades
Luisa Montes
Coordinadora del proyecto desde el 13 de diciembre del 2012 y hasta el 8 de noviembre de 2013

Reunión con alumnos líderes ambientales

El 7 de enero se convocó una reunión con los estudiantes que iniciaron el proyecto con el anterior coordinador Biólogo Alberto Miranda para retomar las actividades. Estuvieron presentes Azucena Morales, Samantha Jasso y Sandra Velázquez, del 1er semestre de la especialidad de Inglés e Israel Gómez de la especialidad de historia 3er semestre, se acordó la elaboración de un video que hablara del clima y biodiversidad de nuestro País, de nuestro estado de Morelos y de los planes de nuestra institución para convertimos en un plantel sustentable y también el diseño de un logo institucional para representarnos, el cual sería realizado en equipo.



Informe de actividades
Luisa Montes

Video: México, Morelos y la Escuela Normal

Con el propósito de establecer comunicación y vinculación con los planteles participantes, se elaboró un video en el que se da a conocer el clima y la biodiversidad en nuestro País, en nuestro Estado y en nuestra escuela, además de que se dan a conocer las expectativas al formar parte del proyecto "Planteles educativos sustentables". Compartiendo saberes.

Este video fue compartido con el grupo de español de Dawson College en la semana de actividades para la celebración del día de la tierra en el mes de abril.

<http://www.youtube.com/watch?v=yi2pegwFG2o>



Informe de actividades
Luisa Montes

Diseño de logo

Con la participación y creatividad de estudiantes involucrados en el Proyecto, se diseñó un logo representativo de la institución que es la imagen que encabeza todas y cada una de las acciones emprendidas en el camino hacia la sustentabilidad.




Informe de actividades
Luisa Montes

Curso: El tren de la participación social

Taller de desarrollo de proyectos a cargo de la maestra Margarita Hurtado Badiola que tuvo lugar en la biblioteca escolar el día 18 de enero.

En el participaron estudiantes interesados en conocer la propuesta del proyecto y valorar su participación en el mismo.



Informe de actividades
Luisa Montes

Huerto por la paz

Inspirado en la experiencia en Dawson College del Jardín por la paz, fue la actividad con la que se dio marcha al proyecto de sustentabilidad en la Normal. Representa la energía positiva y, por supuesto, la paz que México necesita urgentemente para opacar la situación de violencia que se vive en la actualidad; en este contexto las plantas son medicinales, la idea de que sean plantas curativas representa no solamente el ámbito físico sino también en el espiritual.



Informe de actividades
Luisa Montes

Encuentro de hockey

En el marco de la inauguración de la exposición fotográfica "nuestros vecinos veredes" y en la coyuntura de la visita de los estudiantes de Dawson College, Gabrielle Caron y Kendall Birker, quienes estuvieron de intercambio en la sede Ayala de la UPN; se organizó un partido amistoso de hockey en la cancha de usos múltiples de nuestra escuela, esto, con la intención de establecer lazos de convivencia entre estudiantes y coordinadores de las diferentes casa educativas participantes.



Informe de actividades
Luisa Montes

Nuestros vecinos verdes

Muestra fotográfica de la biodiversidad del plantel que busca generar conciencia del cuidado del medio ambiente, contó con la participación de fotógrafos profesionales invitados y docentes de la institución educativa, esta muestra fue expuesta y subastada en Dawson College en el marco de la celebración del día de la tierra, el dinero recaudado fue empleado en el Proyecto Agua Viva que se lleva a cabo en la Normal.



Informe de actividades
Luisa Montes

Canción por la tierra

Cercanos a la conmemoración del Día de la Tierra, un grupo de estudiantes del 1er semestre de la especialidad en Telesecundaria, escriben letra y música de una canción dedicada a la tierra, así mismo, se elabora un video que puede localizarse en

<http://www.youtube.com/watch?v=zNXz311V0oc>



Informe de actividades
Luisa Montes

Acuerdo para promover el programa EDUCARE (FIDE)

Se estableció contacto con el Fideicomiso para el Ahorro de Energía Eléctrica (FIDE), perteneciente a la CFE. Se lograron dos acuerdos: realizar un diagnóstico sobre el consumo de energía en la institución y un estudio de la viabilidad de recibir fideicomiso para reemplazar los sistemas de electricidad, y, el compromiso de la Institución para difundir a través de actividades pedagógicas el programa EDUCARE, que busca llevar a las escuelas de Educación Básica información clara y sencilla en la generación de una cultura del ahorro de energía eléctrica, éste último firmado el día 20 de abril.



Informe de actividades
Luisa Montes

Conmemoración: Día del Medio Ambiente (Parte 1)

El 5 de junio, se realizó un programa informativo, cultural, artístico y deportivo con la intención de dar a conocer a la comunidad juarista los propósitos y avances del Proyecto. En este evento se llevó a cabo un desfile de modas con vestuario realizado con materiales de reuso con diseño y participación de la especialidad de Inglés, 1er semestre, se dio a conocer una canción para la tierra que fue escrita, musicalizada e interpretada por estudiantes de Telusecondaria, 1er semestre.



Informe de actividades
Luisa Montes

Participación en la semana de actividades por la tierra

En el mes de abril, el Dawson College, llevó a cabo una semana de actividad por la tierra.

Durante esta semana, participé en una serie de talleres y reuniones de trabajo para fortalecer las estrategias de abordaje de este proyecto en la Normal, así mismo, formé parte de la exposición y subasta de las obras fotográficas que componen la muestra "Nuestros vecinos verdes", el dinero obtenido se invirtió en la construcción del Filtro bebedero "Agua viva"



Informe de actividades
Luisa Montes

Conmemoración: Día del Medio Ambiente (Parte 2)

Se presentaron dos exposiciones, una del Prof. Germán Pastón, del laboratorio escolar, quien con la especialidad de Educación Especial elaboró materiales de limpieza para uso de la institución, entre otros, gel para manos y para el cabello, desinfectante para pisos y desengrasante; otra, a cargo de las profesoras Patricia Montero, Nélyda Díaz y Crissana Figueroa, quienes realizaron talleres para la confección de accesorios con materiales de reuso.



Informe de actividades
Luisa Montes

Conmemoración: Día del Medio Ambiente (Parte 3)

Finalmente, con el apoyo del Profesor Juan Alvarado, se realizó un torneo relámpago de fútbol 5, en el que las casacas, las porterías y los balones estuvieron elaborados con materiales de reuso.

A este evento, estuvieron convocados los tres planteles la UPN Morelos, la participación de un grupo entusiasta de la sede Galeana dio un realce especial a esta conmemoración.



Informe de actividades
Luisa Montes

Circuito lúdico deportivo (Parte 2)

Asistieron la maestra Margarita Hurtado, alumnos de UPN sede Galeana y Cuernavaca, la representatividad de Dawson College a través de dos estudiantes de intercambio y los cuartos semestres de la especialidad de educación física quienes fungieron como anfitriones y organizadores de un evento lúdico deportivo en el que se dio la oportunidad de una convivencia intensa y amistosa.



Informe de actividades
Luisa Montes

Circuito lúdico deportivo (Parte 1)

El 17 de junio, con el propósito de crear lazos de amistad y colaboración entre los planteles participantes, se organizó una actividad en la Unidad Deportiva Laura Ortega (recinto ferial Acapantzingo).

El propósito central, fue hacer una demostración del uso de materiales didácticos aplicados a las clases de Educación Física.




Informe de actividades
Luisa Montes

Circuito lúdico deportivo (Parte 3)

Para la exitosa realización de este evento contamos con el apoyo de los Profesores de Educación Física de la EPNSBJ Profesores Raúl Carsi y Gustavo Ortega.

Durante el evento se llevó a cabo un convivio para compartir el almuerzo y al final de las actividades programadas un espacio para el intercambio de experiencias vividas en cada una de las escuelas por parte de los estudiantes.





Informe de actividades
Luisa Montes

Charla de bienvenida a la alumna Katie Weatley

El día 4 de julio, recibimos en la Normal Benito Juárez a una estudiante de Dawson College, quien estuvo colaborando y asesorando las actividades del proyecto durante todo el mes. Para recibirla se organizó una reunión con estudiantes interesados en el proyecto en el Auditorio de la Institución, durante este acto, Katie ofreció una exposición sobre el programa Dawson sustentable, donde compartió sus experiencias con los presentes, al final de esta charla, hubo un espacio para el diálogo.



Informe de actividades
Luisa Montes

Un cheque que si checa

En agosto, en un acto significativo y en presencia de representantes del Instituto Mexicano para el desarrollo de Ciudades Verdes, "Planteles Educativos Sustentables" y la Escuela Normal Superior Lic. Benito Juárez, recibimos la cantidad de 31,000. Este recurso, dio marcha al proyecto Agua Viva, a este mismo proyecto se destinaron 500 dólares canadienses, resultado de la subasta de la obra fotográfica "Nuestros vecinos verdes", este apoyo fue un importante impulso en la construcción del proyecto de captación de agua de lluvia.



Informe de actividades
Luisa Montes

Curso taller "Herramientas y estrategias para la creación de planteles educativos sustentables"

Con el objetivo de generar ambientes de aprendizaje que permitieran la apropiación de herramientas teórico conceptuales, metodológicas, tecnológicas y procedimentales, para avanzar hacia la sustentabilidad en planteles educativos. Participaron expositores de México y de Canadá; entre ellos, la Secretaría de Desarrollo Sustentable; la SEMARNAT a través de su Centro de Capacitación para el Desarrollo Sustentable (CECADESU) el Instituto Mexicano para el Desarrollo de Ciudades Verdes SC, La CFE a través de su programa Fidelcomiso para el ahorro de Energía Eléctrica (FIDE), La Institución Dawson College, Earthvalues Institute y la Escuela Particular Normal Superior "Lic. Benito Juárez"



Informe de actividades
Luisa Montes

Agua viva

Propuesta de arquitectura alternativa (sustentable). Se construyó un captador de agua de lluvia, que será filtrada, potabilizada e ionizada para su consumo, con la idea de reducir al máximo el uso del agua embotellada. La sustracción del agua se hará mediante una bicibomba y culminará en un bebedero de uso común en el plantel. Esta obra se construye con el impulso económico recibido del Proyecto "Planteles Educativos Sustentables, lo obtenido en la subasta de fotografías de la galería "Nuestros Vecinos Verdes" y la aportación de la propia escuela Normal.



Informe de actividades
Luisa Montes

Aula viva

De manera paralela a la construcción del captador de agua y debido a la necesidad de cambiar de lugar el Huerto por la paz, pues las condiciones son poco propicias para el desarrollo y cuidado de las especies sembradas, la institución invierte en la construcción y activación de un espacio común que permita potenciar el impacto de las acciones realizadas en la Normal. El propósito de salvaguardar el Huerto trae consigo la opción de convertirse en un espacio que enriquezca la tarea de formación de los estudiantes ofreciéndose como una herramienta sustentable en el proceso enseñanza aprendizaje.



Informe de actividades
Luisa Montes

Aula viva

De manera paralela a la construcción del captador de agua y debido a la necesidad de cambiar de lugar el Huerto por la paz, pues las condiciones son poco propicias para el desarrollo y cuidado de las especies sembradas, la institución invierte en la construcción y activación de un espacio común que permita potenciar el impacto de las acciones realizadas en la Normal. El propósito de salvaguardar el Huerto trae consigo la opción de convertirse en un espacio que enriquezca la tarea de formación de los estudiantes ofreciéndose como una herramienta sustentable en el proceso enseñanza aprendizaje.



Informe de actividades
Luisa Montes

Guerreros unidos: sustentabilidad social (parte 1)

Los alcances del Aula Viva comienzan a dar muestra del impacto que puede alcanzar al servir como catalizador de la participación de un grupo de 7 estudiantes, quienes en situación de riesgo de perder sus estudios debido a una situación de contingencia tras el paso de los huracanes Ingrid y Manuel por las costas del Estado de Guerrero, lugar de residencia de la mayoría de los estudiantes mencionados, se consigue un acuerdo con la administración de la institución.



Informe de actividades
Luisa Montes

Guerreros unidos: sustentabilidad social (parte 2)

Los jóvenes apoyan los trabajos de traslado del huerto y la activación del espacio a cambio de continuar sus estudios, se considera este trabajo equivalente al pago de colegiatura. Esta acción les permitió apoyar a sus familias, conservar sus estudios e integrarse al proyecto, logrando la atención de la comunidad escolar quien comienza a visitar el espacio con curiosidad. Es importante mencionar que este tipo de acciones surgieron con anterioridad en la figura de alumnos becarios quienes apoyan diferentes áreas administrativas, a excepción de Arnán Nicolás quien funge como apoyo en el cuidado de las áreas verdes desde el inicio de la actual administración y es el líder ambiental del suelo en ese proyecto.



Informe de actividades
Luisa Montes

Inauguración de los proyectos Agua y Aula viva (8 de nov)

En presencia de personalidades de Dawson College, Earthvalues, Secretaría de Desarrollo Sustentable, CECADESU, SEMARNAT, Ciudades Verdes, Mpio. de Jiutepec, Programa "Gánale al CO2", UPN Morelos, Centro de Estudios de Posgrado Lic. Benito Juárez García y la Escuela Particular Normal Superior, con la representación de los jefes de grupo, se realiza una emotiva ceremonia para inaugurar los proyectos Agua y Aula viva, en ella participa el ballet folclórico de la Escuela dando un toque místico y de apropiación de los proyectos.

Se realizó un brindis con agua viva y posteriormente se procedió a la siembra de semillas en el Huerto por la Paz por parte de los Invitados.



Informe de actividades
Luisa Montes

Taller de evaluación

Participamos coordinadores, estudiantes y autoridades de los planteles participantes. En el acto, además del intercambio de experiencias y el análisis colaborativo del proceso, se plantearon nuevos rumbos para los planteles participantes y se abrió la posibilidad de una segunda etapa.

La riqueza de este taller como la de otras acciones previas, fue la del aprendizaje mutuo al compartir saberes, experiencias y expectativas.

En el evento, participamos por parte de esta institución, el Director de la Escuela, Profesor Carlos Gallardo Sánchez, la Profesora Ríos, y yo, como parte de un proceso de entrega y recepción de los trabajos futuros en nuestra institución.



Informe de actividades
Luisa Montes

Cambio de estafeta (8 de nov)

En el marco de la Inauguración de los proyectos Agua y Aula viva, se nombra una nueva coordinación en la figura de la Profesora y Bióloga Patricia Ríos Bárcenas, quien con sus conocimientos en el área y su experiencia en el desarrollo de acciones para la cultura de la sustentabilidad, ofrece certeza en la atención y ampliación del proyecto, el acto tuvo lugar en presencia de personas que han dando apoyo y asesoría a nuestra escuela en el camino hacia la sustentabilidad, a fin de definir una continuidad haciéndolos del conocimiento.



Informe de actividades
Luisa Montes

Difusión

A través del dominio IP www.bimedia.mx en el programa "Cosas de Profes", se ha dado seguimiento a las actividades del proyecto "Planteles Educativos Sustentables. Compartiendo saberes" en las instituciones educativas participantes: Dawson College, Normal Superior Lic. Benito Juárez y la UPN en sus tres campus, en el Estado de Morelos, Ayala, Galeana y Cuernavaca. Todos estos programas se encuentran dispuestos on demand para los usuarios interesados en conocerlos.



<http://www.normalario.com/>



Informe de actividades
Luisa Montes

Difusión

Así mismo pueden encontrarse artículos de difusión en el Blog: www.normalario.com revista digital perteneciente al Centro de Estudios de Posgrado en la cual es posible encontrar información permanente sobre los logros y avances del proyecto en la Normal.

Y en las páginas de Face book "Plantel Sustentable Normal Superior" y "Planteles Educativos Sustentables, Dawson, UPN, Normal Superior"





Informe de actividades
Luisa Montes

Difusión en línea

A través del dominio IP www.bjmedia.mx en el programa "Cosas de Profes", se ha dado seguimiento a las actividades del proyecto en las instituciones educativas participantes: Dawson College, Normal Superior Lic. Benito Juárez y la UPN en sus tres campus, en el Estado de Morelos, Ayala, Galeana y Cuernavaca. Todos estos programas se encuentran dispuestos on demand para los usuarios interesados en conocerlos. Así mismo pueden encontrarse artículos de difusión en el Blog: www.normalario.com

Principales actividades de la EPNSBJ en el Proyecto "Planteles Educativos Sustentables" Compartiendo saberes

Presenta : M.P.C. María Luisa Montes Mendoza
Coordinadora del proyecto desde el 13 de diciembre del 2013

1. Diseño de logo

Con la participación y creatividad de estudiantes involucrados en el Proyecto, se diseña un logo representativo de la institución que es la imagen que encabeza todas y cada una de las acciones emprendidas en el camino hacia la sustentabilidad.

2. Reunión de trabajo con alumnos líderes ambientales

El lunes 7 de enero se convocó a una reunión con los estudiantes que iniciaron el proyecto con el anterior coordinador Biólogo Alberto Miranda para retomar las actividades propuestas. Estuvieron presentes Azucena Morales, Samantha Jasso y Sandra Velázquez, del primer semestre de la especialidad de inglés e Isael Gómez de la especialidad de historia tercer semestre, se acordó la elaboración de un video que hablara del clima y biodiversidad del nuestro País, del clima, diversidad y costumbres de nuestro estado de Morelos y de los planes de nuestra institución para convertirnos en un plantel sustentable y también el diseño de un logo institucional para representarnos, el cual sería realizado en equipo.

3. Video sobre México, Morelos y la Escuela Normal

Con el propósito de corresponder a un video recibido de Dawson College, se elaboró un video en el que se da a conocer el clima y la biodiversidad en nuestro País, en nuestro Estado y en nuestra escuela, además de que se dan a conocer las expectativas al formar parte del proyecto "Planteles educativos sustentables". Compartiendo saberes, este video fue subido a You tube y posteriormente compartido con el grupo de español de Dawson College en la celebración del día de la tierra celebrado en el mes de abril. Es posible encontrar este material en <http://www.youtube.com/watch?v=yi2pegwFG2o>

4. Curso: El tren de la participación social

El grupo de Formación Cívica y Ética de primer semestre a través de su maestra asesora Mireya Rivera, se acercan a preguntar si ellos pueden participar, la respuesta positiva les dio su lugar para asistir al taller de desarrollo de proyectos a cargo de la maestra Margarita Hurtado Badiola que tuvo lugar en la biblioteca escolar el día 24 de enero.

5. Huerto por la paz

Fue inspirado en la experiencia en Dawson College del Jardín por la paz, fue la actividad con la que se dio marcha al proyecto de sustentabilidad en la Normal, representa la energía positiva y, por supuesto, la paz que México necesita urgentemente para opacar la situación de violencia que se vive en la actualidad; en este contexto las plantas son medicinales, la idea de que sean plantas curativas representa no solamente el ámbito físico sino también en el espiritual.

6. Expo Nuestros vecinos verdes

En el mes de marzo en el marco de la celebración de las "Jornadas Juaristas" se inauguró una muestra fotográfica de la biodiversidad del plantel que busca generar conciencia del cuidado del medio ambiente, esta importante actividad contó con la participación de fotógrafos profesionales invitados y docentes de la institución educativa, esta muestra fue expuesta y subastada en Dawson College en el marco de la celebración del día de la tierra en el mes de abril, el dinero recaudado fue empleado en el Proyecto Agua Viva que se lleva a cabo en la Normal.

7. Encuentro de Hockey

En el marco de la inauguración de la exposición fotográfica “nuestros vecinos veredes y en la coyuntura de la visita de los estudiantes de Dawson College, Gabrielle Caron y Kendall Birker, quienes estuvieron de intercambio en la sede Ayala de la UPN; se organizó un partido amistoso de hockey en la cancha de usos múltiples de nuestra escuela, esto, con la intención de establecer lazos de convivencia entre estudiantes y coordinadores de las diferentes casa educativas participantes.

8. Acuerdo con FIDE para la promoción del programa EDUCARE

En el mes de abril, se estableció contacto con el Fideicomiso para el Ahorro de Energía Eléctrica (FIDE), perteneciente a la Comisión Federal de Electricidad. Se llevó a cabo una reunión de información sobre este programa y se lograron dos acuerdos, por una parte el compromiso de FIDE para realizar un diagnóstico sobre el consumo de energía en la institución y un estudio sobre la viabilidad de recibir un fideicomiso para el reemplazo de los sistemas de electricidad en los edificios que conforman el plantel, y por el otro, el compromiso de la institución para fungir a través de actividades pedagógicas el programa EDUCARE, que busca llevar a las escuelas de Educación Básica información valiosa y de manera sencilla en la búsqueda de generar una cultura del ahorro de energía eléctrica, éste último firmado el día 20 de abril.

9. Conmemoración del Día Internacional del Medio Ambiente (5 de junio)

Se realizó un programa informativo, cultural, artístico y deportivo con la intención de dar a conocer a la comunidad juarista los propósitos y avances del Proyecto “Planteles educativos sustentables. Compartiendo saberes”. En este evento se llevó a efecto un desfile de modas con vestuario realizado con materiales de reuso con diseño y participación de la especialidad de inglés, así mismo, durante este evento se dio a conocer una canción dedicada al cuidado del medio ambiente que fue escrita, musicalizada e interpretada por un grupo de estudiantes de la especialidad de Telesecundaria, allí mismo se presentaron dos exposiciones, la primera por parte del Profesor Germán Pastén, coordinador del laboratorio escolar, en sus clases con la especialidad de Educación Especial elaboró materiales de limpieza para uso de la propia institución, entre otros, gel para manos y para el cabello, desinfectante para pisos y desengrasante. La segunda, a cargo de las profesoras Patricia Montero, Nélyda Díaz y Crissana Figueroa, quienes realizaron talleres con sus grupos asesorados para la creativa confección de accesorios con materiales de reuso, finalmente, con el apoyo del Profesor Juan Alvarado, se realizó un torneo relámpago de fútbol 5, en el que las casacas, las porterías y los balones estuvieron elaborados con materiales de reuso. A este evento, estuvieron convocados los tres planteles la UPN Morelos, la participación de un grupo entusiasta de la sede Galeana dio un realce especial a esta conmemoración.

10. Circuito lúdico deportivo 17 de junio

Con el propósito de crear lazos de amistad y colaboración entre los planteles participantes en el proyecto y aprovechando la visita de dos estudiantes de Dawson College en la sede de UPN Galeana, se organizó una actividad en las instalaciones de la Unidad Deportiva Lauro Ortega ubicada en el recinto ferial Acapantzingo; el propósito central además de la convivencia y acercamiento de los estudiantes y coordinadores de los planteles en México, fue el de hacer una demostración del uso de materiales didácticos aplicados a las clases de Educación Física. A este evento asistieron la maestra Margarita Hurtado Badiola coordinadora nacional, un grupo de alumnos de UPN sede Galeana, acompañados del profesor coordinador, la participación de un grupo de estudiantes de UPN Cuernavaca, la representatividad de Dawson College a través de los estudiantes de intercambio y los cuartos semestres de la especialidad de educación física quienes fungieron como anfitriones y organizadores de un evento lúdico deportivo en el que se dio la oportunidad de una convivencia intensa y amistosa, en este evento contamos con el apoyo de los Profesores de Educación Física de la EPNSBJ Profesores Raúl Carsi y Gustavo Ortega. Durante el evento se llevó a cabo un convivio para compartir el almuerzo y al final de las actividades programadas un espacio para el intercambio de experiencias vividas en cada una de las escuelas por parte de los estudiantes.

11. Charla de bienvenida a la alumna Katie Weatley

El día 4 de julio, recibimos en la Normal Benito Juárez a una estudiante de Dawson College, quien estuvo colaborando y asesorando las actividades del proyecto. Para recibirla se organizó una reunión con estudiantes interesados en el proyecto en el Auditorio de la institución, durante este acto, Katie ofreció una exposición sobre el programa Dawson sustentable, donde compartió sus experiencias con los presentes, al final de esta charla, hubo un espacio para el diálogo.

12. Curso taller “Herramientas y estrategias para la creación de planteles educativos sustentables”

El curso tuvo una duración de dos semanas y su objetivo principal fue el de generar ambientes de aprendizaje que permitan a los participantes la apropiación de herramientas teórico conceptuales, metodológicas, tecnológicas y procedimentales, para avanzar hacia la sustentabilidad en planteles educativos. Participaron expositores de México y de Canadá; entre ellos, la Secretaría de Desarrollo Sustentable; la SEMARNAT a través de su Centro de Capacitación para el Desarrollo Sustentable (CECADESU) el Instituto Mexicano para el Desarrollo de Ciudades Verdes SC, La Comisión Federal de Electricidad (CFE) a partir de su programa Fideicomiso para el ahorro de Energía Eléctrica (FIDE), La institución Dawson College, Earthvalues Institute y la Escuela Particular Normal Superior “Lic. Benito Juárez”

13. Proyecto Agua viva

Como propuesta de arquitectura alternativa (sustentable) se realizó la construcción de un captador de agua de lluvia, que será filtrada, potabilizada e ionizada para su consumo, con la idea de reducir al máximo el uso del agua embotellada. La sustracción del agua se hará mediante una bicibomba y culminará en un bebedero de uso común en el plantel. Esta obra se construye con el impulso económico recibido del Proyecto “Planteles Educativos Sustentables, lo obtenido en la subasta de fotografías de la galería “Nuestros Vecinos Verdes” y la aportación de la propia escuela Normal.

14. Proyecto Aula viva

De manera casi paralela a la construcción del captador de agua, se da la coyuntura para el desarrollo de un importante proyecto que busca la activación de un espacio común ubicado a espaldas del edificio B de la escuela. Debido a la inminente necesidad de cambiar de lugar el Huerto por la paz construido en el mes de marzo, pues las condiciones del espacio son poco propicias para el óptimo desarrollo y cuidado de las especies sembradas en dicho huerto, surge la oportunidad de que la institución invierta en la construcción y activación de un espacio común que permita potenciar el impacto de las acciones realizadas hasta este momento en la Normal, el propósito de salvaguardar el Huerto por la paz trae consigo la afortunada posibilidad de convertirse al mismo tiempo en un espacio que permita enriquecer la tarea de formación de nuestros estudiantes ofreciéndose como una herramienta sustentable en el proceso enseñanza aprendizaje.

15. Guerreros unidos, sustentabilidad social

Los alcances del Aula Viva comienzan a dar muestra del impacto que puede alcanzar al servir como catalizador de la participación de un grupo de 7 estudiantes, quienes en situación de riesgo por perder sus estudios debido a una situación de contingencia tras el paso de los huracanes Ingrid y Manuel por las costas del Estado de Guerrero, lugar de residencia de la mayoría de los estudiantes mencionados, se consigue un acuerdo con la administración de la institución para que ellos apoyen en los trabajos de traslado del huerto y la activación del espacio a cambio de continuar con sus estudios, considerando este trabajo como equivalente a los pagos de colegiatura pendientes. Esta simple acción generó para los jóvenes una manera de apoyar a sus familias en desgracia, conservar sus estudios y además formar parte de este proyecto, logrando la atención de una parte importante de la comunidad escolar quienes comienzan a acercarse a preguntar y a visitar el espacio con curiosidad. Es importante mencionar que este tipo de acciones por parte de la institución surgieron con anterioridad con la figura de alumnos becarios quienes apoyan en diferentes áreas administrativas, con excepción de Amín Nicolás quien funge como apoyo en el cuidado de las áreas verdes desde el inicio de la actual administración y es el líder

ambiental del suelo en ese proyecto.

16. Difusión.- A través del dominio IP www.bjmedia.mx en el programa “Cosas de Profes”, se ha dado seguimiento a las actividades del proyecto “Planteles Educativos Sustentables. Compartiendo saberes” en las instituciones educativas participantes: Dawson College, Normal Superior Lic. Benito Juárez y la UPN en sus tres campus, en el Estado de Morelos, Ayala, Galeana y Cuernavaca. Todos estos programas se encuentran dispuestos on demand para los usuarios interesados en conocerlos. Así mismo pueden encontrarse artículos de difusión en el Blog: www.normalario.com revista digital perteneciente al Centro de Estudios de Posgrado en la cual es posible encontrar información permanente sobre los logros y avances del proyecto en la Normal.

17. Cambio de estafeta

Con fecha 8 de noviembre y en coincidencia con la inauguración de los proyectos Agua viva y Aula viva, la institución determina un cambio en la coordinación del proyecto en la figura de la Profesora y Bióloga Patricia Ríos Bárcenas, quien con sus conocimientos en el área y amplia experiencia en el desarrollo de acciones encaminadas a la cultura de la sustentabilidad ofrecen un apoyo eficaz en la continuidad y ampliación de este proyecto, este acto tuvo lugar en la ceremonia de inauguración y en presencia de importantes personalidades que han venido dando apoyo y asesoría a nuestra escuela en el camino hacia la sustentabilidad.

M.P.C. María Luisa Montes Mendoza

Coordinadora del Proyecto en la EPNSBJ (hasta 8 de nov. 2013)





2

Proyecto: “Planteles educativos sustentables. Compartiendo saberes”

El proyecto Planteles Educativos Sustentables, compartiendo saberes desde sus inicios ha propiciado no solo la participación de los estudiantes de las diferentes instituciones participantes, sino su formación y sensibilización ante la importancia de compartir saberes y sentires para propiciar la sustentabilidad en las diferentes escuelas participantes, Universidad Pedagógica Nacional Morelos en sus tres campus (Cuernavaca, Galeana y Ayala) y la Escuela Normal Superior “Lic. Benito Juárez”, proyecto mediante el cual se han podido emprender acciones de beneficio del medio ambiente, con el objetivo de transitar hacia la sustentabilidad en estos espacios educativos.

En este escrito, se pretende resaltar aquellas actividades que han sido emprendidas en el periodo Enero-Junio 2013, en la UPN Sede Ayala. Tiempo en el que la comunidad universitaria participante se encontró en constante formación y colaboración para aprender y compartir sus saberes en la institución educativa. Aunque, en la actualidad la UPN Subsede Ayala, se encuentra por un momento desafiante, debido a un desalojo de las instalaciones el día martes 17 de Septiembre del 2013, por ejidatarios (personas propietarias de tierras de cultivo, dentro de un ejido rural, y a un ejido se le conoce por ser un terreno de cultivo en las afueras de una población), a causa de cuestiones legales del terreno donde se situaban las instala-

ciones de la universidad), razón por la que en este momento los estudiantes, profesores y personal que labora en la institución se encuentra trabajando en el ICATMOR (Instituto de capacitación para el trabajo en el estado de Morelos) de Anenecuilco, Morelos.

Las acciones realizadas en el Plantel UPN Sede Ayala, respecto al proyecto se mencionan y describen a continuación:

ACTIVIDADES:

1. Elaboración de un video mensaje.
2. Visita de estudiantes canadienses a la UPN Sede Ayala: Gabrielle Caron y Kendall Birker, del Dawson College, Canadá. En el mes de Marzo 2013.
3. Diversas jornadas de trabajo en la Sede para transitar a la sustentabilidad.

- Delimitación y conformación de equipos para la elaboración y aplicación de iniciativas medio ambientales.
- Aprendiendo a realizar un proyecto según el Tren de la Participación Social.
- Aprender y realizar composición mural por la paz.
- 4. Continuación y trabajo por los diversos equipos en la sede para un plantel Educativo Sustentable.

Como secuencia se plasma a continuación una descripción de las diversas actividades realizadas durante el periodo mencionado.



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1. Elaboración de un video mensaje.

Esta actividad:

En el mes de febrero varios estudiantes y profesores de la universidad UPN Ayala participaron en la creación de un video para compartirlo con los Estudiantes del Dawson College, Canadá, especialmente para enviar un fuerte abrazo a los compañeros estudiantes de segundo año y a la maestra Sarah Cartier, de la clase Fundraising CRLT de Dawson. Reconociendo que para nosotros, estudiantes y profesores es un placer trabajar en este proyecto, juntos para poder compartir, ayudarnos y apoyar el trabajo de las instituciones para transitar a la sustentabilidad. A pesar de la distancia estamos unidos

por el amor que compartimos, para tomar medidas que logren facilitar el camino para lograr la sostenibilidad en nuestros campus.

2. Visita de estudiantes canadienses a la UPN Sede Ayala: Gabrielle Caron y Kendall Birker, del Dawson College, Canadá. En el mes de Marzo 2013.

Un momento importante en el periodo mencionado, fue la visita de dos estudiantes canadienses del Dawson College, Canadá, a la Sede Ayala, razón para aprender, compartir y emprender actividades de sustentabilidad, en nuestra institución educativa. Durante la visita de Gabrielle Caron y Kendall Birker, se realizaron actividades que favorecieron la participación, integración,

el trabajo en equipo, la interacción. Tuvi- mos una excelente experiencia de trabajo conjunto gracias a este proyecto.

El 6 de Marzo de 2013 con el motivo de la visita de los estudiantes del Dawson College se realizó un juego amistoso de Hockey, en la Normal Superior "Lic. Benito Juárez", despertando el espíritu de compañerismo entre estudiantes, cuya experiencia fue muy emotiva para los estudiantes de la Sede Ayala, varios estudiantes del plantel Ayala no dudaron en trasladarse a la Ciudad de Cuernavaca, participar y unirse a esta fabulosa actividad, propuesta por los estudiantes extranjeros.

3. Diversas jornadas de trabajo en la Sede Ayala para transitar a la sustentabilidad.

- Delimitación y conformación de equipos para la elaboración y aplicación de proyectos e iniciativas para transitar a la sustentabilidad del campus.
- Aprendiendo a realizar un proyecto según el Tren de la participación Social. El día 12 de marzo, con la participación de Gabrielle Caron, se trabajó el Tren de la participación Social, actividad con la cual estudiantes del plantel UPN Sede Ayala iniciaron con propuestas de proyectos en la Universidad, tales como compostaje, huerto de plantas medicinales, hortalizas, cactáceas, de tal manera que los estudiantes trabajaron en equipo y desarrollaron sus propuestas, para iniciar cuanto antes.

- Realizando composta. El 16 de marzo en la Sede Ayala se efectuó una capacitación para la elaboración de composta, gracias a la gestión de Margarita Hurtado Badiola (coordinadora del proyecto en México), quien logró conseguir dicho taller con Blanca Espino (Educatora ambiental). Se vivió en el plantel una experiencia que sin duda alguna dejó reflexionando a los estudiantes acerca de la importancia de elaborar composta, pero sobre todo se aprendió cómo realizar el compostaje y para qué hacerlo.

Los participantes, fueron principalmente estudiantes de UPN sede Ayala, Cuernavaca y los compañeros Canadienses, así como maestros, personal de intendencia, jardín y vigilancia. Se aprendió que separar nuestros residuos es de suma importancia y responsabilidad de cada ser humano, siendo una manera de cuidar a nuestro planeta. Con lo cual se puede reconocer que el compostaje es una acción muy noble, porque de tal manera le regresamos a nuestra tierra los nutrientes que ella muy amablemente día con día nos da en nuestros alimentos.

- Prueba del carbono. El 15 de marzo los estudiantes continuaron con un trabajo intenso, en esta ocasión con un trabajo duro, para calcular la huella del carbono de la Sede Ayala. Los estudiantes trabajaron muy duro. El trabajo consistió en formar diferentes equipos



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Se obtuvo el peso de cada uno de los residuos y las cantidades fueron enviadas a las personas expertas en cálculos para medir la huella de carbono en el plantel.

- Elaboración del mural por la paz. La actividad inicio con la propuesta de Gabrielle Caron, para lo cual se realizó un proyecto por escrito, en el cual participó Kendall Birker, Gabrielle Caron y Yarida L. Avila, para documentar la actividad y conseguir el presupuesto a través de Margarita

encargados de reunir durante una semana toda la basura del plantel. Separando residuos orgánicos e inorgánicos como plástico, metal, vidrio, papel, y todos aquellos residuos que generó la universidad en una semana.

Llegado este día se procedió a separar la basura y calcular el peso de toda esta. Resultó ser una actividad que en un inicio parecía un tanto incómoda por trabajar con basura, pero los estudiantes se la ingeniaron para hacerla muy divertida y agradable, pues se tomaron previas precauciones para obtener una actividad interesante.



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Hurtado Badiola,, la coordinadora del proyecto "Planteles educativos sustentables, compartiendo saberes".

La puesta en acción fue gracias a la participación de Ricardo Daniel Chávez Allende, estudiante del segundo semestre, quien inicio el día 22 de marzo a diseñar el dibujo de la actividad. Mientras tanto Kendall y Gabrielle adquirieron el material, las pinturas y pinceles para los estudiantes de Ayala. La actividad consistió en crear un UPN Ayala un Mural de la Paz, tomando como ejemplo el Muro de la Paz que tienen los estudiantes en la casa del profesor Chris Adams Canadá,

El día que se presentó dicha actividad a los estudiantes, se tuvo la participación de

Gisela Frias, la coordinadora del proyecto en Canadá, por medio de Skype, quien dio felicitaciones a los estudiantes por todo el trabajo intenso que realizan.

A través de esta actividad se pidió a los estudiantes que reflexionen sobre lo que es la paz para ellos y plasmarlo en la pared para compartir con la escuela. Realizar un mural por la paz en la Sede Ayala fue una manera creativa para plasmar compromisos a través de nuestras huellas para transformar el mundo, pensando en la paz.

El día viernes 22 de marzo, los estudiantes estaban listos para iniciar la actividad, pintar y crear el mural por la paz, una actividad muy emocionante, divertida, que realmente todos los participantes disfrutaron. Fueron

momentos muy emotivos, donde cada participante pudo añadir algo especial, fue un espacio lleno de participación, de apoyo, ayuda y sobre todo de compartir, con amigos, compañeros, profesores, el jardinero de la escuela, existió mucho entusiasmo.

Este mural fue parte de una actividad que promovió la participación de los estudiantes, para despertar la reflexión de los estudiantes respecto al compañerismo, el trabajo en equipo, el amor, el cuidado de nuestro mundo, pero sobre todo respecto a la paz y la obtención de un espacio que viva en armonía.

4. Continuación y trabajo de los diversos equipos en la sede Ayala, para un plantel Educativo Sustentable.

Después de la visita de Gabrielle y Kendall a la Sede Ayala, los diversos equipos de estudiantes continuaron trabajando en el plantel, con sus iniciativas en Hortalizas, Jardín de plantas medicinales y Cactáceas. La visita de los estudiantes de Canadá propicio que guardemos en nuestros corazones experiencias inolvidables y muy especiales para continuar trabajando por la sustentabilidad en nuestro plantel.



Durante el periodo antes mencionado las actividades más rescatables fueron las ya señaladas, pero detrás de cada una se encuentra un trabajo profundo, intenso, pero muy divertido, lleno de riqueza y muchos saberes.

Cada estudiante participante dedico de su tiempo, de espacios extras, es decir, horarios fuera de clases, realizando en muchos de los casos un esfuerzo grande para llevar a cabo cada actividad, pero la recompensa más grande para todos nosotros fue el aprender, formarnos, trabajar, compartir saberes para obtener un mejor espacio y transitar hacia la sustentabilidad en el plantel Ayala.

Los estudiantes trabajamos en equipo, de forma viva, intercambiando conocimientos, alegrías, sonrisas y muchas emociones que propician conocer a los demás y conocerse a sí mismo.

De forma personal quiero decir unas palabras, he podido como estudiante vivir y sentir este proyecto desde su inicio, lo cual me sirve para decir que el trabajo realizado implica mucho esfuerzo, mucha dedicación, compromiso, responsabilidad, paciencia y una postura ante la vida. Es un proceso lleno de desafíos, y alguna otra cosa que se torna como obstáculo, porque hay sujetos pesimistas, pero así mismo personas muy positivas ante la vida y cuando te rodeas de ellas el trabajar para transitar hacia la sustentabilidad es más fácil y comfortable. Aprovecho para agradecer a nombre de



varios estudiantes participantes de la Sede Ayala en el proyecto Planteles educativos sustentables a aquellas maravillosas personas con las que hemos podido trabajar en conjunto, como compañeros de las distintas universidades participantes, maestros que han apoyado este trabajo y la gente que nos enseña y comparte. Las diversas universidades participantes en el proyecto están rodeadas de mucha gente valiosa, con múltiples conocimientos y talento para ayudar a que nuestros planteles se comprometan con la naturaleza, compartiendo y multiplicando los conocimientos adquiridos durante el proyecto, para hacer que nuestro mundo sea

más sostenible.

Ahora es posible decir que nosotros hemos vivido la teoría con todos nuestros sentidos, apreciando todo lo que nos rodea, por lo tanto, especialmente doy las gracias por este proyecto a dos grandes personas: Gisela Frias y Margarita Hurtado (coordinadoras del proyecto en Canadá y México) quienes nos han dado la oportunidad de participar en este proyecto, además de ser una fuente inspiradora para transformar los contextos y progresivamente nuestro mundo. El mensaje que les compar-

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to es el siguiente: Hemos crecido bastante, sé que esta experiencia nos ha cambiado la vida a muchos, porque se ha aprendido a intercambiar no solo proyectos y conocimientos, sino muchos sentimientos y amistades que perduran para toda la vida.



Ávila Juárez Yarida Lizbeth.







UNIVERSIDAD
PEDAGÓGICA
NACIONAL



Marzo-
Noviembre 2013

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**Informe
Cuernavaca**



Intercambio 2

Gaceta iniciativa Galeana

Diagnostico institucional:

La comunidad universitaria de la Universidad Nacional Pedagógica Nacional Unidad 17-A es consciente de los enormes retos que las prácticas de las sociedades actuales representan para el desarrollo sustentable de la humanidad. Estos retos no pueden ser vistos como responsabilidad exclusiva de los estados-nación, sino también de los ciudadanos. Si existe algún tipo de consenso en este sentido, es que la solución a los problemas actuales no pueden ser resultados de manera aislada e independiente, por el contrario se requiere de la cooperación entre estados y entre estado y sociedad si es que se pretende una solución duradera y estable a los problemas que representa el uso irracional de los recursos naturales.

En este contexto, la Universidad desde hace un año se incorporó conjuntamente con otras instituciones de educación superior a un proyecto de escuelas sustentables que han derivado en las primeras acciones particularmente en las sedes de Galeana y Ayala, lo que ha servido para que estas sedes reciban apoyo financiero de una agencia de cooperación del gobierno de Canadá.

La UPN como espacio de formación de profesionales de la educación tiene el compromiso de formar a sus estudiantes no sólo con una alta capacitación técnica, sino con valores comprometidos con el mejoramiento de las comunidades a las que vaya a servir y la sociedad en general. Por ello el enfoque de este proyecto ha sido de tipo

participativo para fomentar la incorporación de toda la comunidad universitaria en los compromisos y actividades propuestas por este proyecto tendientes a mejorar las condiciones de sustentabilidad y convivialidad.

El proyecto ha pretendido articular un conjunto de acciones aplicadas en las distintas sedes a partir de diagnósticos de las necesidades propias de cada sede, y la integración de otras actividades que se apliquen de manera conjunta entre las tres sedes. Comprende un conjunto de áreas de intervención como ahorro de energías, adaptación de espacios y prácticas sustentables.

Objetivo general:

Fortalecer la adopción de hábitos y actitudes de la comunidad universitaria la UPN Cuernavaca que se traduzcan en un consumo más racional de los recursos, naturales y energéticos.

Objetivos Específicos:

Tener una composta activa que funcione para utilizar los residuos orgánicos del plantel, y así ocupar la composta para las áreas verdes del plantel y el jardín de flores y frutas.

El objetivo será diagnosticar, recuperar, cuidar y dar mantenimiento a las áreas verdes del plantel así como el jardín de flores y frutas.

Dar a conocer a la comuni-

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dad estudiantil, docentes, administrativos y trabajadores de mantenimiento el concepto de sustentabilidad y su importancia para crear conciencia en ellos para lograr llevarlos a cabo la separación de los residuos del plantel y promover la importancia de tener botes separadores de "basura" para crear conciencia en la comunidad del plantel así como poder reutilizar o comercializar los residuos.

Realizar jornadas en donde en conjunto estén trabajando docentes, alumnado y personal de mantenimiento, para obtener la recuperación y embellecimiento de las áreas del plantel educativo.

Recuperar y arreglar las áreas que

versidad participen en la elaboración de la composta escolar, reducción de desechos y separación de basura

Los alumnos de licenciatura reciban formación y capacitación sobre el cuidado de sí y de los demás.

Toda la comunidad universitaria haga un uso responsable de los recursos naturales, materiales y energéticos disponibles en la Universidad

Que cada involucrado o interesado comparta sus saberes respecto a los proyectos del plantel.

Lograr tener un plantel educativo con sus áreas verdes, cuidadas y que tengan mantenimiento de los alumnos, trabajadores de mantenimiento y docentes.

Mantener los proyectos actuales para poder crear nuevos proyectos que sean sustentables y viables para el plantel.

Crear un cultura y respeto por la sustentabilidad para que allá una continuidad del proyecto, al igual que tener material de recopilación de actividades para dejar plasmado lo que se ha hecho y lo que puede seguir ocurriendo en el plantel (dejar huella).

Justificación:

Fomentar y apropiarnos del concepto de sustentabilidad para crear en el plantel una conciencia y poder hacer acciones de provecho que sirvan para cambiar la forma de actuar, hacia un camino sustentable, el dejar una cultura responsable de su propio entorno, se trata de dar a conocer lo que se está logrando con cada paso que da-

no estén en mantenimiento para darles una visión sustentable para ser utilizadas por la comunidad de la institución.

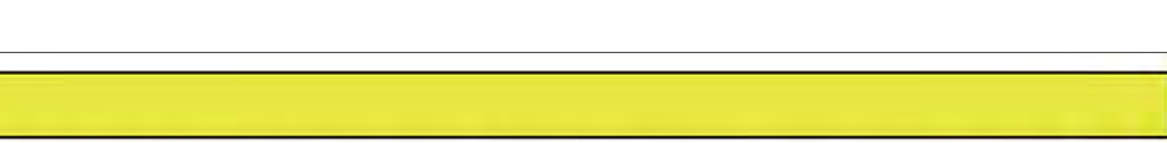
Conocer y llevar a cabo los saberes de la comunidad estudiantil, docentes y de trabajadores de mantenimiento para poder vincularlos al proyecto.

Dar a conocer mensajes sustentables por medio de lonas o folletos la importancia del término.

Metas:

Los miembros de la comunidad Universitaria de la UPN Cuernavaca economizan los recursos como el agua a través de estrategias participativas de los alumnos y personal de la universidad que permitan a la vez el ahorro de recursos financieros.

Los alumnos y personal de la Uni-



mos hacia un plantel educativo sustentable y darnos cuenta que empezamos a crear conciencia a fondo de cómo estamos viviendo, así como el uso adecuado de nuestros residuos, saber cuidar y dar mantenimiento a las áreas verdes del plantel, al igual que el uso adecuado de el papele, el agua y la tierra del plantel trabajando en forma colectiva.

Actividades realizadas durante el 2013:

- Talleres diversos para los alumnos que les forme en el cuidado se si y de los demás.
- Dos talleres sobre elaboración de composta
- Incorporar a los contenidos curriculares de algunas materias los temas de cuidado del medio ambiente
- Realización un sistema de imágenes y símbolos dirigidos a fomentar el ahorro de recursos.

Participantes

Todas las alumnas del tercer semestre de la Licenciatura en Intervención Educativa, alumnos de otros semestres que se incorporen a través del programa de beca salario, personal de apoyo y limpieza, además de los profesores que deseen participar activamente en el proyecto.



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**UPN Cuernavaca:
compartiendo saberes**

El martes cinco de marzo de 2013 salió al aire en el Programa Cosas de Profes que realiza la Escuela Particular Normal Superior Lic. Benito Juárez un spot que realizaron las líderes del proyecto Planteles sustentables: compartiendo saberes.

Días antes se inició el proceso de involucrar a las estudiantes en el proyecto. Ha sido un esfuerzo compartido. Los frutos se verán reflejados en el 2014, gracias a la participación activa de toda la comunidad escolar.

**¡Vamos por
una
sociedad
sustentable!**






Septiembre 2012-
Diciembre 2013

3

Informe
UPN-Galeana



Intercambio
Gaceta iniciativa Galeana

UPN-Galeana: campus sustentable

Desde septiembre de 2012 en UPN Galeana iniciamos una aventura con la sustentabilidad que ha tenido diversos frutos. Lo que a continuación estamos por mostrar es parte de un esfuerzo colectivo que nos ha llevado a reconocernos como un plantel que puede llegar a ser sustentable (con todo lo que ello implica) y que puede aportar mucho a sus instituciones hermanas. Desde septiembre de 2013 iniciamos con la organización del grupo, preparación de los proyectos a realizar, dejamos una muestra de esfuerzo y de cariño:

11/feb/2013 Trasplante de Nonis

Esa ocasión en la casa del profesor Josué Serdán Leyva se llevó a cabo el trasplante de nonis (árboles frutales comunes en la localidad de Zacatepec). La actividad se realizó en su casa ya que en vacaciones invernales el profesor las había sembrado ahí. Como siempre todos trabajaron en equipo. Al final, el profesor protegió las plantas con un insecticida natural, compuesto por cebolla, ajo y tabaco molido.

14/mar/13 Educación para el trabajo, la vida y la salud

El jueves 14 de marzo del 2012. Tuvimos otra actividad que realizamos dentro de la institución. Se realizaron varios platillos sa-



ludables hechos con soya, trigo y piña. Con la soya se preparó un delicioso ceviche (en lugar de camarón lleva soya), además de picadillo (esta vez la soya reemplazó a la carne roja). Con el trigo se hizo una ensalada también bastante rica. Y, otra vez con la soya se hizo agua tipo horchata muy refrescante, con la piña realizamos mermelada y también tepache. Estas actividades las compartimos con los demás compañeros, y al final tuvimos una pequeña demostración con el resto de las personas de la institución. Es importante hacer mención que estos conocimientos los adquirimos gracias a la señora Bety

que es la encargada de la limpieza durante las mañanas en la universidad. Realizamos esta actividad ya que la licenciatura en intervención educativa educa para el trabajo, la vida y la salud. Y como interventores educativos ya sea para trabajar con niños, jóvenes o adultos, somos personas que sentimos que viven y necesitan, entonces nosotros como interventores necesitamos tener conocimientos amplios de cualquier tipo, incluso en la misma casa podemos comenzar a llevarlo a cabo.

3



21/feb/13 visita a un experto en composta y alimentación con nopal

El día 21 de febrero del presente año, el grupo de 6° semestre junto con el profesor Josué tuvimos nuestra primer actividad, la cual fue ir a la colonia "La Azuchilera" en Tehuixtla, Morelos donde se encuentra el centro de compostaje que el señor Vicente Parra Sosa representa. Lo primero que hicimos fue conocerlo y después tuvimos una amena plática acerca de qué dificultades ha tenido con su centro de compostaje. Posteriormente nos enseñó los diferentes tipos de composta y de que están hechos.

Nos demostró que con la corteza de coco se puede hacer composta y nos mostró el proceso de trituración, con lo que incluso se pueden hacer filtros de agua. Después nos dirigimos a un terreno en el cual tiene sembrado únicamente nopal. Nos dijo sus propiedades de dicho alimento, ya que es muy bueno para la salud y nos comentó de unos borregos que son alimentados con nopal, que ese fue nuestro último punto de visita, y efectivamente los borregos fueron alimentados con nopal. Seguiremos en contacto con él para seguir aprendiendo más, y compartirlo con todos.

Asimismo, se han desarrollado diferentes actividades en el plantel, mismas que han representado la organización de todos los grupos de la Universidad y también de los profesores, estas han sido denominadas "Jornadas de trabajo universitario en beneficio de UPN Galeana". Lo anterior ha tenido como objetivo lograr la estética de la institución mediante el trabajo colaborativo aplicado a la resolución de pequeñas problemáticas detectadas. Entre los resultados que hemos obtenido ha sido acondicionamiento de áreas verdes, un estacionamiento, mantenimiento a mobiliario e infraestructura, convivencia entre alumnos.



4



27 de mayo de 2013

Una comisión de profesores presentamos a Dylan y Lea a los estudiantes de la Universidad Pedagógica Nacional sede Galeana. El recibimiento fue muy cálido por parte de nuestros estudiantes quienes cantaron, mostraron su afecto y dijeron estar muy dispuestos a trabajar en el proyecto de sustentabilidad.

29 de mayo de 2013

Se realizó una visita al Instituto de Energías Renovables donde nos mostraron el cocedor solar que podría estar en UPN-Galeana. Asimismo, investigadores del lugar nos

En el evento se les hizo entrega de recursos económicos a los estudiantes para llevar a cabo los proyectos de sustentabilidad que han planeado. Los proyectos son la elaboración de un jardín de plantas medicinales, la creación de una cocina ecológica y la colocación de lámparas de luz solar en la calle.

17 de junio de 2013

Estudiantes y profesores de la Universidad Pedagógica Nacional, la Normal Benito Juárez y una representación del Dawson College realizamos un "Círculo lúdico-deportivo", en la Unidad Deportiva Acapantzingo" (recinto ferial) bajo los siguientes objetivos:

- Generar redes de comunicación entre los estudiantes y profesores
- Fortalecer sus procesos de identidad profesional y los lazos interinstitucionales
- Hacerlo partícipes del proyecto Planteles Educativos Sustentables. Compartiendo saberes.

Se realizaron estrategias que combinaron lo lúdico y lo deportivo con intenciones de convivencia y aprendizaje.



mostraron el Laboratorio Nacional de Sistemas de Concentración Solar y Química Solar, uno de los más importantes del país; además de explicarnos la importancia de la energía del sol y su utilización en distintos ámbitos de la industria y la vida cotidiana.

7 de junio de 2013

Iniciamos, a partir de las cinco de la tarde, la Jornada denominada un día por la UPN, en el que participaron estudiantes y profesores de toda la escuela, hubo representación del Dawson College con Dylan y Lia, de la Normal Superior Benito Juárez con Luisa Montes, y de Ciudades Verdes AC representada por Margarita Hurtado.

Taller herramientas y estrategias para construir planteles sustentables

6 y 7 de julio de 2013

Dio comienzo al taller Herramientas y estrategias para construir planteles educativos sustentables. Se comenzó con un retiro en Tashirat, en Santo Domingo, Tepoztlán. Durante el fin de semana los participantes trabajaron el tema del liderazgo y las dinámicas de grupo como el pilar que sostiene el trabajo para la sustentabilidad. Guiados por Chris Adam los participantes se conformaron como grupo para trabajar juntos en transformar sus planteles educativos en instituciones sustentables.

8 de Julio de 2013

En esta sesión trabajamos el panorama global de la crisis ambiental enfocándonos en la globalización, el cambio climático, biodiversidad y energía. También juntos exploramos el concepto de sustentabilidad.

9 de Julio de 2013

Trabajamos mapas conceptuales como herramienta para organizar nuestras ideas y



5

exploramos que es para nosotros un plantel sustentable. También tuvimos la oportunidad de aprender más sobre el cambio climático con una charla dinámica de Jeffrey Barnes y jugando Naranja Dulce de Margarita Hurtado Badiola. También aprendimos a cómo organizar un proyecto de sustentabilidad.

10 de Julio de 2013

Hicimos una auditoria de la basura. Luego

vimos el tema de la biodiversidad y herramientas y estrategias para identificar, valorar, conservar y fomentar la biodiversidad en nuestros planteles.

11 de Julio de 2013

Como parte del curso taller visitamos El Fresno, un espacio para el aprendizaje de ecotecnias. Fue una rica experiencia para todos. Aprendimos sobre los jardines verticales.

6



12 de Julio de 2013

Este viernes seguimos con el tema de la biodiversidad y trabajamos la importancia de la pertenencia cultural en los proyectos de desarrollo sustentable. Fue el último día en el curso taller de Jeffrey Barnes y de Chris Adam. También aprendimos sobre el uso de indicadores de sustentabilidad y el uso de puntos de partida. Tuvimos la visita de una representante de FIDE quien nos habló sobre estrategias para el ahorro de energía y también nos ayudó a identificar recursos para hacer auditorias de energía y para acceder a créditos para la implementación de energías alternativas.

15 de Julio de 2013

Continuamos en el curso taller. Una de nuestras tareas es trabajar un proyecto de sustentabilidad. Ese lunes nos dedicamos a planear y a ejecutar nuestro proyecto. Para esto contamos con el apoyo de Felipe Tijera quien anteriormente nos dio un taller de muros verdes.

16 de Julio de 2013

Tuvimos con la participación de Teresita Maldonado de CECADESU-SEMARNAT. Nos dio una charla sobre la importancia de “ambientalizar el curriculum”. Compartió

con el grupo las bases de la educación ambiental y de sus principios. Luego nos enriquecimos con una presentación de Gisela Frías sobre “estrategias de organización para planteles educativos sustentables”. Aprendimos sobre diferentes formas de organización en una comunidad educativa. Luego Katie Wheatley nos habló de una experiencia de organización estudiantil. Compartió con nosotros su experiencia como miembro del grupo Planeta Verde, de Dawson College.

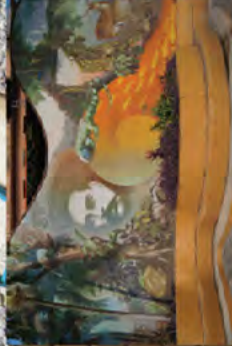
17 de Julio de 2013

Fuimos a visitar la casa de César Añorve quien nos recibió con gran calidez. César compartió con nosotros una perspectiva crítica pero también esperanzadora sobre el uso del agua. Tendrán ustedes mismos que visitar este mágico lugar y ver el baño seco, los sistemas de filtraje de aguas jabonosas, los sistemas de captación de agua de lluvia, los filtros para bebederos públicos y muchas ecotecnias más.



18 de Julio de 2013

Fue la clausura del curso taller. Un día de aprendizaje y de hacer redes para la sustentabilidad en planteles educativos. Contamos con la presencia de Mercedes Pesqueira, Alberto Miranda y el Secretario de desarrollo sustentable, Topilzin Contreras. Para la clausura también nos acompañó el maestro Carlos Gallardo, director de la Normal Superior Benito Juárez.



7

**Curso de verano para niños en UPN Galeana.
Tema: sustentabilidad
(22 de julio-2 de agosto 2013)**

8



Día 1: Inventario de biodiversidad. Las maravillas que detectaron los niños en la UPN.

**Día 2: Hagamos macetas.
El uso de material
reciclable.**



9



10



**Día 3: Inventario de basura
en la UPN. ¿Qué podemos
aprovechar de lo que
tiramos a diario?**

Día 4: Cuidemos al planeta. Cantemos y convivamos en pro de un consumo responsable.



11

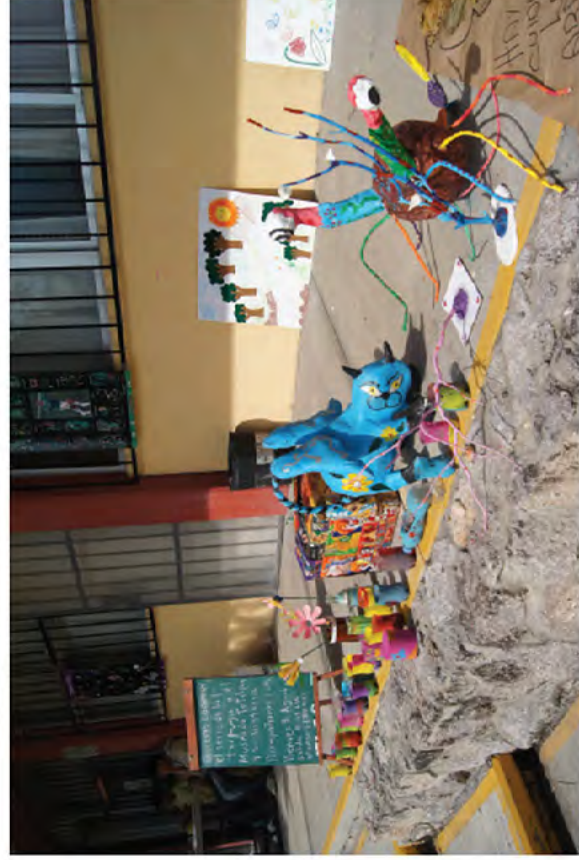
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Día 5. Promovamos el deporte. Nos divertimos con el uso de material reciclable.



**Día 6. La tecnología verde.
Busquemos en la red tips
para cuidar el medio
ambiente.**



13

14



**Día 7. ¿Cómo cuidar el
agua y la energía? Lluvia de
ideas entre los niños.**





Día 8. Rally de sustentabilidad. ¿A qué nos comprometemos como niños?



15



Día 9. Arriba el telón. El teatro y la música como alternativa para cuidar el ambiente.



16



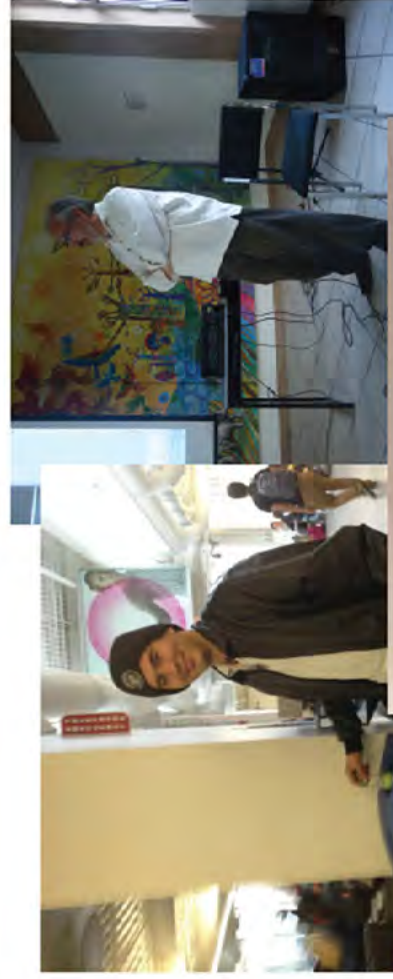
**Día 10. Clausura del curso.
Visita guiada al cerro de la tortuga y al museo comunitario San Esteban Tetelpan.**



17

En agosto se logró la incorporación al currículum de educación ambiental; además de recibir formación a través del contacto de especialistas. Asimismo, en octubre de 2013, un estudiante de UPN Galeana visitó el Dawson College en Montreal Canadá, con el objetivo de aprender sobre la historia y proyectos de sustentabilidad en Dawson College. Participar en actividades organizadas por Dawson College para compartir la experiencia de la sustentabilidad en un contexto diferente. y, finalmente, se incorporaron estudiantes del proyecto beca- salario, quienes trabajan en beneficio de la escuela todos los miércoles y sábados desde el 28 de octubre. Finalmente, el 11 y 12 de noviembre se realizó la evaluación del curso.

Elaboró: Juan Salvador Nambo
y Billy Hernández



18

Annex VIII

Activity Report

Tools for Environmental Education: A workshop for facilitating student engagement, learning and environmental action

By: Gisela Frias and Margarita Hurtado

**Funded by: Dawson College's Faculty Professional Development Program
Faculty Group Training**

Participation and Methodology

The workshop: "Tools for Environmental Education" was part of the Participatory Action Research project: "Sustainable Campuses: Sharing our Knowledge for social and environmental sustainability" It took place on Thursday April 25 and Friday April 26 2013, from 2:30 to 5:00 and it was also part of Sustainable Dawson's Earth Week's activities.

The workshop had the participation of Dawson College faculty who teach environmental content in their courses. Participating faculty came from different programs including social science (sociology, geography and anthropology), science, business administration and CRLT. In addition, a teacher from the Mexican university "Normal Superior Benito Juárez" and an undergraduate student from the Mexican National Pedagogical University also participated. Several faculty members who expressed interest in the activity but could not attend were included in the follow up of the workshop and we have shared with them the resources made available to the workshop participants.

The methodology included group integration activities aimed to generate an atmosphere of trust and cordiality to favor alternative forms of expression to those that teachers normally use in their classes, such as play and expression through art. Through an experiential approach participants engaged in artistic expression, theater, played games, shared laughter and tears, engaged in human contact through hugs or holding hands and established a dialog of knowledge. All these exchanges gave to the group the opportunity to learn that these provide complementary and alternate paths for the treatment of environmental issues.

Day One: A Post Card from my Region

During the first session of the workshop, the technique entitled "A postcard from my region" was applied. Based on the tradition of sending postcards from places we have visited to our family and friends, participants were asked to make a post card from a place that was significant to him/her. Participants were invited to make their own postcard to represent the place where they were born, where they grew up, or lived a meaningful experience. Then the facilitator presented various techniques and materials that could be used for making your own postcard. To foster a deep personal contact, it was requested that this be carried out in silence while classical music played in the background (in this case, Mozart was our partner). Next, participants were asked to share their post card with the group and to describe it. At this moment, the facilitator recorded different information such as: elements of the natural environment, identified environmental/social changes, emotions, feelings and desires. Special attention was placed on identifying situations that the participants wished to transform so these could be used to propose and motivate action.

The attitude of openness, willingness to work and cooperation of the participants made this activity a success that undoubtedly served its purpose. Two articles have been attached to this report that were made available to the participants in an electronic file (PDF). One is a detailed guide to develop the technique: "a postcard from my region" and the other frames this activity in theoretical terms within the field of popular environmental education. These are original materials authored by Margarita Hurtado, translated from Spanish to English, to be used in the workshop and to enable participants to delve into this topic, to reflect and to apply what they have learned with their groups.

Day two: Theater and Playing Games

During the second workshop session, the facilitator introduced to the group the technique: "Tell me a story". The objective is to treat the concept of sustainability through the reading and staging of stories that will motivate the reflection and action in relation sustainability. All the members of the group got involved with a lot of enthusiasm in this activity. Participants were divided in two groups that read two different stories. Each group represented their story through theater. Participants enjoyed the activity and found the motivation to apply this technique in their classes.

The facilitator introduced to the group two board games used to motivate discussions on local environmental issues and action. The "Eco-game" and "Aqua-game" were described and participants had an opportunity to play the "Aqua-game". This board game is for those who are interested in critical issues related to water such as water availability, cleanliness, and long-term conservation. The game aims to engage players in identifying problems related to water at the community level and in promoting solutions. By playing the "Aqua-game", people can carry out a diagnosis of the water situation in their communities. This is done in a collective and fun way. The outcome can serve as a starting point for taking concrete actions to improve our everyday water culture.

During the second workshop session the group became involved in the tools presented (doing theater and playing games) and lived the experience of learning in an alternative way. The focus is placed on the realization that knowledge doesn't have to come from the "teacher who knows everything", but that it can be constructed through the dialogue of knowledge, in a playful way and that it can be action-oriented. Participants are expected to be able to apply these techniques in their classes. Above all, participants can create other similar tools to respond to its cultural and environmental context.

Logistics

The workshop took place in room 3F4. This room was chosen for the activity because it was appropriate in terms of size, lighting, layout of furniture and equipment. The room's conditions favored the participatory, creative nature of the workshop activities. Logistical details such as the availability of muffins and cookies, fresh and delicious fruits, coffee, water and tea (generously provided by the Academic Dean's office), helped give the workshop a relaxed and convivial atmosphere. Thanks to those who were behind the scenes this was made possible.

Comments from Participants

Following the workshop participants were asked to provide feedback via email. These are some of the comments received.

“I thought that the workshops were a great example of taking simple ideas and having participants engage in sharing their perspective on the world and getting to know the perspective of others.”

“From a group dynamic point of view, participants had to reflect, actively listen, show patience, sequence thoughts and were made aware that there are many teaching strategies that can be used to get a point across – not just dry lecturing...”

“I liked the workshops very much and it was a treat to be a participant! Margarita’s patience, knowledge and soft tone created a comfortable setting for all...so important!”

“It was really fun (and educational) to be “taught”. I really enjoyed the introduction exercise where we had to introduce our “compadres” or “comadres”. It was a great way to feel welcome and a part of the group.”

“The board games were also lots of fun. I would have liked if the pace was a bit quicker - if I were teaching I would probably put a timer on how long people could talk to keep the game moving quicker.”

“It was REALLY cool to meet people from the Mexican universities/colleges. I felt a sort of solidarity for our planet and was left feeling like I had connected not only with people but to a common desire to improve our earth.”

“The translation was very well done! It’s healthy (in my opinion) to learn to communicate and it is VERY good for us English speakers to be reminded that English is not a given. I also like when people can express themselves in their mother tongue as it gives a deeper glimpse into their way of expressing themselves and communication style.”

“I’d love to participate again in the future”.

“Participar en el taller impartido por Margarita Hurtado fue para mí la oportunidad de tocar más de cerca la esencia de la actitud que como coordinadora del proyecto de sustentabilidad en la institución educativa en la que trabajo debo asumir, porque me permitió conocer in situ la sensibilidad de mis compañeros participantes, me dejó constatar que no hay distancias, ni idiomas o experiencias y formaciones profesionales que se interpongan, más bien al contrario, se trata de sumar y toda opinión y sugerencia es siempre bienvenida.”/ “To participate in a workshop taught by Margarita Hurtado was for me the opportunity to be in touch more closely with the essence of the attitude that as a sustainability coordinator in my institution I should embody. It allowed me to realize in situ, the sensitivity held by the other participants. It allowed me to see that there is no distance, language or professional experience and training that may act as barriers but quite the contrary. It is all about validating all opinions and suggestions”.

“Pude encontrar la magia de la condición humana que se esconde tras un dibujo, un libro de cuentos, un juego de mesa o un diminuto guiñol que se ofreció como portador de mi sentir, de mí decir y de mi querer hacer.”/ I was able to find the magic of the human condition that is hidden behind a picture, a story book, a board game or a tiny puppet who volunteered itself as a carrier of my feelings, my words and my doing”.

“La sencillez de las actividades no dejaba ver de primera mano la profundidad de su propósito, había que irlo descubriendo, irse contagiando, involucrando y dejarse llevar por algo más que la razón, en otras palabras me permitió construir y construirme junto a otros.”/ “The simplicity of the activities hid the depth of their purpose. You had to discover it by watching it, by being touched by them, by becoming engaged and letting yourself be taken by something more than reason. In other worlds it allowed me to

construct and construct myself along side others.”

“Interactuar con maestros y maestras con los que me une el quehacer profesional que tanto amo, me dejó la voluntad llena otra vez, renovada, dispuesta y creativa.”/ To interact with teachers with whom I am bound through a profession that I love so much left me full again, renewed, willing and creative.”

“Y después de todo lo anterior, así casi sin darme cuenta, estaba más capacitada, conocía diferentes alternativas de intervención para comunicar a la comunidad educativa en que me desenvuelvo cada día, y sin duda con un caudal de nuevas ideas para poner en práctica.”/

“And after all this, and almost without realizing it, I was better qualified, I knew different intervention alternatives to communicate with my educational community where I work every day, and no doubt with a wealth of new ideas to implement.”

“Participar en el taller impartido por Margarita Hurtado ha sido un regalo que valoro en mucho y que me da una pauta para seguir por el rumbo que he iniciado en compañía de todos y todas con quienes tuve la suerte de vivirlo.”/ “To participate in a workshop taught by Margarita Hurtado has been a gift that I highly value. It gives me guidelines to follow the path that I started in the company of everyone with whom I had the fortune to share it with”.

“El haber sido participe del taller dio una gran oportunidad para que los participantes nos conociéramos y colaboráramos los unos con los otros, aprendiendo de todos, pero sobre todo adquiriendo conocimientos y alternativas de enseñanza. El taller, para mi persona resulto una experiencia única, de la cual se puede rescatar que nosotros, como educadores, podemos hacer uso de las distintas técnicas para educar a los sujetos de forma significativa y divertida a través del dialogo y la reflexión. Por lo tanto el taller es de gran utilidad para aprender de manera distinta, concentrando y conectando el pensar y sentir, para transmitir a muchas personas más.

“Being part of the workshop provided an opportunity for participants to get to know each other and to work together, learning from everyone, but especially acquiring knowledge and teaching alternatives. The workshop, for me was a unique experience. As educators we can use different techniques to educate subjects in a significant way that is fun and promotes dialogue and reflection. Thus, the workshop is very useful as a means of learning differently, concentrating and connecting thinking and feeling, to convey to many people.”

“After the workshop I was left with the conviction that in order to transform the world we must transform our teaching practice. Knowledge is not enough. We will not change our reality by increasing just how much we know about environmental issues. We must engage our core, all of ourselves. As a teacher, for me, this means opening my classroom to the unexpected, to self expression of emotions and creativity, to expressions that cannot and maybe should not be evaluated”.

“I truly enjoyed having the opportunity to share such a meaningful activity with other Dawson teachers. I feel that we connected and think it is the beginning (at least for me) of working more closely with others. I dream of the creation of a teaching/learning community around sustainability”

“For the most part I thought the workshops worked well. They make teachers think about alternative methods that can be used to get students to reflect on sustainability and environmental issues. I must say that I was not, at all, expecting workshops that were oriented towards more informal learning through the promotion of creative artistic, theatrical renderings, and semi structured knowledge acquisition to promote environmental awareness; the first being through drawings, painting and montages, the second being through play acting of stories, and the third being through the use of board games. The activities were not ones normally thought to be associated with post secondary social science pedagogical methods (though, to be fair, the workshops were open to all programs here at Dawson). It is for this reason why I had some difficulty reflecting on how I could integrate these methods into my teaching. Yet, by reflecting hard, I have been able to see parallel activities for each of the three approaches in the way

different teachers here at Dawson have developed their alternative methods to the simple lecture format. On the artistic approach, I personally have had students generate “perceptual maps” of their neighbourhoods and of the greater metropolitan area of Montreal. On the theatrical approach some teachers have their students role play as “stakeholders” in the context of a development project. On the board game approach, some teachers have had their students work with software, such as “Sim City” or Google Earth in order to have the students learn more informally about a particular subject. The workshops themselves were very “hands on”, which forced those attending to actually participate in the learning process from the position of the student. To these ends, the workshops, though very novel, succeeded!

“Some pedagogical elements, unfortunately, were left untouched that would have otherwise made the experience more fulfilling. The instructors should provide some guidelines or conceptual ideas as to how a teacher can establish a timeline behind the development, preparation and execution of the activities. This type of guidance would be useful in helping teachers reflect on how much of the course would be taken up by such an activity. Another valuable piece of guidance would be the development of some type of generic grading system template that can be applied to exercises that are oriented towards “creative representations” of topics, and/or that ties the creative component to knowledge based content (i.e., class readings, or scholarly internet sites). Although the exercises were very interesting and interactive, we, as teachers, always have to situate these activities in the context of the fulfillment of government competencies and the measurement of a student’s performance. It is for this reason why I think that subsequent presentations should have a component that addresses the development of a timeline template for the completion of the different pedagogical components, and should address the application of a “grading tool or matrix” as a guide for those who will be applying these pedagogical exercises.”

Participants

Names	Departments	Day one	Day two
Chris Adam	CRLT	x	x
Jennifer Smith	Anthropology		x
Jeffrey Barnes	Geography		
	Environmental Studies		
	Profile Coordinator	x	x
Clifford Hastings	Geography (Chair)	x	x
Gisela Frias	Geography	x	x
Tonia De Bellis	Biology		
	Program Coordinator		
	Environmental Science	x	
Helen Stavaris	Business Administration	x	
Anna-Liisa Aunio	Sociology		x

Faculty with whom we are sharing results:

Fiona Hanley -Nursing

Ian MacKenzie - English

Genevieve Raymond-Parent –Physical Education

Non-Faculty members with whom we are sharing results

Maria Barile – Project Co-director Adaptech Research Network / Réseau de Recherche Adaptech

Cindy Elliott – Sustainable Dawson Coordinator

