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Making the Path as We Walk It: Changing Context and Strategy on Green Street

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Abstract:
This is a story about how a national Canadian environmental education program (Green Street) evolved in unpredictable ways and about the particular twist in the road that led program stakeholders to focus on scaling up in different ways than originally imagined. The "twist" occurred when the program reached the initially perceived "peak" in a particular "fitness landscape," where a focus on policy advocacy (and specifically curriculum reform) seemed a logical next step. However, noting examples within the program of deeper student engagement (with concomitant learning about what constitutes authentic experience); the development of place-based programs that employed extensive and diverse school-community partnerships; the aligning of environmental stewardship with broader notions of active citizenship; and a movement with the potential to engage teachers and students alike (Quebec's EVB or Brundtland Green School movement), the program team instead decided to focus on further development of these and other innovations to generate new models and experiments we could all learn from. This is the story of a program increasingly participating in a movement-building process rather than focusing on program development and policy advocacy.

Keywords: environmental education, student engagement, teacher engagement, school-community partnerships, voluntary sector role in education, educational programming

It has been ten years since the J.W. McConnell Family Foundation, a private foundation based in Montreal, launched a pan-Canadian environmental education program called Green Street. The goal of the program was to encourage active participation of young people in environmental stewardship. Its strategy centred on supporting voluntary sector organizations in offering quality programs to schools that responded to both students' interests and teachers' needs. While the program goals and core values remain the same, the strategy has evolved considerably. This paper documents this evolution with a view to analyzing the change process and to extracting lessons learned that are of potential interest to both educators and program managers.

The origins of Green Street

Throughout the 1990s, environmental non-governmental organizations (ENGOs) had been approaching the J.W. McConnell Family Foundation for support in offering environmental education programs in schools. These ENGOs had identified K-12 programming as a potentially effective means of educating and engaging emerging environmental stewards. They had begun to offer some programs with support from the McConnell Foundation and others, but felt that they were not reaching more than a small minority of classrooms. Foundation staff agreed that the education of children and young people was a necessary component of working towards a sustainable future. They also suspected that environment-focused activities could be one vehicle for engaging

students in learning, an area of interest to the Foundation at that time following its recent support to a national study that highlighted the need to increase student engagement in their own learning (Smith et al., 1998).

The Foundation thus commissioned two studies in order to better understand the type of programs teachers and students needed, and to identify the barriers preventing teachers from using programs offered by environmental organizations. Based on the outcomes of these studies and lessons learned in building other national programs, the Foundation embarked on the development of Green Street/*Ma rue verte* (GS/MRV), a pan-Canadian environmental education initiative that sought to improve the quality of programs offered by ENGOs and facilitate easier access to them.

Against this background, in June of 1999 the McConnell Foundation's trustees approved funding of $5 million over five years (school years 1999-2004) for Green Street. The program aimed to reach 500,000 of the 5 million K-12 students in Canada, primarily by appealing to students who would be motivated to contact the program clearinghouse via the Internet to identify programs that they and their teachers could order. It rapidly became clear however that students were not well placed to influence the types of programs that would be used in their schools and the target audience soon shifted to teachers.

The basic mechanism by which Green Street has operated since its inception is through an Internet site www.green-street.ca where teachers can choose from a variety of quality-controlled programs offered by ENGOs (a list of ENGO partners and their programs is available on the site), in accordance with grade level and subject taught, and dependent on availability in their regions. Teachers book the program on-line and it is delivered by an ENGO program provider, which receives funding from Green Street for the delivery. Both ENGOs and teachers are also able to access other support services through Green Street, allowing them to enhance their capacity to offer effective programs to students.

Increasing quantitative success and the more nuanced story behind it

Green Street evolved from reaching 1,500 students in its first year to over 52,000 students in 2003-2004, to delivering 3,456 programs to 123,384 students in 2004-2005 (Staniforth, 2005). Participating organizations reached many thousands more via other means, and often cited their affiliation with Green Street as enabling them to overcome teacher resistance.

While the numbers indicated that the program was opening new doors, the in-depth evaluations, which have been a feature of the program since the beginning, sometimes told a more nuanced story. For example, based on observations during 2001-2002, Green Street evaluator Sue Staniforth (2002) stated that: "Although teachers and students expressed enthusiasm and positive support for the Green Street programs, there was little evidence that the programs were transformative experiences that provoked and inspired students to further environmental

Student Engagement

Efforts in this direction continue: In 2005, one of Green Street's program providers, Sierra Club of Canada-BC Chapter, began providing on-going coaching and coordination to a national Youth Advisory Committee, which came to play an increasingly active role in program policy. More recently, two former high school student members of Green Street's Youth Advisory Committee became the managers of Green Street's Youth Engagement program (YEP).

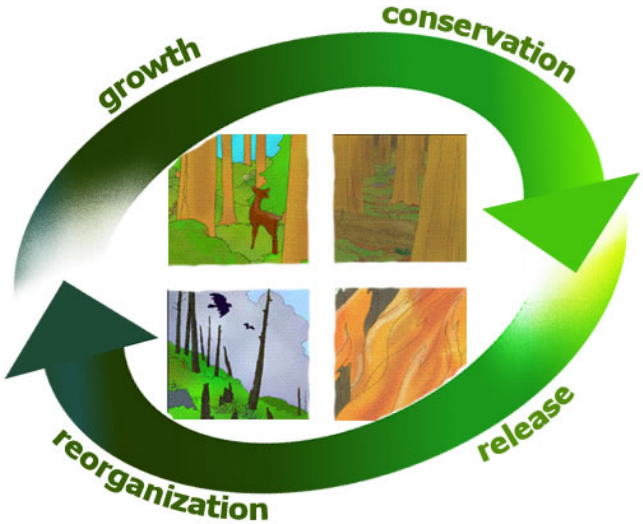
The YEP focuses on providing input to the development of the Green Street program and also on creating opportunities for students to go beyond their school-based experiences. The latter include paid internships with Green Street's ENGO partners. Students can also participate in training programs; network with other engaged youth; and seek bursaries for their own projects.

stewardship" (p.2) and in 2003-2004 she noted that while students (and teachers) ranked the quality of presentations highly, only 31.6% of students said that they saw opportunities for further engagement as a result (Staniforth, 2004). Although student engagement had been a focus from the outset, there was obviously room for improvement.

Some innovations took place at the program provider level: involving secondary students in delivering hands-on programs to elementary students, for example, as in Ducks Unlimited's Wetlands Centres of Excellence, a program introduced in 2003. The program also invited some youth-led organizations, including The Otesha Project (which joined Green Street in 2004), to deliver programs. All providers were encouraged to operate with the assistance of youth advisory committees, and a workshop was offered to equip students to conduct evaluations—using focus groups and surveys to capture attitudes and priorities among their teachers and peers. As a result of these and other efforts, the "see opportunities for engagement" score eventually rose to 74% in 2004-2005 (Staniforth, 2005).

To the extent that Green Street seemed well on its way to reaching the quantitative targets that had been established at the outset (although not quite as quickly as hoped), it can be said to have helped overcome some of the barriers that had been identified prior to the program's inception. Student engagement was being addressed, and several complementary players were supported – including Green Teacher magazine, which was distributed to participating teachers, and the Canadian Network for Environmental Education and Communication (EECOM), which received a grant to establish a paid secretariat. Within Green Street, a "community of practice" (Lave and Wenger, 1998) evolved which included students, teachers, environmental educators, and academics.

Towards the conclusion of the first phase of the program (1999-2004), stakeholders sought to formalize some of the gains that had been made—program standards were benchmarked (Green Street, 2003), and plans were developed to seek changes in provincial curricula. These were logical next steps in the "adaptive cycle" as the program moved towards "maturity" or "conservation" (Holling, 2002). However, several things happened to disrupt what might have constituted a "straight line" evolution of the initiative.



The adaptive cycle, first described by the ecologist C.S. Holling (2002) is one thought provoking way to look at the life cycles of social innovations (and often organizations) as they are invented, tested, and spread, then decline and either disappear or re-emerge as new approaches or entities.

The Green Street community of practice thinks about how to go to scale and finds itself in a fitness landscape

Throughout 2004 the Green Street community of practice was engaged in a process of reflection regarding where to go next, the results of which were summarized in *A Proposed Framework and Implementation Strategy to Promote Environmental Learning and Sustainability in Canadian Schools* (Green Street, 2004). The document focuses on six themes that together were expected to form a strategy for moving forward, including creating a culture of Environmental Learning and Sustainability (ELS); supporting youth engagement; providing support for educators; advancing relevant education policy and curriculum; supporting networks that promote ELS; and reviewing and encouraging research in ELS.

All of these things made sense at that time from the perspective of Green Street stakeholders viewing the situation. However, in the coming months Green Street did not proceed calmly towards maturity as expected. It instead found itself in a process of "creative destruction" or "release" (the phase of the adaptive cycle that is generally represented by the forest fire metaphor). The program was clearly no longer on a straight path. It was in a "fitness landscape."

Complexity scientist Stuart Kauffman (1996) uses the term "fitness landscape"—a metaphor drawn from evolutionary biology—to describe what occurs when an effort is made to change a system, pointing out that neither the system itself nor the intervention is sufficient to account for what actually takes place. Instead, as Westley et al. (2006) express it,

> [W]e need to think about evolution more as a movement on a rugged landscape that shifts as we try to move across it---a fitness landscape…If our goal is climbing the highest summit, how do we figure that out? We can see only the nearby peaks. We may believe we're climbing the highest mountain only to find yet another range lies beyond with even higher peaks. Now add another layer of complexity---that the landscape evolves as we move across it---and we have a more accurate image of the challenges of social innovation. Not only do we face a rugged landscape where we may not be able to see beyond our current location, but the peaks themselves are shifting as a consequence of our actions and the actions of others. (pp. 202-203)

So how did the Green Street community find itself in this fitness landscape and how did it figure out what to do next?

Green Street was coming to the end of its first phase in 2004. This "phase" was defined by the McConnell Foundation's five-year funding commitment. The Foundation was not prepared to simply renew funding for Green Street to continue doing the same thing because the Foundation's strategy is focused on seeding and/or scaling up "social innovations" (Pearson, 2007). Green Street had been funded throughout the stages of exploration (or "reorganization" when seen in terms of a continuous adaptive cycle) and early growth. It was time for the stakeholders (which included the McConnell Foundation itself) to demonstrate how it could and would scale up.

One way to scale up is simply to do more of what you are doing. It was clear however to stakeholders (particularly the Foundation), that adding resources to multiply the available programs until they reached every student in the country, and thereafter sustaining them indefinitely, was neither efficient nor feasible. A system level change was required and, as often occurs in "mature" systems, thoughts turned to standard setting and benchmarking—and to policy. In the domain of education, policy advocacy is often concentrated on curriculum change, which in Canada generally means attempting to effect curriculum change at the provincial level.

As Green Street was completing its first phase, its success to date had attracted the interest of new partners that were ready to help support it to make that logical next step to the policy arena. Given this opportunity, and an oft observed tendency within organizations for resources to flow towards the top or centre of organizational structures—where the power base is situated, Green Street resources appeared poised to concentrate around one theme of the 2004 Green Street strategy document: "advancing relevant education policy and curriculum."

And then some stakeholders looked down from the peak on which we were standing and took notice of how the landscape had evolved as we had walked across it. In effect, from the vantage point of five years' experience and many people's reflections, it appeared that the lack of formal environmental education curriculum was not a significant obstacle. Green Street had confirmed the findings of Smith et al. (1998) and Rogan (1999) that provincial curricula were not a key factor in the existence of effective environmental education within schools. We had seen instead that creative and engaged teachers (also identified as a key factor by the above authors) working with voluntary sector partners and with support from their schools' administrations could achieve a great deal within the context of the existing curricula.

More importantly, we realized that what was exciting and successful about Green Street had little to do with policy. It had to do with innovating at the margins—at the level of actions by teachers and students and program providers at specific locales, and at the connections between them, some of which exhibited "movement-like"[1] tendencies. Such developments were noticeable in the rapid growth and evolution of organizations like Evergreen and The Otesha Project and of the "EVB" (or Brundtland Green Schools) program in Quebec[2], which suggested the possibility of social and environmental transformation of a higher order than simply increasing the numbers of students taking environmental education programs. From this perspective, it seemed that Green Street's scaling up strategy should more logically be one of continuing to experiment with a range of creative approaches and developing the multi-level relationships that would be required to disseminate these innovations to other parts of the "environmental education system".

Tensions arose among those looking at the fitness landscape from different angles and during 2005, Green Street "creatively destructed" (and there were moments when it was not clear to many of the people involved if the program would survive the process). A difficult transition was undertaken in late 2005 and early 2006, with the Green Street Steering Committee (which had representation from the various stakeholder groups) coming together to redefine program direction and select a new managing secretariat.

Since 2006, Green Street has again found itself in a "reorganization" phase within the adaptive cycle, with new ideas and resources to work with (i.e., all of the "matter" released by the "fire" in what was verging on a "mature forest"). The program has thus begun a second round of experimentation (with an emphasis on pilot projects), continual reflection, and evaluation of what works and what does not. The rest of this paper will focus on some of the thinking and action that has emerged from this process, and give some sense of where we think Green Street is going from our current vantage point.

Mapping the Path

From the beginning, the learning process that Green Street hoped to stimulate was as much affective as it was cognitive. According to the 1999 proposal approved by the Foundation's trustees, Green Street was to be:

> [A] national program *to encourage active participation of young people in environmental stewardship*. "Environmental stewardship" implies that students not only learn about the environment, but they actively participate in projects over time that are both related to the breadth of environmental concerns and enable them to take personal responsibility. (McConnell Foundation, 1999, p.1)

The developers of the program wanted students to care, and to have confidence in their ability to act and make a difference now and in the future. Fortunately, they knew that they did not have to choose between engagement and learning. The previously mentioned national study (Smith et al., 1998) had clearly demonstrated that engagement with both the subject matter and with other people in the student's learning community were necessary conditions for learning. This was not a new idea: as Alfred North Whitehead had pointed out in 1929, "the first stage of education is romance" (1929/1967). The above description also reminds us that we are talking about "action" and again no sacrifice of learning is required; most educators are familiar with John Dewey's rarely disputed assertion that we learn best by doing (Dewey, 1938).

The tendency for young people to take a passionate interest in environmental issues, along with the opportunities within environmental education for collaborative hands-on projects, and for developing capacity in systems thinking[3], means that environmental education has the potential not only to educate about the environment, but to educate in general. Environmental education should therefore not be considered as an add-on. The environment has always been an effective integrating context for learning (Lieberman & Hoody, 1998) and its effectiveness has continued to increase as environmental issues have become key concerns for young people and their communities. It can therefore be presumed to meet a variety of curriculum objectives, whether or not they make specific reference to "environment." With all of this going for it, why is action and affect-oriented environmental education not a core part of what schools offer?

The case for engaging teachers rather than curriculum developers

Given that the environment is an integrating context, it is not difficult to design environmental education programs that offer opportunities to develop skills in reading and math, as well as making connections to the content of all other traditional school subjects. Links can also be made to the components common to educational curricula concerning personal and moral development, which often include critical thinking skills, awareness of current events, and the various aspects of citizenship education. In effect, there is little to prevent teachers anywhere in Canada from meeting existing curriculum objectives through programming with a strong environment/sustainability focus.

We have begun to ask ourselves if a focus on curriculum reform may actually reduce teacher engagement and potential for effective sustainability education. Efforts to change curriculum often results in adding things (which is natural because no one wants to have to choose between things like reading and environmental literacy). This can therefore result in the articulation of even more objectives for teachers to cover and test for and therefore further take time away from the integrated and experiential learning that represent effective sustainability education—and the increased specification may further limit teachers in bringing their particular teaching skills and creative ideas to bear, which in turn limits their engagement and effectiveness.

The research conducted for the McConnell Foundation, prior to the development of Green Street, noted several obstacles to getting environmental education into schools:

- teachers were overwhelmed by the number of existing environmental education programs and noted there was little or no quality control (Catalyst Centre, 1999)
- lack of commitment on the part of the province and/or school districts to make environmental education a priority (Rogan, 1999)
- lack of resources, time, and funds (Rogan, 1999)
- some teachers' lack of confidence in their own ability to deliver environmental programs in the absence of specialized training (Rogan, 1999)
- challenges experienced by some teachers in integrating environmental ideas and activities into the existing curricula (Rogan, 1999).

Rogan also notes however that "among these teachers, some were already offering extensive and impressive programs, despite the obstacles that were described" (p.61) and Smith et al. (1998) echo these findings.

Within Green Street, we have been able to overcome many of the obstacles described above by providing: (a) funding; (b) a clearinghouse offering quality curriculum-linked programs; and (c) additional human resources through program providers' contribution of time and expertise. The result, as mentioned above, has been to increase the number of environmental education activities offered in schools—to which teachers and students have responded positively. All of this is good. However we also note that, in parallel, some teachers continue to do the "extensive and impressive" things described by Smith (1998) and Rogan (1999) and that now, as then, the above obstacles and the resources provided to overcome them do not seem to be key determinants. It appears that these teachers and the programs that they employ, often in collaboration with the voluntary sector, share a number of characteristics and seem to be governed by a different set of conditions than those on which Green Street has focused to date.

We have therefore turned our attention to these "innovations on the margins" to elucidate their characteristics and the conditions that support their emergence to reorient Green Street in support of them. Our approach to this "reflection on our practice" has included the development of an evolving set of "Guiding Principles for Sustainability Education" (McConnell Foundation, 2008b) which we are using as a basis for on-going conversations with our colleagues in the field. We hope that this will both help us to understand what we see happening within Green Street and that the Green Street experience will contribute to the reflections of our colleagues on their own work and the ways in which we might collaborate. A number of members of this particular "learning community" came together at a meeting convened by the McConnell Foundation in May 2008. Some of their thoughts are documented in a short video *Learning to Live like We Plan on Staying Here: New Approaches to Sustainability Education in Canada* (Shore, 2008) and incorporated into a further elaboration of the "guiding principles" (McConnell Foundation, 2008c).

We note that many of our observations to date are consistent with published research and therefore will not describe them in detail. We will limit ourselves to a short summary illustrated with some particular examples drawn from the Green Street experience and then focus on how we are attempting to re-orient Green Street based on our current understanding of our work.

Engaging and Engaged Education

The teaching-learning experiences that most impressed Smith et al. (1998) and Rogan (1999) and that continue to impress us as Green Street observers, are those in which teachers and voluntary sector partners "engage" students. We also note that what most characterises these successful "engagers" is their own level of engagement. What do we mean by "engagement"? Smith and his colleagues quote Newmann's statement that: "engagement is difficult to define operationally, but we know it when we see it, and we know when it is missing" (1998, p. 2). They then cite a number of potentially useful definitions for "engagement", which describe it as:

- "more than motivation or the general desire to succeed in school. It involves participation, connection, attachment, and integration in particular settings and tasks
- psychological investment in learning…mastering knowledge, skills, and crafts, not simply a commitment to complete assigned tasks or to acquire symbols of high performance such as grades or social approval
- a dialogue, where the student interacts with more than themself *[sic*]. In order to be fully engaged, a student must be emotionally involved in an inner and outer dialogue with oneself, with the teacher and with the learning environment" (Smith et al. 1998, p.2)

Within the context of Green Street, we have begun to break down the characteristics of engaging and engaged education as follows:

Engaging education involves:

1) "Big ideas" (meaningful and integrated content) - Whitehead (1929/1967) warned us long ago that "the result of teaching small parts of a large number of subjects is the passive reception of disconnected ideas, not illumined with any spark of vitality" (p. 2). This warning has not been heeded; as indicated by Wesch (2008), "the most significant problem with education today is the problem of significance itself". He offers a solution in

pointing out that "when students recognize their own importance in helping to shape the future of this increasingly global, interconnected society, the significance problem fades away" (p. 6). Penny Milton, CEO of the Canadian Education Association, has participated in reflections about Green Street over the past couple of years and has frequently reminded us of the importance of "big ideas". Sustainability itself is a big idea and one that inherently involves making connections, such as between social, economic and environmental issues. One of the strengths of the EVB (Brundtland Green School) model, which has begun to play an increasingly central role in Green Street, is that it focuses on the interrelated values of environmental stewardship, democracy, peace and solidarity. The integration of these values reflects the way that many young people involved in Green Street and other McConnell Foundation programs tell us that they see the world; they do not separate environmental issues from social justice issues. *Engaging in our Communities…as Global Citizens* is a set of educational materials developed within the EVB framework, and now being disseminated throughout Canada by Green Street, that calls upon students to undertake community projects in a way that requires them to reflect deeply on the four values.

2) Student agency – Engaging education involves young people as "actors"—rather than just "learners." Penny Milton has suggested that we stop asking ourselves how to "do sustainability education," particularly given that as a society we have very entrenched ideas of what constitutes "education." We should instead: "imagine a role for children and young people in moving towards sustainability" (McConnell Foundation, 2008a). Many of the most engaging programs offered through Green Street involve taking action, be it creating a garden (Evergreen), restoring a wetland (Ducks Unlimited), constructing a solar oven (Pembina), or setting up a recycling program (EnJeu). Another particularly good example is the *Comité de valorisation de la rivière Beauport*'s "Adopt a River" program, which involves whole schools over an extended period of time (interestingly, this program faced a long wait to be accepted onto the Green Street slate because of its higher cost relative to other programs and the concerns that this raised about accessibility for schools). We have also been impressed by several newer projects developed by organizations within our network, such as Club 2/3's *Magasin du Monde* (where students set up fair trade stores in their schools), and the Sierra Youth Coalition's current effort to bring their post-secondary Sustainable Campus model to high schools.

3) Hope – The action described above requires and reinforces a sense of hope. Engaging education not only allows students to experience "agency" but also avoids eliciting despair by not overwhelming them with visions of global environmental catastrophe on a scale to which they cannot respond---and thus creating the "ecophobia" of which David Sobel (1996) has warned us. Rick Kool (2005), who the Green Street community has to thank for keeping us focused on this issue, points out that: "Putting the weight of the world on children's shoulders is problematic regarding their self esteem and anxiety" and that "reminding students of death-related topics could increase their anxiety and make many increase their attachment to their cultural worldview" (which may not be conducive to sustainability). He therefore tells us: "don't focus on doom and gloom... focus on beauty and wonder and hope and change" (2005, slide 84).

One Green Street partner, The Otesha Project, involves young people in cycling tours that visit high schools and uses theatre to encourage students to first change their personal consumption habits and then ideally go on to take further initiative by becoming Otesha-mentored "Hopeful High School Hooligans." The Otesha Project is infused with hope: its use of art brings colour and humour to its message; its focus on small things that any young student can do does not overwhelm; and there a few things more inspiring than seeing a gang of slightly older youth arrive in the schoolyard on their

bicycles and demonstrate how to live sustainably throughout their visit--“walking the talk” in everything they do.

4) Relationships – Looking at the Green Street experience, “relationships” seems to us to be the most important element of all. They are a common thread that runs through all of the rest. As Smith and his colleagues (1998) point out: “The actions of students, teachers, and parents matter most to student learning; policies at the program, school, district, state, and federal levels have limited effect compared to day-to-day efforts of the people who are most involved in students’ lives” (p.3). Young people need to be inspired, encouraged, and supported to develop the sense of responsibility, the confidence, and the capacities required to fulfill their roles in moving towards sustainability. They also need to feel that they are not alone in the things they care about; that others share their passions and are working together with them to change things for the better. All of the Green Street-supported activities mentioned above involve young people engaged in collective projects with their peers, with older youth, with teachers, and with members of their wider community. As Green Street observers, we have been particularly struck by the tremendous significance of relationships with teachers. Students frequently attributed their engagement in learning and in action to the presence in their lives of inspiring teachers (Staniforth, 2006b).

Relationships with nature also appear to be significant. The Green Street program evaluation reports offer multiple stories of how young people are stimulated by the beauty, complexity and challenges inherent in nature. They recall with great enthusiasm the trips offered through Green Street by ENGOs like the Sierra Club of BC and the Canadian Parks and Wilderness Society, as well as the opportunities to engage with the nature of their own schoolyards and neighbourhoods (Staniforth, 2006b).

We note that “relationships” seem to be a key element in all aspects of “engaging education” and also, perhaps not surprisingly, at the centre of the conditions that support its emergence, as summarized below.

Engaged education requires:

1) Engaging educators - The "engaging education" described above would not happen without engaged educators. Within Green Street, we have seen that in addition to inspiring and supporting students,

> Teachers play a vital role in communication about and initiating projects, communicating to other students, teachers, parents and the wider school community, investigating training opportunities to build their own skills and/or searching out local resource people as support, raising funds and soliciting school board support. A committed teacher obviously plays a pivotal role in the success and long term sustainability of environmental action projects within the formal school system. (Staniforth, 2006a)

But who inspires and supports the teachers? Within the Green Street context, partnerships with the voluntary sector have provided an important source of support, as described below. We have also noted the EVB network's capacity to provide support for engaged teaching in Quebec. The network offers both an entry point into the EVB movement for new teachers and, at the other end of the career spectrum, keeps teachers engaged even after their retirement (the association of Brundtland retirees plays a vital role in offering training and mentoring). When the EVB movement celebrated its 15th Anniversary in February 2008, it was striking to note how many teachers' testimonials focused on how isolated they had felt in their efforts to be "green" or "engaged" teachers prior to their involvement in the EVB network. Their statements indicated that while they had believed in what they were doing, they experienced self-doubt in the face of other teachers or administrators in their schools who were sticking to more conventional approaches--or students and parents who had certain assumptions and expectations in relation to the "teacher" (Personal observation, *Session nationale EAV-EVB,* Quebec City, 21 February 2008).

M. J. Barrett (2007) has written extensively on this issue and has been very helpful in reminding the Green Street community of the challenges that the existing culture of education presents:

> "One of the things I've found in my research on teachers who are trying to support students in engagement is that even though they fundamentally believe in the values of experiential learning, if they are going to feel like they are doing their job properly (and all the stories they've been told about what it means to be a teacher) there is a fundamental conflict there - between what they believe in and want to do and what their sense of "doing my job right" is." (Barrett, in Shore, 2008) (not in the reference list).

In response to this challenge, a program like Green Street can try to support teachers to give themselves permission to teach differently, by helping to facilitate the development of a Canada-wide movement similar to that of EVB. Green Street can also engage in helping to change the public discourse about education—largely by telling the stories (to actors in the education field and to the general public) of the "education" that is emerging within the Green Street context.

2) Involving the voluntary sector - Green Street was founded on the premise that the voluntary sector has an important role to play in schools.[4] The levels of engagement, skills, and knowledge of people working in the sector are tremendous assets. Many organizations produce excellent resource material to which Green Street continues to facilitate access via its website. Within the Quebec portion of Green Street, we have experimented over the past couple of years with making funding available to involve local community partners in school-community projects, often using the pedagogical framework of the *Engaging in our communities* program, and believe that Green Street should expand its support for this type of approach.

3) Supporting projects developed by students and their teachers - The most likely route to offering students the opportunity to experience agency and engage with meaningful content is to let them play a large role in determining their own projects. While Green Street has always been geared to responding to the interests of students and teachers, and has been partially successful in this quest, the program has not always supported them in carrying out their own projects. Efforts to make quality-assured programs available nationally through a simple on-line registration process has meant that, with some notable exceptions, Green Street has encouraged a tendency towards "one size fits all; packaged for easy delivery" programs. While the activities offered have generally been of value, they have not always maximized the use of available resources in a way that feeds into longer term projects in schools, which would in turn multiply impact in terms of engaged learning. Green Street can try to overcome this limitation by: (a) continuing to work with partner organizations that focus on supporting schools in carrying out their own action projects; (b) disseminating the *Engaging in our communities* program, which provides a generic pedagogical framework for undertaking a broad range of school-community projects; and (c) asking students and teachers to define their own projects (and offering funding for them) and then helping them to connect to resources that support those projects—as opposed to asking them to choose from a menu of programs that are not necessarily linked to a project, as has traditionally been the case.

4) Opening up space for creativity and experimentation at all levels - In order to facilitate the emergence of more "engaging education", Green Street should continue to support "innovation at the margins." This will involve helping to create *spaces* (rather than *programs*) in schools and communities, where inspired people (students, teachers, and community partners) can do creative, hopeful things together—and receive support and recognition for their efforts. Secondly, it should focus on supporting the opening up of communication channels among these spaces to allow the people in them to connect with others doing important work in other spaces, both within schools and communities, and in other parts of the education "system"—and help to share their stories widely. If Green Street can assist in the development of an effective "community architecture," these connections may continue to develop organically and reinforce what we hope is a growing "sustainability education movement."

Building community architecture on Green Street

In its effort to build community architecture, Green Street is currently focused on "building on", "building with," and "building out".

Building on – This first component primarily concerns teachers and focuses on "building on" the work of engaged teachers and the organizations and programs they have created in order to further support the development of a movement for engaged teaching. The Green Street community has moved almost intuitively towards increased integration with existing teachers' movements, culminating in the current situation where Green Street is managed by two teachers' associations, the Canadian Teachers' Federation (CTF) and the *Centrale des Syndicats du Québec* (CSQ), both of which explicitly stand for a set of values related to both social justice and quality education. CTF and CSQ connect to huge networks of teachers with whom they have well-developed communication channels and a range of training opportunities.

These values and strengths were combined in the creation, by CSQ, of the EVB movement 15 years ago and in the more recent development of the *Engaging in our Communities* educational materials within the EVB framework. CTF, when it took over

the management of Green Street outside Quebec in 2006, quickly grasped the value of EVB and *Engaging in our Communities* and immediately set about exploring ways to adapt and expand the program to the rest of Canada.[5] CTF also brings its own resonant perspective to Green Street through an emphasis on active citizenship as a central theme in contemporary education (Froese-Germain, 2003).

Building with – This second component involves providing a space for teachers and students and their community partners to build their own projects with support from Green Street. This support includes funding opportunities and access to an on-line virtual classroom where they can develop their own projects and through which resources adapted to their particular projects can be directed to them.

Building out – The third component will connect the virtual classrooms, and the virtual schools of which they are a part, to a larger Green Street community. Here they will find not only other students, teachers, and schools with whom they can exchange and collaborate, but also a range of other partners who can support their work in a variety of ways—and whom they in turn can help to understand what effective sustainability education might look like. This community will exist on-line using the infrastructure offered by the new Green Street website at www.green-street.ca and through activities initiated by community members. It will be a place to act, to learn, to tell stories, and, hopefully, to build a movement.

Conclusion

Looking back at the evolution of Green Street over the past decade, we note that the program's strategy has moved along a spectrum: from trying to "fill gaps" (a lack of environmental education in schools) to trying to "open up spaces," where relationships can be forged and creative initiatives can emerge.

Green Street spent its first phase trying to perfect itself as a program delivery mechanism--and then began to embark on an effort to influence policy in a way that would ensure more programs would be delivered. And then the "fire" broke out. The program subsequently began its reorganization phase; a process of experimentation where the resources released through creative destruction were reassembled in a variety of configurations—in order to see which seedlings had potential to be part of the new forest. Green Street now finds itself entering its second growth phase; one in which it has been re-imagined. As observers in a new "fitness landscape," we no longer see Green Street primarily as a program delivery mechanism (although this may remain part of what it does). Instead, we see it as a group of community architects trying to help build a movement—one with a diversity of members whose ideas and actions can be woven together into a new story of engaged and engaging education. We hope that it will be a story compelling enough to move a system.

What will a "mature" Green Street look like this time around? Will the program's adaptive cycle include another round of "creative destruction?" Will changes in the program influence changes at different levels of scale? Get involved!

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[1] "Movement" is understood in this article as a critical mass of individuals and/or groups working towards a common values-driven goal. The boundaries around a movement tend to be vague and fluid and movements grow "organically." The ways in which the parts of a movement are linked may vary with respect to degrees of connectedness and formality; similarly leadership can be quite centralized or very de-centralized. Movements cease to exist when (as perceived by a significant number of participants) the goals are seen as met, unachievable, or no longer relevant.

[2] The *Centrale des syndicats du Québec* (CSQ) - the Quebec teachers union - established a green schools program, *the Établissements verts Brundtland* (EVB) in 1993 and from the year 2000, one of the opportunities available to schools in Quebec through Ma rue verte/Green Street was to join the EVB network and access EVB activities and educational materials. The fact that this model and the network that had developed around it offered a framework into which other MRV-supported activities naturally fit, meant that the Quebec version of Green Street began to look somewhat different than the program in the rest of Canada, allowing for interesting comparison and reflection.

[3] The complexity science and resilience thinking that informs conceptual models like the fitness landscape and the adaptive cycle, also tells us that we live in a complex and changing world (Holling, 2002). Therefore, as educators, we need to think increasingly about how to support students in developing their capacity for systems thinking. Creating learning opportunities where students can engage with the linked socio-ecological systems that make up "our environment" can increase their potential to both learn to live sustainably and develop the skills to confront the challenges with which they are confronted now and in the future.

[4] For further discussion of this issue, please see: Dunleavy, Jodene. Voluntary Sector Contributions to Public Education in Canada: A Discussion Paper. (2007) http://mcconnellfoundation.ca/utilisateur/documents/EN/Initiatives/Voluntary_Sector_Contributions.pdf and Huddart, S. (2007) Investing in Resilience: Public Education and Voluntary Sector Partnerships. *Education* Canada Vol. 47(4),8-21.

[5] To nurture the seeds of a national movement, *Engaging in Our Communities* is being disseminated in three ways throughout Canada:

1. Via a cadre of teacher-trainers to answer the call for professional development opportunities within the teaching profession;
2. Via those pioneering teachers who are dedicated to the environment and feel confident to take this on without the benefit of background or training;
3. Via three pilots in Alberta, Ontario and Newfoundland, which share common objectives:
    - To formally introduce teachers to a new sustainability education pedagogical tool titled *Engaging in Our Communities;*
    - To encourage active student participation at the classroom level;
    - To encourage student engagement leading to action projects tied to the community;
    - To strengthen the school/community links and determine best approaches for future partnerships;
    - To engage students in a meaningful and sustainable manner to effect change;
    - To plant the seeds for a national movement that "*thinks globally and acts locally*" with courage and creativity.

An evaluation will be conducted to determine outcomes and promising practices; the levels of innovation and integration with each educational setting; and indications that students are engaging in a movement for sustainable change. The cultural distinctiveness of each pilot project will provide a breadth of ideas and projects, and may also confirm the need for different regional frameworks when implementing national projects of this kind. A separate research case study will be produced to examine this issue.