ACTIVITY 13

It's My Turn to Claim The Land: Sustainable Food

Activity: Using land claims for initial settlements, students define, compose and illustrate a sustainable community.

Curriculum Fit: Grade Seven - Science

Unit A: Interactions and Ecosystems Unit B: Plants for Food and Fibre

Agriculture Concepts: Diversity

Economic importance of agriculture

Capital and technological intensity of agriculture

Cognitive Level: Application, Analysis, Synthesis, Evaluation

Materials Required:

- Classroom area for displays, art materials, (i.e. photography equipment, clay, drafting supplies), measuring tools, paper, individual journal booklets, land use maps of Alberta and/or the

world.

Time Required: Minimum of eight 40-minute class periods.

Background — For the Teacher

The quality of life in our world is primarily sustained through an agricultural base. Given the environmental and global issues we face today, our students will need to be ready, willing and able to take on the responsibilities that ensure global health. The sooner we provide them with opportunities to contemplate and identify with these issues, and the more time the students are given to consider and rehearse the roles they play in these global issues, the better their personal and physical environments will become.

By giving students ownership over their land, they become self-motivated and gain a sense of how they can positively contribute to the formation of a sustainable society.

The use of community resources provides a practical and experiential component. The development of a resource and mentor network (e.g., with local farms, industries, farmers, agriculturalists) and the written and/or audio-visual information available through each component of the network, will provide the students with hands-on, practical experiences that will enhance and support the "education for life" perspective.

This project serves as a foundation for students to make insightful, informed and creative decisions concerning their environment and its future.

Procedure

Preparation

- Each student receives a journal in which they
 will record observations, feelings and ideas
 after each lesson. Their first entry is a
 response to questions such as, What does
 "taking care of the land" mean to you? If I
 visited your land, what would I see? Describe
 the landscape. The type of farm. The
 buildings.
- Class discussion on the elements of a farm and related community resources. Use a web or mapping structure to record their ideas.
- 3. View farming resources. For example, visit or show a video on farming communities and agricultural industries, interviews with farmers and/or senior citizens (see "Resources" at the end of this activity).
- 4. Students update their journal with reflections on new information.
- 5. Divide class into appropriate groupings for project work. Each group/student is given an equal portion of land (e.g., 1/4 section, 160 acres).
- Provide a handout or grading sheet of the expectations and time lines. Provide students with materials for use in this project.

 Students verbalize their ideas and make journal entries using diagrams and/or written descriptions to illustrate how their land will be used.

Introduction

- 8. Use class discussions to have students share their ideas. Record the major types of land use: livestock, crops, wilderness, water locations, buildings and businesses. Have the students view this information in such a way that it could be used to form a sustainable community.
- Define what components comprise a sustainable community. [A sustainable community is one in which everyone contributes to the needs within the community and uses no outside assistance]. At this point a field trip or video visit to a Hutterite/ Mennonite Colony could be beneficial.
- 10. Use class/individual discussions, problem solving and divergent thinking strategies to come up with a plan that would facilitate land development in this sustainable community.
- 11. Time should be provided for researching and synthesizing new information on any of the issues or concerns raised. These issues may address debate over irrigation lines, road placements, farm land use for setting up production facilities or, conversely, land appropriation for specific use in agriculture related areas (e.g., processing of farm products).
- 12. Periodically revise the original mapping structure of this sustainable community with the class to illustrate the impact of their decisions on the outcome of a project, and leave their results on display for reference.
- 13. Journal entries throughout this process may include student responses to questions about how they felt after some decisions were made, whether and why the changes affected their land and what ideas they have for improving this community.

Activity

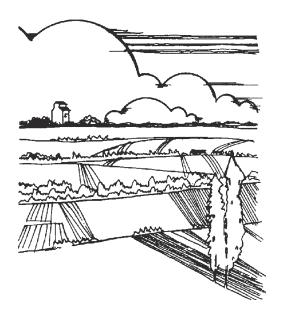
- 14. Further consultation with mentors and/or visits to neighbouring farm communities and/or a Colony is encouraged.
- 15. The development of their land into a community can be facilitated through further class discussion. This entails that the students synthesize their previous discussions and community experiences, that they position and illustrate their community plan, determine the display format, identify individual responsibilities and meet the criteria for a sustainable community.

Conclusion

- 16. Have the class review the various projects and assist in making the necessary revisions. They will evaluate each land claim using the handout of original project expectations and pre-determined criteria (e.g. clarity, appropriate land use in contributing to the sustainment of the community).
- 17. Evaluate the experiences individually as well as collectively.
- 18. A celebration is planned to culminate their project's completion. Students invite guests from the agricultural community, mentors, parents, administrators and trustees to view and discuss this project with the students.
- 19. Journals are completed and used to assess project grade.
- 20. Consider extension activities and issues for further study.

Discussion Questions

- 1. Tell me about your land claim!
- 2. What kind of land did you choose? Why did you choose it?
- 3. Were there extra things that you included? Describe them.
- 4. Where is your land located? What are its features?
- 5. What is your role in the community? Why did you choose that role? Do you need to give up your land?
- 6. How will you illustrate your role in this community?
- 7. Is it possible to have a sustainable community? Can you think of any communities that are totally self-sustaining?



Related Activities

- 1. Create a story, skit, song or poem about your experiences as part of this community. What would a visitor see and hear?
- 2. Create a sustainable earth or space settlement.
- 3. Discuss concerns about agricultural issues. These may include such concerns as the use of pesticides as pest-control methods, some stereotyped agricultural roles, and environmental concerns (e.g., water, soil and weather).
- 4. Research and design various agricultural buildings for better animal and grain management.
- 5. Determine how sustainable the community really is. What are the essential roles played in sustaining this community? List these in order of importance.
- 6. Interview someone in your area who currently has the role you chose and discuss your observations.
- 7. Design an alternative arrangement of this project.
- 8. Identify some things that would affect and change the environment (e.g., weather). Describe what would be needed to maintain it as a sustainable community.
- 9. Compare and contrast Hutterite or Mennonite Colonies, urban or rural centres, with your project.
- 10. Graph the farming and non-farming occupations in this community.
- 11. Use a computer graphics program to design and illustrate this community.
- 12. Use a scientific approach to produce a new breed of animal or food for this community.
- 13. What insects or animals function as part of sustainable communities (e.g. ants and bees)?
- 14. Write ads to sell your land or the products you produce.
- 15. Create a board game.

Resources

Information Packaging Centre
Alberta Agriculture, Food and Rural Development
Main Floor, 7000 - 113 Street
Edmonton, Alberta T6H 5T6
Phone: (780) 422 3051 Fox: (780) 427 3861

Phone: (780) 422-3951 Fax: (780) 427-2861

or visit the website at:

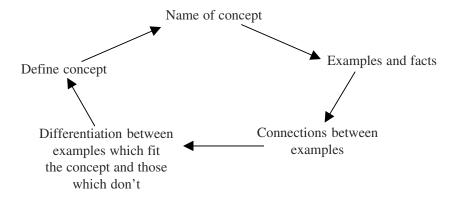
www.agric.gov.ab.ca

(for a list of publications and videos select "Dept. Publications and Products").

Original lesson idea by Linda Sabatini Modifications by AITC

Teacher Resource Sheet #1

Special Section -- Teaching Strategy



Some of the **Skills** needed to implement a Concept Development teaching strategy include the understanding of examples being discussed, the ability to classify and see commonalities between different examples, and good questioning skills.

Concept Development allows students to construct concepts related to specific examples and characteristics they themselves have outlined - this process leads ultimately to the construction of a definition. The concepts would be generated by considering their similar attributes.

Concept Development, as a teaching strategy, allows for the facilitation of communication. As well, Concept Development allows for the gathering, interpretation, and correlation of many similar facts and/or concepts.

Concept Development can be adapted to meet any student's needs. The strategy is appropriate for all ages and learning styles. Auditory and visual learners can be stimulated by the appropriate uses of many different methods. Some of these methods might include discussions, audio-visuals, and drama. Students are able to develop their own personalized meaning for a particular concept. This is fostered by the movement of the process from a concrete representation of the concept to an abstract form of recognition - a broader sense to a more specialized, deeper sense.

Social Studies is ideal for the implementation of a Concept Development teaching strategy. Cooperative learning, program continuity, and across-the-curriculum program development, all have vital roles in the use of this strategy. Concept Development fits in well with the inquiry approach.

Some of the "pros" of Concept Development include; the opportunity for students to personalize ideas (It should be noted that the program is easily personalized), the adaptability of the strategy to meet the needs of different learning styles, the student-centred approach, the encouragement of critical thinking skills, and the student self-motivation all of which are inherent qualities of the Concept Development teaching strategy.

Some of the "cons" include; the time consumption on the part of the teacher, the patience and the firm-belief required for the process, the need for good questioning skills, a need for good background knowledge, and the apparent non-applicability for the attainment of physical skills.

Resources: Concrete examples of concept components should be used to give more personal meaning to the development of the concept being learned.

Note: Concepts build upon each other.