

Qujangnamik

“Qujangnamik” (the Inuit word for welcome) to the Arctic Blast 2001 education program. We hope that you will enjoy your educational adventure across the new Canadian Territory of Nunavut.

The Arctic Blast curriculum package is based on the Arctic Blast 2001 expedition – a dogsled expedition traveling through Nunavut - to begin February 2001. Now, you can take your class to the arctic on a virtual expedition via the Internet and the following materials.

The Arctic Blast curriculum is designed in an easy to use format so that you can integrate the expedition’s many resources into your classroom experience. The expedition spans 16 weeks, and consequently, the curriculum package consists of 16 units. One topic for each week on the trail!

Each weekly topic is introduced and highlighted on the Arctic Blast website while the expedition team dovetails from the trail, drawing parallels from the print on paper (or screen) to real life experiences and current social issues creating teachable moments.

Though we encourage involvement in the full program, the easy and well-rounded format of each unit makes any option a worthwhile and effective lesson. Simply choose to follow the entire program or use components and worksheets as supplements for other activities. A simple overall calendar on www.arcticblast.polarhusky.com alerts you to live opportunities – the perfect tool as an introductory primary or meaningful end.

The curriculum package includes:

- an instructor introduction
- a product overview
- extensive background information on the people and environment of Nunavut
- reproducible student activities
- ideas for connecting your students to the actual team members via the Internet
- suggestions for taking your students on a virtual expedition to the Arctic
- collaborative online project ideas and directions for connecting with other classrooms participating in Arctic Blast 2001
- other resources such as a Web resource list and a bibliography of related literature.

All of the Arctic Blast’s educational materials have been designed for active student learning. The Arctic Blast Web site www.arcticblast.polarhusky.com includes journals, pictures, movie clips, audio clips, and games which lead students into hands-on activities, both on and off line. The collaborative projects found on the Web site provide opportunities for students to collect and share data. The reproducible activities in this guide are designed to immediately engage students in active research, experiments, and other problem solving activities. Each activity clearly states the learner outcome and provides ample workspace for the students.

The Idea Gems are not work sheet activities but rather “ideas” that you may wish to use as written, change them to your liking, or adapt them to your students’ specific needs.

Teaching with Arctic Blast

The Arctic Blast curriculum has been designed to fit your teaching style. Here are some different ways you can use the Arctic Blast in your classroom:

Use the story of the expedition to motivate your students to learn various content related to the expedition. For example:

Social Studies

- Use the journal entries of the expedition members to learn their perspectives of the cultures they are experiencing.
- Ask the expedition team members questions to learn more about the land and people of the Arctic.

Science

- Use data collected by expedition members to learn about natural phenomena such as sunrise and sunset times, weather, and animal behavior.
- Collect data in your own community and compare it to data collected by other classrooms around the country.

Language Arts

- Write responses to expedition journal entries.
- Write stories using photos from the expedition.

Math

- Plan for an expedition by buying supplies and budgeting for expenses.
- Estimate and calculate distances and times.

Use the unexpected events of an expedition as teachable moments and problem solving opportunities. For instance:

- What would you do if you ran low on fuel?
- What should you do if you got sick?
- What would you do if a very important piece of equipment was lost?

Use the stories and events of the expedition as topics for research topics and classroom discussions. For example:

- How does the lack of sunlight affect people and their behavior?
- What are the different kinds of shelter people build for certain climates?
- How do people use clothing to represent their culture and values?

Plan and re-create an expedition using the Arctic Blast data, photos, and journals.

- Using your favorite presentation tool, create your own multimedia journal integrating actual photos and information from the Arctic Blast Web site.

Virtual Expedition Overview

This section contains everything you need to bring students “along for the ride.” All of the activities are designed to help your students feel as if they are on the expedition themselves - a virtual expedition. Here’s how:

The Current Status Check is a form students can use to keep track of data (weather, location, supplies, health, etc.) collected by the team. This data is found on the Arctic Blast Web site and can be used for graphing and problem solving activities.

The Grounding Exercises form can be used to note observations based on the five senses of the Arctic Challenge team. Students can use this data to create a mental model of what it would be like to be in the Arctic.

The Chance Activities is a list of real life problems, which can be used to generate problem-solving situations when in cooperative groups.

The Journal Writing Center includes student writing suggestions based on real life experience and Arctic travel.

The Reading Center includes bibliographies of books for a variety of ages related to adventure and the Arctic.

Product Overview

The Curriculum Package:

- *Background Information* - Each of the sixteen units contains background information on Nunavut and the expedition.
- *Questions for the Team* - Each unit includes suggested questions to ask the expedition team members.
- *Student Activities* - Each unit contains ready-to-use, reproducible activities which engage students in research and problem solving.
- *Idea Gems* - Each unit includes additional interdisciplinary student activity suggestions.
- *Virtual Expedition* - This additional unit provides a framework for students to recreate their own expedition to the arctic.
- *Student Assessment Chart* - This chart will help keep track of teacher and student observations of student work.

The Web: www.arcticblast.polarhusky.com

- Timely online Introduction and presentation of weekly unit (supplement curriculum package)
- Expedition Journals
- Interactive Games
- Photos and Multimedia
- Collaborative Projects
- Interaction with the Arctic Blast 2001 Team and other Experts
- Polar Husky A you Z: 25 Arctic subjects
- Extensive Resource Information
- Contest and surveys



National Standards

The National Council for Social Studies states:

”The skills that should be promoted in an excellent social studies program include the following:

- Acquiring information and acquiring data
- Developing and presenting policies, arguments and stories
- Constructing new knowledge
- Participating in groups

Arctic Blast provides:

- Primary sources and unfiltered data
- Real life stories, dilemmas, and issues
- Opportunities for new understandings of mysterious and unfamiliar places and people
- Collaboration with expedition members, expert, and other students from North America and around the world

The National Geography Standards recommend skill development in the following areas:

- Asking geographic questions
- Acquiring geographic information
- Organizing geographic information
- Analyzing geographic information
- Answering geographic questions

Arctic Blast encourages students:

- To ask many geographical questions from ecological and spatial perspectives, such as
”How are people able to survive in such a harsh climate?”
- To answer these questions by acquiring, organizing, and analyzing geographic information from a variety of primary and secondary sources found on the Internet

The National Council for Teaching of Mathematics suggests that the following receive increased attention:

- Pursuing open-ended problems and extended problem-solving projects
- Investigating and formulating questions from problem situations
- Applying mathematics

The Arctic Blast math activities include:

- Countless real-life situations which require students to predict, estimate, collect data, analyze data, compute, and solve problems
- Opportunities for formulating a wide array of mathematical questions such as, ”How long will the expedition take if they continue traveling at this rate?”
- Opportunities for students to understand and apply mathematics in real life situations such as converting weights, measures, and currency

In Benchmark for Science Literacy, the American association for the Advancement of Science states that:

Students should ”be actively involved in exploring phenomena that interest them both in and out of class”
Students should look for ”similarities and differences among the things they collect and examine
”Student investigations ought to constitute a significant part —but only a part — of the total science experience...even though the main purpose of students learn how science works, it is important to back up such experience with selected readings”

The Arctic Blast science activities include:

- taking students on an exciting virtual field trip to the Arctic to conduct scientific explorations
- collaborative online projects where students around North America and the world can analyze the similarities and differences found within much larger and more diverse data samples;
- connecting students to primary and real life sources, which have more immediacy and relevancy than relying solely on textbooks and encyclopedias.

The Arctic Blast curriculum package furthermore draws attention to the following subject areas:

ART LANGUAGE HEALTH