

► WASTE MINIMIZATION – GRADE 8

Big Ecological Idea #1:

Informed consumers can have a positive impact on the environment by making wise purchasing choices.

- a) Consumer demand is an important factor in determining what manufacturers provide. Manufacturing is heavily influenced by costs (of raw materials, energy, labour, environmental regulations, taxes) – but consumer demand can affect the direction of changes in manufacturing.
- b) As consumers become more environmentally aware, they often seek products that are more sustainable in a variety of ways (e.g., more efficient, healthier, non-chemical, organic, minimal packaging, reusable, unbleached).
- c) Environmentally responsible (e.g., waste-reducing, efficient, non-polluting) practices are often adopted in Western society because of the demands of citizens (e.g., McDonald's changing the Big Mac styrofoam container to the paper wrapper).

Clustering of Expectations

SCIENCE & TECHNOLOGY—Understanding Structures and Mechanisms: Systems in Action (2007)

- 1.1 assess the social, economic, and environmental impacts of automating systems
- 1.2 assess the impact on individuals, society, and the environment of alternative ways of meeting needs that are currently met by existing systems, taking different points of view into consideration
- 3.9 identify social factors that influence the evolution of a system (*e.g., growing concern over the amount of waste creates a need for recycling centre, and the recycling centres must grow as population and waste increase...*)

Big Ecological Idea #2:

Our economy and society are dependent upon a healthy environment. This idea can become a factor in prompting changes in how we think and what we do.

- a) Plentiful resources, plentiful fuel at reasonable prices, and global connections through transportation and communication enable us to produce, trade and buy an unprecedented choice of goods. Skilled marketing, and supply and demand of rapidly replaceable products have created a high standard of living, but also record quantities of waste, and resulting environmental damage.
- b) “Consumer confidence” – the inclination of a person to shop as a form of economic activity – is an important support of our prosperity. Waste and the replacement of disposed-of goods increase economic growth. Commercial media promote consumer behaviour as being for the good of society and the betterment of the individual. Consumer behaviour produces waste that is related to the level of consumption.
- c) Technology can play a role in reducing waste through achieving greater efficiencies in manufacturing processes. But producing less waste in the first place is accomplished through human responsibility in the use of energy and resources.
- d) Change in society comes about when a number of people recognize a need for different kinds of behaviours or practices and influence others

to join them in calling for a shift in a new direction. Change in society also comes about because of technological innovations (e.g., the shape of communities changed significantly with the invention of the car).

e) People are not fully aware of the environmental consequences of waste (on the air, water, land, and on ecosystems and health). Education about environmental issues motivates some people to be more responsible about waste.

Clustering of Expectations

HISTORY Canada: A Changing Society (2005)

8h36 • describe the factors contributing to change in Canadian society (e.g., immigration, technology, politics, globalization);

GEOGRAPHY - Economic Systems (2005)

8g19 • describe the characteristics of different types of economic systems and the factors that influence them, including economic relationships and levels of industrial development;

8g22 • outline the fundamental questions that all economic systems must answer: what goods are produced; how they are produced; for whom they are produced; by whom they are produced; and how they are distributed [how they are disposed of, and an awareness of the environment on which all the foregoing depend];

8g25 • identify and give examples of the three major types of industries – primary (resource), secondary (manufacturing), and tertiary (service) – and describe how these industries have developed in Canada.