

A. The Three Pillars of the EcoSites Initiative

The EcoSites initiative is built on three pillars of operational environmental literacy.

Definition of the Three Pillars of EcoSites:

- **EcoLiteracy** – *developing understandings* – learning about the earth and its life - the ecological processes and systems that describe how life functions on our earth;
- **EcoRelationship** – *making connections* – developing a personal connection with the earth and its life - how humans are tied into the systems of life and what that means to them personally
- **EcoAction** – *changing behaviours* – crafting lifestyles (individually and collectively) that are more harmonious with the earth and its life – action to reduce the impact of humans on the systems of life on earth

The three pillars can be addressed through an integrated approach or separately. The three pillars of environmental literacy aligns with best practice standards from a literature review.

Further explanation of the Three Pillars of EcoSites:

a. EcoLiteracy – *developing understandings*

Environmentally literate people understand that human beings are a part of the systems of life on earth. The resulting understandings create insight into the nature of change and human beings' role on our planet. EcoLiteracy is demonstrated by an ability to:

- think in terms of ecological systems (i.e. energy flow, cycling of materials, interrelationships, change) and how we as human beings are tied into those systems
- be an environmental teacher ...a person who helps others understand ecological systems, appreciate the natural world, and change lifestyles to live more lightly on the earth
- be an environmental model...a person who demonstrates forming good environmental habits and breaking bad ones.
- be an environmental champion...a person willing to publicly defend other life that cannot defend itself
- critically evaluate the effects of change before influencing change

The Calgary Board of Education has Governance Policies Ends that guide the work of the CBE. The development of ecological understandings aids students in their ability to function effectively in life, work, and continued learning (Ends 1). Understandings about the physical world, ecology, and the diversity of life on earth assists students in their overall academic success (Ends 2) through providing big picture insights into their role in the systems of life on earth. Ecological understandings help people to determine the relative health of an ecosystem and subsequently their responsibility in reducing their individual and collective ecological footprint.

b. EcoRelationship – *building connections*

Environmentally literate people understand how they are tied into the systems of life and what that means for them personally. They understand that quality immersion experiences including rich, firsthand contact with the natural world help to build a relationship between how life works on our planet and this knowledge influences the choices that they make. Affective experiences such as the development of a sense of reverence, joy, love, and kinship with all life are powerful motivators for positive environmental lifestyle behaviours. This experience allows students and adults to take meaningful action that involves them in local, national, and international communities (Ends 3). EcoRelationship includes affective learning that helps to build a significant connection between people and their home, the earth. The resulting personal values and beliefs allow for deeper critical thinking as it relates to environmental issues.

EcoRelationship is demonstrated by an ability to:

- Have a balanced lifestyle that includes quality immersion experiences in the natural world
- Value the aesthetic as well as the conceptual – to have a sense of reverence for natural communities; to have a sense of joy at being in touch with the elements of life; to have a sense of kinship with all living things

c. EcoAction – *changing behaviours*

Environmentally literate people understand the importance of making changes to our lifestyle (both individually and collectively) in order to lessen our impact on the ecological systems of life. They do this through crafting more harmonious lifestyles within the ecological systems that support them, through assimilating understandings of how life works on earth, through enhancing feelings for the earth, and by participating in environmental planning and action. The CBE is a leader in environmental planning and action from a facility, curriculum, and community engagement perspective.

Environmentally literate people aim to lessen their ecological footprint through reducing the amount of energy and materials they consume. They understand that this is a life-long, and lifestyle, based process. Personal development and character development (Ends 4 and Ends 5) are direct outcomes of adopting lifestyle behaviours that have less impact on the earth and its life. Positive environmental action based on understanding and an innate comprehension of our connectedness to the natural world, results in deeper learning. This learning is demonstrated by a reduction in the consumption of energy, water, and the building materials of life, resulting in less waste creation.

The ultimate goal of environmental literacy initiatives is a reduction in wasteful or excessive consumption behaviours of citizens in our society. Environmentally literate people are able to offer leadership in initiatives that focus on reducing our impact on the earth and its life.

EcoAction is demonstrated by an ability to:

- craft lifestyles that are in harmony with the earth and its life
- offer leadership that supports meaningful change
- move from awareness, to understanding, to appropriate action

Together these three parts of the operational definition of environmental literacy represent the head (EcoLiteracy – *developing understandings*), the heart (EcoRelationship – *making connections*), and the hands (EcoAction – *changing behaviours*).