

Backgrounder on Youth Environmental Engagement in Alberta:

How to engage youth in environmental action,
and a snapshot of current activities

Developed by the Alberta Emerald Foundation
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About this document

The Alberta Emerald Foundation (AEF) seeks to determine the most effective role it can play in recognizing, supporting, and encouraging youth involvement in environmental excellence. AEF seeks to identify what it means to engage youth in the fields of environment and sustainability, and to understand the context in which they may develop a program. AEF considers 'youth' to be young people up to the age of 26. With background in the theory and practice of effective youth environmental engagement, and with a clear sense of who is doing what in Alberta and elsewhere, the Alberta Emerald Foundation can craft an environmental youth program. This program will fit the needs and interests of Alberta youth, meet AEF's vision, mission and values, and creates synergies with existing programs and organizations.

The Alberta Council for Environmental Education (ACEE) and Acton Consulting were selected to conduct research and make recommendations for AEF's role in engaging Alberta youth in environmental excellence. In addition to this backgrounder during January – March 2008, AEF, ACEE, and Acton will conduct interviews, survey stakeholders, and convene two consultations around this topic. This backgrounder has been reviewed by several stakeholders in Alberta, and comments have been incorporated.

Effective youth environmental engagement

What initiates youth engagement?

AEF's key questions in this area are "what hooks today's youth into being motivated, enthusiastic advocates and participants of sound environmental and sustainability practices; and what are the barriers to this sort of engagement?" There are several reasons or initiating factors for youth becoming engaged. There are individual, organizational, and community/societal factors that contribute towards initiating and sustaining youth engagement. There are also barriers that prevent youth from becoming and/or staying involved.

Key initiating factors include the following:

- personal interest, passion, and/or enjoyment. It should be fun!
- personal values and beliefs

- personal experience and/or connection with environment or specific environmental issue
- a sense of social responsibility
- not being satisfied with current affairs or not having a voice
- a need to accomplish something (e.g. have fun, gain experience, meet requirement for school, an award application, or resume)
- seeking social networks
- modeling of engagement by a peer or respected adult
- inspiration or encouragement from another person

While there may be several reasons why youth initially become engaged in projects or programs, it is the design and specific features of these programs that sustain youth engagement.

What is youth engagement?

Youth engagement is the meaningful and sustained involvement of young people in an activity. It is about youth being actively and authentically involved, motivated, and excited about an issue, process, event or program. Youth engagement is a goal for many organizations in a variety of sectors. For AEF, this goal relates to engaging youth in environmental and sustainability projects and programs.

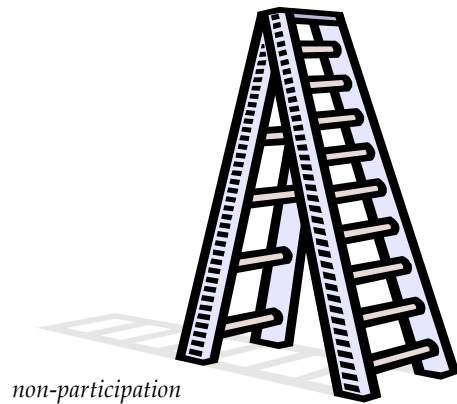
The Centre of Excellence for Youth Engagement (www.engagementcentre.ca) has compiled much research in this area. The Centre's youth survey conducted in 2005 summarizes some key elements of engaging youth for AEF to consider.

Youth are engaged if:

- ✓ they are respected, valued, trusted, feel appreciated, safe and comfortable
- ✓ they feel they are working in a youth friendly environment and involved in a meaningful way
- ✓ their voices are being heard
- ✓ they are given the chance to be involved, make decisions, gain leadership skills and see their ideas realized
- ✓ there is a social aspect to their involvement
- ✓ they see change and progress happening
- ✓ their imaginations are touched and they are valued
- ✓ they are in a place where they have ownership and control

Roger Hart (1992) has conducted research in children and youth engagement and participation. We have adapted his *Ladder of Youth Participation*, as useful reference model for defining AEF's best level of engagement, and how to build strategy around it.

Ladder of Youth Participation



Level 8: Youth lead and initiate action

Level 7: Youth and adults share decision-making

Level 6: Adult-initiated, shared decisions with youth

Level 5: Youth consulted and informed

Level 4: Youth assigned and informed

Level 3: Youth tokenized *

Level 2: Youth are decoration *

Level 1: Youth are manipulated *

* Hart identifies Level 1-3 as

This model is not meant to imply that all youth and organizations should be working at the highest levels; rather, that these levels of engagement are examined by organizations when designing and developing youth engagement programs, and that each level includes strategies for supporting youth. Youth engagement will look different for different age groups, cultures and levels of education.

Features of effective youth environmental engagement

Some of the key factors that influence meaningful youth engagement are listed below. These factors address specifications around designing a program that encourages and supports youth engagement. They have been drawn from recent research on the effective design of youth education (Raynolds, 2006), research from the Green Street National Youth Engagement Program (Hoffman & Staniforth, 2007), and others (see list of references). The AEF will need to consider these factors when deciding how to involve and support Alberta youth.

Ecological Literacy – Decades of research and practice indicate that one of the most important aspects of fostering environmentally responsible behaviour is to create first-hand opportunities for youth to experience, understand, value and create a relationship with nature. This process helps youth develop “environmental sensitivity,” fostering feelings of empathy towards living things, as well as a capacity to behave as a member of the larger interdependent ecological community.

Personal Relevance – Recent research and practice emphasizes that effective youth engagement requires programs to be designed based on the needs and interests of youth. It is important to engage youth around issues that affect their own lives and communities. A **holistic approach** is highlighted, helping youth to develop not only their intellectual and physical capacities, but also their moral, ethical, and spiritual elements through cross-disciplinary experiences. Developing **confidence and self-**

esteem are key aspects that enable youth to participate in sound environmental and sustainability practices.

Critical Thinking – A key step in formulating environmentally responsible behaviour occurs when youth are able to reflect on their own views and values towards the environment. They ask difficult and meaningful questions about themselves, their communities and their future. It is a process of examining our society and its systems, and **formulating their environmental ethic**.

Diverse Perspectives – Meaningful engagement involves learning from a diversity of perspectives, from local to global. This means having people involved from a range of cultures, backgrounds, ages, and worldviews, and learning from the variety of perspectives on what environment and sustainability means.

Experiential Learning – This is a well known feature of programs that seek to instill a sense of leadership in young people, helping equip them to do what they believe is right. It is based on learning through real-life experiences, followed and accompanied by critical analysis and reflection. This includes **place-based learning**, which encourages programs to be directly connected to the community and natural environment where youth live. Hands-on activities set within a community context prompt youth to share their knowledge and experience with others.

Skills for Action – An understanding of environmental issues, and building the knowledge and skills to resolve issues of concern, is a key aspect of effective youth environmental engagement. **Action projects** are a growing feature of many environmental education programs, and *skill building* and *action orientation* are characteristics of excellent environmental education, according to the North American Association for Environmental Education.

Examples of action projects:

- *Educate and inform*: projects that teach people about issues, such as writing articles, creating plays, posters, and hosting workshops and events.
- *Shopping habits*: projects that investigate what people buy / eat / wear everyday. Efforts are focused on trying to change habits, supporting local farmers and businesses.
- *Consumer action*: investigating stores and businesses to see how products can be more environmentally friendly, and making suggestions for change.
- *Political action*: learning to organize and create change at the school, community and government levels. Might involve participating in public debates and meetings, writing letters, petitions, media releases, and organizing campaigns.
- *'Get down and dirty' projects*: projects such as creating a community garden or building a trail, and others.
- *Environmental science projects*: projects such as environmental research, stream monitoring and mapping.
- *Lifestyles choices*: projects that encourage environmentally sound decisions such as walking, biking, public transport, consuming less, recycling more, and choosing low-impact recreation.
- *Others*: let your imagination go wild - there are endless possibilities for youth driven action projects!

Meaningful work – Programs need to **empower** youth to engage in work that makes a difference. A shift in emphasis from activities and outputs to outcomes and impacts adds value to the work and helps ensure that youth are addressing the root causes, not the symptoms of environmental issues. This perspective means that, instead of collecting litter, youth might create and deliver a community anti-litter campaign.

Accessibility and Scope – Effective programs must be inclusive, and engage a **diverse cross-section of youth**. The program must be a safe place for youth of all backgrounds to be involved. The scope of the program refers to including a range of evolving opportunities for youth and giving them responsibility. Creating **options** and allowing **choice** is important.

Nurturing Relationships – Many youth programs are about forming and nurturing relationships – with nature, other youth, and adults. Effective programs include **community and capacity building**. Programs must foster self-confidence, empower learners, and offer support. Good facilitation is required, where adults are **mentors and role models**, and not authority figures: the adult’s role is to be ‘the guide on the side, not the sage on the stage.’ Organizations must also demonstrate a strong commitment to youth participation and a genuine interest in supporting youth initiatives.

Walk the Talk – A strong message from youth-driven environmental organizations is that programs must “walk the talk.” This means the program must model its messages. Aspects to consider include the ecological footprint of food, energy, materials and facilities employed during the program. Modeling is a powerful means of learning and teaching, and programs must ensure that their ‘behaviour’ is consistent with its lessons.

Duration and Follow-up Support – Effective youth environmental engagement occurs over time. Research indicates that programs of longer duration have a greater impact, and that follow-up support and programming is a key aspect of sustaining youth involvement in environmental and sustainability practices and projects.

The lay of the land: Some of the key players in Alberta

Another critical area of research for AEF to examine is ‘who is doing what’ in Alberta with regards to environmental youth engagement. The AEF seeks to determine potential partnerships that can be created to ensure program success, prevent duplication of efforts, and add value to the work that is already being done by other organizations. This context will help in the process of identifying gaps in current youth programming, and identifying opportunities where AEF may provide support.

The information below is designed to show key trends and features, and is by no means an extensive list. Appendix One contains a more comprehensive list of Alberta stakeholders. The AEF research process (interviews, survey, and consultation meetings) is designed to gain a clearer understanding of the ‘lay of the land,’ and if there is a niche AEF can fill. A gap analysis will be conducted.

Youth-led organizations

It is often difficult to know the status of youth-led organizations, because of the fluctuation in membership and the flexibility of focus and strategy. Many of these groups are grassroots and operate differently from adult-led organizations. The interviews and meetings in early 2008 will help provide a clearer understanding of youth-led activities in Alberta.

There are several prominent national organizations that offer youth-run environmental programs. Their level of activity in Alberta has varied over the years. The Otesha Project has organized bike tours in which dynamic young people visit schools and communities along their route, using theatre and presentations to inspire action. The Sierra Youth Coalition (SYC) has programs on sustainable campuses, and its 'Community Youth Action Project' supports youth gatherings and a sustainable high schools initiative. The Canadian Youth Climate Coalition is a recently formed national organization, with youth from Alberta involved. They are planning a national summit focusing on Alberta tar sands and climate change for June/July 2008. Taking It Global is a national youth-led organization with a provincial coordinator in Alberta.

The Edmonton-based Prairie Chapter of the Sierra Club organized a 2007 canoe trip where youth examined first-hand the impacts of the oil sands development on the Athabasca river and affected communities. SYC volunteers also organized a three-week long bike tour called To the Tar Sands in 2007. A second tour is being planned for 2008. The Radical Cheerleaders, based out of Edmonton, is a youth-led group that was very active several years ago and has recently re-emerged in light of climate change and the affordable housing crisis. Alberta's Youth Volunteer Society is a group that enhances and supports youth initiatives in Alberta around global youth issues.

Alberta universities have on-going groups such as the Public Interest Research Group (PIRG) and the Environmental Coordination of Students (ECOS) at the University of Alberta, and the EcoClub and the U of C Greens at the University of Calgary. SYC groups were quite active on campuses several years ago, and there are still some activities continuing such as a community garden at the U of C. University/college based groups are common and tend to be active in Alberta. There is a campus sustainability group at Mount Royal College which began in 2004, and recently succeeded in lobbying to create a Sustainability Multi-stakeholder Committee on campus. The Global Education Network is housed at U of A and offers education and research focusing on global issues, including environmental justice.

Initiatives by non-profit organizations

A large number of non-profit groups deliver environmental education to schools in Alberta, either through professional development of teachers or through direct contact with classes or the entire school. Although their mission, approach, and capacity vary greatly, the vast majority deliver programs linked to the Alberta curriculum, and seek to maintain or improve the quality of the environment. These programs empower youth through an education process that culminates in some sort of action by the learners. These groups are listed in Appendix One. There are also programs offered at the post-

secondary level, where administrators are implementing campus-wide sustainability policies, hiring sustainability coordinators, and presenting lecture series.

Two groups provide additional services. The Alberta Teachers Association's specialist council on Global Environmental and Outdoor Education (GEOEC) provides an annual conference that is attended by teachers and environmental education professionals from the government and Non Government Organizations (NGOs). The Alberta Council for Environmental Education (ACEE) provides support, training, and capacity-building for all environmental education groups, including an annual 'Leadership Clinic' series focused on helping groups optimize their programs to better achieve their action goals.

In the non-formal sector, summer camps, such as YMCA Camp Chief Hector, help increase the environmental sensitivity of youth through direct and prolonged exposure to nature, usually in the context of fun recreational activities. Scouts Canada, Girl Guides, and Junior Forest Wardens successfully engage young people and their families in organized outdoor and environmental activities, commonly accompanied by a community service component. Ghost River Rediscovery is a unique program in Alberta that offers outdoor and cultural education programs based on Aboriginal traditions and values. Child and Youth Friendly Calgary provides opportunities for youth to contribute to the community, although their activities are not focused specifically on the environment; likewise, Volunteer Calgary have developed expertise and training resources for youth engagement.

Initiatives by government

Alberta Environment has been very active in this area:

- Organized a 2006 Youth Environmental Summit that drew 150 youth from across the province.
- Endowed Alberta Ecotrust with a grant to support youth environmental action (see below).
- Created a Young Environmental Stewards committee of 20 youth who provide advice on some policy initiatives and help steer a website, which is designed to be a hub for youth environmental activities, including work experience, volunteer opportunities, and AEF Youth Awards:
<http://www.environment.alberta.ca/873.html>.
- Created a useful hub for environmental education, at
<http://environment.gov.ab.ca/edu/homeEd.asp>.
- Partnered with the Recycling Council of Alberta to create 'Mission Sustainable,' a program that offers a wage of up to \$1,400 to youth in post-secondary education who choose to educate others on environmental sustainability at Alberta universities and college campuses.
- Creating an Alberta Conservation Team (ACT), a team of youth across the province who will be hired into internship positions for the purpose of promoting environmental messaging and engaging the public.

Alberta Sustainable Resource Development runs a variety of Education and Outreach programs including:

- Junior Forest Ranger and Aboriginal Junior Forest Ranger programs offer youth summer work experience across the province.

- Long Lake Outdoor Education Centre offers hands-on learning experiences focusing on ecosystems, biodiversity, stewardship, and outdoor skills for ages 8-16 plus employment opportunities for high school and post secondary students.
- FinS Project is the Fish In Schools Program for elementary schools.

Alberta Education is responsible for the creation of the Alberta Program of Studies up to Grade 12. With the exception of an optional course on environmental and outdoor education for Grades 7-9, curriculum generally does not focus on youth engagement in environmental action, although interested teachers do have the option of engaging their students in such activities. Alberta Education recently hired a Community Relations Coordinator who would provide a useful point of contact for AEF.

Some municipal governments also support youth engagement. In the city of Calgary, the Mayor's Environmental Expo is an annual celebration of Calgary-area environmental projects and best practices by youth and businesses.

Corporate initiatives

Corporate support for youth environmental engagement comes in the form of grants, awards, or innovative direct programs. This funding commonly comes by virtue of their corporate social responsibility portfolio, which can encompass education, community, and the environment.

Some corporations provide grants to NGOs to support youth engagement efforts, either via Alberta Ecotrust or as direct gifts or sponsorship. TransAlta's Project Planet directly supports youth working to improve the communities and environment around them. Shell has established the Shell Environmental Fund as a way to encourage community groups to take action on projects to help the environment. The Toyota Earth Day Scholarship program offers funding to support graduating high school students who have done environmental community service and who now seek post-secondary schooling.

Corporations also sponsor awards to help celebrate youth environmental achievement. As part of its support for the Canadian Environment Awards, TD Bank Financial Group offers the Green Team Challenge for youth, an award program for schools that includes a \$2,500 grant.

Trident Exploration hires staff to support youth involvement in global and environmental education, while Calgary-based Quantum Shift TV challenges students from grades one to twelve to work on a social or environmental project of their choice, and document their progress in two short videos to be uploaded on the Web. These students also have an opportunity to win up to \$50,000 in prizes for their school.

Initiatives by foundations

In 2006 the Canadian Environmental Grantmakers' Network (CEGN) created an issue brief for its members entitled 'Environmental Education in Canada.' This brief (available at www.cegn.org/main.html) and the CEGN's network of foundations that support youth involvement, represent an excellent resource as AEF refines its approach.

Youth in Philanthropy Canada is a national program of Community Foundations of Canada that seeks to create youth advisory committees for community foundations across Canada. Three of the 12 Alberta community foundations have youth advisory committees, according to http://www.yipcanada.org/finder_e.cfm?rid=3.

Last year Alberta Ecotrust Foundation received a three-year funding commitment of \$50,000/year from Alberta Environment to administer and offer Youth Environmental Stewardship Grants. These grants are available to youth aged 16 through 25 who wish to undertake environmental stewardship in their community. The Alberta-based Carthy Foundation supports youth development and market-based environmental solutions in Alberta and across Canada.

Several corporations have created foundations to help distribute and administer funds. For example, the Suncor Energy Foundation plays an important role in supporting both educational and environmental initiatives, while TD's Friends of the Environment Foundation encourages all Canadians to participate in environmental restoration.

The Alberta Emerald Foundation currently documents and celebrates youth achievement through its annual Emerald Awards, recognizing youth who have taken innovative action and demonstrated commitment to address environmental issues.

National context of youth engagement

AEF's initiative is situated within a larger, national context of environmental education. While AEF will focus efforts in Alberta, it is useful to learn of effective youth environmental engagement programs that operate outside the province. These programs occur in a variety of contexts, facilitated by an array of groups. This list and description is, again, not exhaustive, as there are hundreds of programs for students and youth in formal and non-formal settings across the country. A brief overview, with examples of notable programs, provides some background and inspiration.

The federal government uses partnerships to support education across the provinces. As part of Canada's commitment to deliver on the United Nations Decade of Education for Sustainable Development (2005 – 2014), it works with Learning for a Sustainable Future, a national NGO, to support working groups on Education for Sustainable Development in many provinces, including Alberta. It also funds hands-on environmental action programs through its EcoAction program, a community funding program supporting projects that address Environment Canada's priority areas.

The Canadian Network for Environmental Education and Communication (EECOM) holds a national conference annually and encourages networking. Green Teacher magazine serves audiences in both Canada and the US, and commonly features successful youth environmental projects.

Some U.S.A.-based initiatives have important contributions to make. Service learning, a teaching technique that engages young people in community-based problem-solving, is supported by such groups as the U.S. National Service-Learning Partnership, and

groups such as Earth Force specialize in the application of service learning to helping youth address environmental problems.

Noteworthy youth programs linked to formal education

Formal education programs are organized educational activities that take place within the formal education system; i.e. within K-12 schools, colleges, or universities. Green Street, a program of the J. W. McConnell Family Foundation, is one of Canada's national environmental youth engagement programs that links schools in Canada with reputable environmental education organizations across the country. They also have a Youth Steering Committee, and created *The Green Street Guide to Authentic Youth Engagement*. McConnell also has a related initiative known as 'Building Resilient Communities by Engaging Youth.' The Schad Foundation is another foundation that has developed its own program. Earth Rangers in Ontario, focuses on in-school wildlife presentations, hands-on conservation and restoration projects, and sponsorship for disadvantaged children to visit outdoor centres and attend summer camps.

Also serving formal education are teacher training programs such as Wild BC in British Columbia and Établissements verts Brundtland (EVB) in Quebec. These groups offer a range of environmental education programs, support and networking opportunities for teachers and students.

Programs such as Quest in Vernon, TREK in Vancouver, and Outward Bound Canada College in Ontario provide high school students with unique accredited outdoor/environmental education experiences. There is also a wide variety of alternative public school programs such as Waldorf and Montessori, and small locally based schools across the country that emphasize environmental education. Calgary has a Waldorf School.

In addition to accredited public school programs, there are programs that provide environmental education experiences for school groups. Sea to Sky Outdoor School for Sustainability Education based on the Sunshine Coast in BC is a noteworthy program of this format, as well as the Kortright Centre in Ontario.

Many universities and colleges offer environmental science and studies programs. There seems to be few opportunities, however, for older youth to engage in a more experiential environmental education program. In light of this, the Pembina Foundation and Pearson College have partnered to develop an accredited bioregional youth leadership semester program. There are notable university level programs in the US including the Wild Rockies Field Institute and the Audubon Expedition Institute.

Noteworthy youth programs linked to non-formal education

Non-formal education programs are organized educational activities that take place outside the formal education system. Many non-formal programs run for 1-5 days, such as World Wildlife Fund's (WWF) Young Leaders for a Living Planet, and some run for several weeks to months. These include programs such as Students on Ice, Katimavik, and the Pearson Seminar on Youth Leadership. The Routes Gap Year is a new program that piloted last year and serves older youth. ECO-Canada is a national organization that helps recent post-secondary graduates find work in the environmental field

through wage-subsidized internship experiences. There are also programs such as Canada World Youth that offer an international learning experience. An exceptional program for older youth in the US is the Green Corps Environmental Leadership Training Program, and the Semester Intensive program at the Institute for Integrated Leadership in Massachusetts.

Youth-led environmental engagement opportunities have grown considerably outside of Alberta, and there are several noteworthy programs in BC alone. Groups such as the Environmental Youth Alliance and Check Your Head in BC offer both formal and non-formal programming. The Sierra Youth Coalition's Making Waves project and The Otesha Project are examples of youth engagement experiences that are completely designed and delivered by youth. The Power of Hope and Youth for Environmental Sanity (YES) are youth-driven programs serving youth of all ages in Canada and the US; YES hosts worldwide summer Action Camps that empower youth of all ages to take action on environmental issues.

Does Alberta need more youth engagement in environmental action?

Based on our preliminary observations, the answer is – yes.

The Alberta Emerald Foundation (AEF) seeks to determine the most effective role it can play in supporting and encouraging youth involvement in environmental excellence. There is a sound research base concerning effective youth environmental engagement, and we have outlined our preliminary understanding of the key players and programs in the province, as well as noteworthy programs elsewhere. Interviews, a survey and two consultation meetings provide further insight.

There is no doubt there is room for more, high quality environmental youth engagement in Alberta. AEF must now determine how it will best focus its efforts as, with the help of stakeholders, we seek answers to questions such as the following:

- What inspiration can we draw from noteworthy programs in our neighbouring province of BC? What systemic changes brought about the state of activities in B.C?
- Is there a role for AEF to empower ENGOs to better engage youth?
- How can AEF support emerging youth environmental leaders?
- What about high school environment clubs – how many are there, what role might they play, and what support do they need?
- Can AEF help create a network for youth-led groups in Alberta?
- What does support for youth environmental engagement in Alberta look like?
- How can AEF best serve youth?
- How do we reach the diverse range of youth in the province (age, culture, rural/urban, academic/non-academic)

The research process AEF is about to engage in will help bring light to these questions. A gap analysis will be conducted, possible strategies outlined and recommendations formed, which will lead to the best plan of action.

References and reading on youth environmental engagement

Ballantyne, R., & Packer, J. (2005). *Promoting environmentally sustainable attitudes and behaviour through free-choice learning experiences: What is the state of the game?* *Environmental Education Research*, 11(3), 281–295.

Bowers, C. A. (1995a). *Educating for an ecologically sustainable culture: Rethinking moral education, creativity, intelligence, and other modern orthodoxies*. Albany: State University of New York Press.

Canadian Environmental Grantmakers' Network. (2006). *Issue Brief: Environmental Education in Canada*. http://www.cegn.org/EEBrief_Eng.pdf

Centre of Excellence for Youth Engagement. (2003) *Process of Youth Engagement - A model*. http://www.engagementcentre.ca/files/pmodel_e.pdf.

City of Toronto. *Involve Youth: A Guide to involving youth in decision-making and Involve Youth 2: A guide to meaningful youth engagement*. www.toronto.ca/involveyouth

Emmons, K. (1997). *Perspectives on environmental action: Reflection and revision through practical experience*. *Journal of Environmental Education*, 29(1), 34-44.

Goekler, J. (2003). *Teaching for the future: Systems thinking and sustainability*. *Green Teacher: Education for Planet Earth* (70), 8-14.

Groundworks. (2003) *Youth hands! Youth Voices! Youth Policy Engagement through Local Action Projects*. www.lifecyclesproject.ca/resources/youth_hands.php

Hammond, W. (1996). *Educating for action: A framework for thinking about the place of action in environmental education*. *Green Teacher: Education for Planet Earth* (50), 6-14.

Hart, R. (1992). *Children's Participation from Tokenism to Citizenship*. Florence: UNICEF Innocent Research Centre.

Hoffman, J. & Staniforth, S. (2007). *The Green Street Guide to Authentic Youth Engagement*. Green Street National Youth Engagement Program.

Hoose, P. (1993). *It's our world too! Stories of young people who are making a difference*. Toronto: Little, Brown and Company.

Hungerford, H., Peyton, B., & Wilke, R. (1980). *Goals for Curriculum Development in Environmental Education*. *Journal of Environmental Education*, 11 (3), 42-47.

Hungerford, H. R., & Volk, T. L. (1990). *Changing learner behavior through environmental education*. *Journal of Environmental Education*, 21(3), 8-21.

- Jickling, B., Lotz-Sisitka, H., O'Donoghue, R., & Ogbuigwe, A. (2005). *Environmental education, ethics, and action: Getting started*. Nairobi: United Nations Environment Programme.
- Kaplan, S. (2000). *Human nature and environmentally responsible behaviour*. *Journal of Social Issues*, 56(3), 491.
- Keilburger, M. & C. (2002). *Take Action! A Guide to Active Citizenship*. John Wiley & Sons Inc.
- Kollmuss, A. & Agyeman, J. (2002). *Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior?* *Environmental Education Research*, 8(3), 239-260.
- McKenzie-Mohr, D. & Smith, W. (1999). *Fostering sustainable behaviour: An introduction to community-based social marketing*. Gabriola Island: New Society Publishers.
- Meadows, D. (1989). *Harvesting one-hundredfold: Key concepts and case studies in environmental education*. Nairobi: United Nations Environment Program.
- North American Association for Environmental Education (NAAEE). (2000). National Project for Excellence in Environmental Education. www.naaee.org/programs-and-initiatives/guidelines-for-excellence/ NAAEE has generated numerous useful resources through its 'Guidelines for Excellence' Project. Website contains free downloads and on-line workbooks to help improve environmental education materials, learner guidelines, teacher preparation programs, and non-formal education programs.
- Orr, D. (1992). *Ecological literacy education and the transition to a postmodern world*. Albany, NY: State University of New York Press.
- Palmberg, I. E., & Kuru, J. (2000). *Outdoor activities as a basis for environmental responsibility*. *Journal of Environmental Education*, 31(4), 32-36.
- Pharr Jr., J. 2007. *Resolution to Advance Service Learning*. *Green Teacher magazine*, 82, 36-40.
- Raynolds, N. (2006). *Catalysing Change: Focus Group on Education that Enables Youth to Create Ecojustice*. (Master's Thesis, Royal Roads University).
- Rose-Krasnor, L., Campbell, K., Loiselle, L., Pancer, M. , Busseri, M. (2003). *Predicting Youth Engagement: The Role of Initiating and Sustaining Factors*. The Centre of Excellence for Youth Engagement.
- Sobel, D. (1995). *Beyond ecophobia: Reclaiming the heart in nature education*. *Orion People and Nature*, 14(4).

Simmons, B., Mann, L., Vymetal-Taylor, M., & Carter, R. (2000). *Environmental education materials: Guidelines for excellence workbook, bridging theory & practice*. Rock Spring: North American Association for Environmental Education.

Staniforth, S. (2003). *Leap Into Action! Simple Steps to Environmental Action*. Surrey: BC Conservation Foundation and Wild BC.

Stone, M. K., & Barlow, Z. (Eds.). (2005). *Ecological literacy: Educating our children for a sustainable world*. San Francisco: Sierra Club Books.

Uzzell, D. (1999). *Education for environmental action in the community: New roles and relationships*. *Cambridge Journal of Education*, 29(3), 397-413.

Weston, A. (2004). *What if teaching went wild?* *Canadian Journal of Environmental Education*, 9, 31-46.