

This Lake Alive!

An Interdisciplinary Handbook for Teaching and Learning about the Lake Champlain Basin

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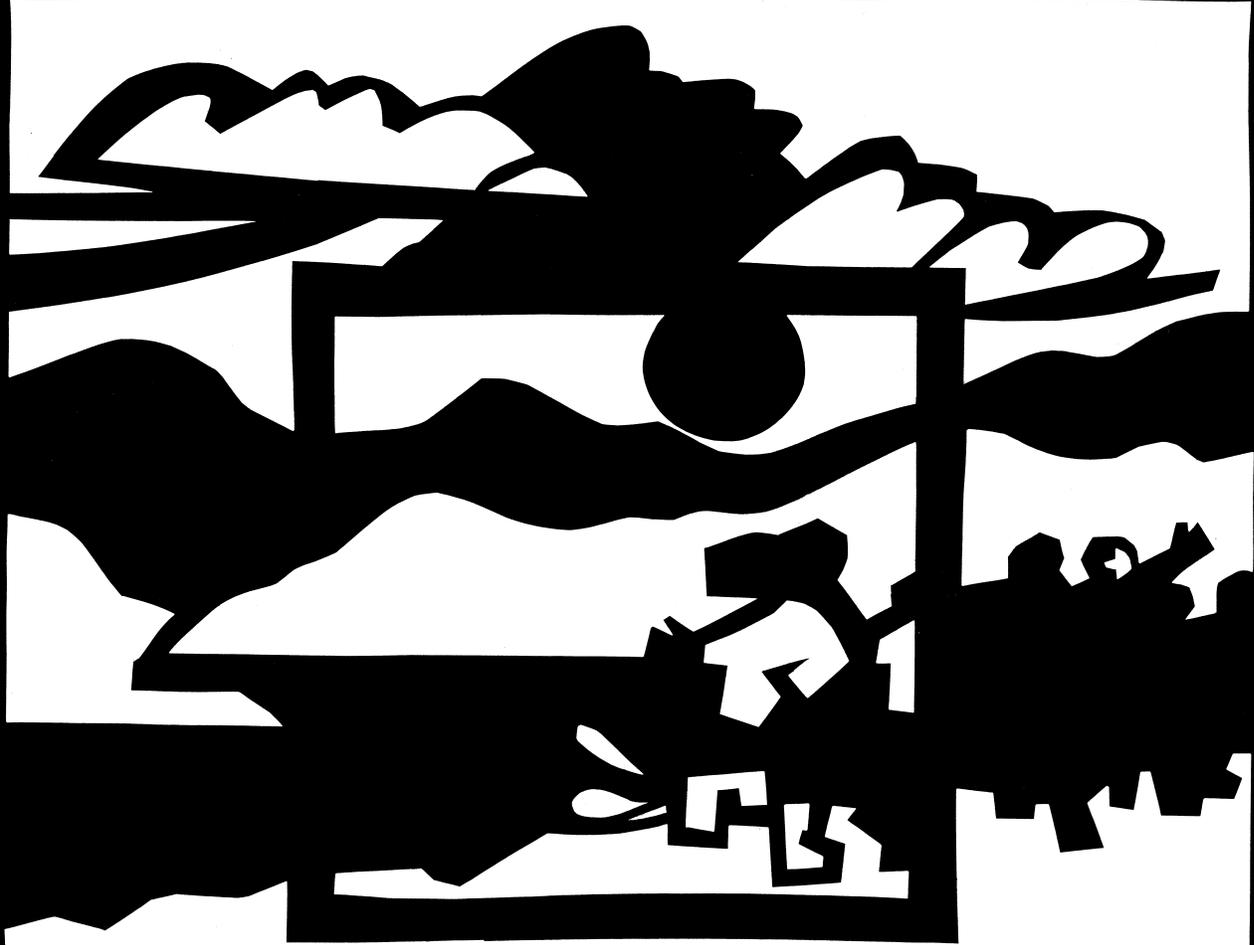
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Drying Off

100% CARING
Stewards of Lake Champlain



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Ticonderoga + Milton Partnerships



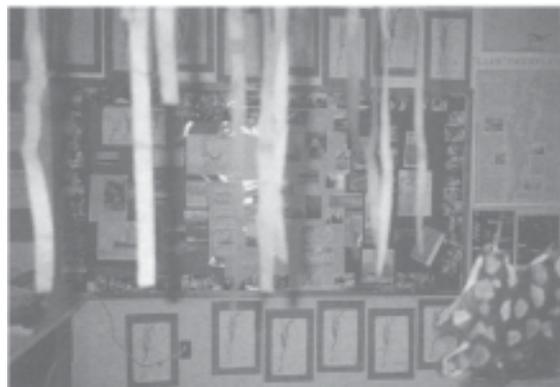
Certificate designed by Mandy Labrie, Grade 5, School Street School, Milton, Vermont



Celebrate Your Success

Culminating activities are important vehicles for students to:

- celebrate what they've learned,
- choose a different way to express what they have learned,
- share their successes with families and community,
- learn more by the process of observing, processing and recording what they know.



For you as a teacher, culminating events provide the opportunity to see what your students have learned. You will see evidence of having met your learning goals. If you have worked hard to help students learn to develop their opinions, for example, and then they stand up in front of 75 people and argue their position on development on the lakeshore, you can see the achievement of your goal. It's a pretty good feeling! When students plan a large portrait of their work, they are constantly retrieving information from the study. Even they will be amazed at how much they learned!

PLANNING *for the* BIG EVENT

The process of working together to plan a presentation is as important as the final product. Sometimes new learning happens in what starts out as a "review." It's also half the fun. When students work together, some good things happen to your community of learners.

Usually I have some idea when I begin of what kind of event we will have but it is very important to involve your students as much as possible. I usually have had some kind of open house with displays and presentation, but that varies with the group that creates it. You are once again in that situation where you have to balance your own standards and expectations with the need to create choices for the students who must feel ownership of the final product.

I will review some ideas for an open house format and then offer some ideas of colleagues who have tried other things.





Other Ideas

- *Make a magazine or “big book” for younger students. Each student can choose a topic about Lake Champlain and have one page to illustrate and write a paragraph explaining that illustration. Students should have the opportunity to read their book to younger kids.*



What I think works for an open house is a display of student work-portfolios on desks, projects on the wall and a formal presentation. We also allow time for parents to walk through and marvel at all the work the students have done.

The following are examples of activities that can be done at an open house:

Skits. Some drama activities outlined in this book can be performed or skits can be created from the students’ own writing. One year students wrote and performed a skit to the story “The Great Journey” (see p. 346).

Poems and speeches about the Lake Champlain study can be recited as a “chorus.” For example, the following poem was written by Cara Basiliere, fifth-grade student in Milton, and recited at the Open House:

Wetlands

*Wetlands, wetlands, oh so mushy,
Your globs of mud are, oh so gushy.
Your filters make the water clean.
You’re one of the prettiest sights we’ve ever seen.*

*Birds and geese, ducks, beavers and bugs,
All make homes that are nice and snug.*

Creation of an underwater world in the classroom. One year, students made crepe-paper fish, which we hung from fishing line across the classroom. The room was dark and we had water music playing. We also dangled numerous facts about Lake Champlain that visitors could read on their underwater “swim.”

A large map of Lake Champlain. Students projected an outline of the lake on poster board taped to the wall and made a large map. Different themes can be displayed on the maps. One group labeled shipwrecks and drew the ships with captions that sat on the map’s edge.

Slide show with narration. One year, with a slide show in mind, I was uncharacteristically methodical about taking slides of each important moment of our study. Classroom activities, guest speakers and field trips were well documented and students organized the slides, wrote the narration and presented the show at the open house. I was lucky to have a parent who came in to work with the writers, which helped create a very well-written, organized production.



Miranda Bushey, fifth-grade student in Milton, wrote and delivered the introduction:

“On the slides coming up you’ll see that during our Lake Champlain unit, we had lots of fun learning about Lake Champlain! We went on lots of field trips and had an exciting time on every one of them. We worked on our Lake Champlain unit for quite a few weeks! We learned many, many things we never knew. We did projects together and didn’t complain who our partners were because in this class we work together as a team.”



Champ. One year a student made himself a wonderful costume out of some slippery green polyester. He was Champ and served as host for the big event.

Poster partners. One year I found myself in a situation where I didn’t feel comfortable about the group dynamics of the class as they began to plan an open house. Some students were ready to go home and start building life-size replicas of boats (the *Philadelphia III*!), and other students had no clear idea what they wanted to do. I felt the need to pull the group together and offer some base to start from. The following is a letter I wrote to students the day after a frustrating planning session. We read and discussed the letter, used the chart of possibilities to choose topics and were under full sail within an hour.

Dear Folks,

I have done some thinking after our discussion Friday, and I have a plan that I think will help focus our energies and get us going. I think it is a framework that you can get very creative with, and it gives us a place to start together, rather than going around in circles. I keep thinking about how much you know about our lake and what an important task you have of sharing your knowledge.

Two students will work together on making a poster with information (five facts) and an illustration. These posters will be displayed in the gym, unless connected to a specific display in our room. It is possible that some students may choose to work by themselves, and other students may pair up more than once! Aside from the basic format of the posters, you have an opportunity, after your posters are done, to create projects, displays, learning centers, skits...whatever time and your energy will allow!!!!

Here are some ideas... I bet you have more!

Information Poster

TITLE: Lake Champlain - General

FIVE FACTS: Could be even more!

GRAPHIC ILLUSTRATION: Scenes from the lake, tourist brochures you design, or each fact illustrated...

OTHER POSSIBILITIES: Game based on basic info, skit, survey of other students in the school about what they know.

Information Poster

TITLE: Pollution Problems

FIVE FACTS: About what threatens our lake, about how to prevent pollution.

GRAPHIC ILLUSTRATION: Something similar to the graphic we used on pollution problems in the watershed...or about a particular problem.

OTHER POSSIBILITIES: Bumper stickers or pins giving advice, skits on what to do or what not to do. Survey of practices that help or harm...

Information Poster

TITLE: Zebra Mussel

FIVE FACTS: You've got 'em! [*This had been a homework assignment.*]

GRAPHIC ILLUSTRATION: Life cycle or picture of clustering mussels.

OTHER POSSIBILITIES: Posters, brochures, buttons on how to prevent the spread of zebra mussels.

Information Poster

TITLE: Underwater Archeology

FIVE FACTS: On procedure or on diver safety.

GRAPHIC ILLUSTRATION: Grid system... underwater wrecks...

OTHER POSSIBILITIES: Larger model of shipwreck...

Information Poster

TITLE: Fish Hatchery

FIVE FACTS: How it works.

GRAPHIC ILLUSTRATION: Picture of how it works.

OTHER POSSIBILITIES: Glossary of fish words, artistic picture, life cycle of fish...

Information Poster

TITLE: Lake Champlain History

FIVE FACTS: Or more!!!

GRAPHIC ILLUSTRATION: Large "Time Quilt" or

one large illustrated timeline...

OTHER POSSIBILITIES: Talking artifacts...

Information Poster

TITLE: Fish of Lake Champlain

FIVE FACTS: About different kinds of fish, their habitat...

GRAPHIC ILLUSTRATION: Pictures of fish, life cycle, cold-water and warm-water species.

OTHER POSSIBILITIES: Label drawing of parts of a fish...

Information Poster

TITLE: Lake Champlain Geography

FIVE FACTS: About what you think is important for people to know.

GRAPHIC ILLUSTRATION: Map!

OTHER POSSIBILITIES: Include important sites to us...

Information Poster

TITLE: *Philadelphia I & II*

FIVE FACTS: About each boat.

GRAPHIC ILLUSTRATION: Chronology of both boats.

OTHER POSSIBILITIES: Picture of Valcour Island, picture of launching of *Philadelphia II*, skit of firing cannon...

Information Poster

TITLE: Our study of the lake

FIVE FACTS: Highlights.

GRAPHIC ILLUSTRATION: Use pictures of our work and make a photo album....

OTHER POSSIBILITIES: Write a newspaper account of the things that we did....

Information Poster

TITLE: Alphabet of Lake Champlain

FIVE FACTS: If you used every letter, you would have 26 pictures!

GRAPHIC ILLUSTRATION: Illustrated alphabet.

OTHER POSSIBILITIES: A poem....

Information Poster

TITLE: Underwater Wrecks

FIVE FACTS: About preservation....

GRAPHIC ILLUSTRATION: Map with location of wrecks, picture of one wreck...

OTHER POSSIBILITIES: Horse ferry, model of shipwrecks...



Guest presenters. For two years, the Lake Champlain Basin Program has attended our open house and set up a display with literature. There are many groups that will be happy to share their information with a willing group of citizens and it adds class to your presentation.

OTHER CULMINATING ACTIVITIES *in the* BASIN

Colchester High School

Bill Romond and Betty Carvellas run a stellar interdisciplinary study of Lake Champlain at Colchester High School. Most years, they culminate the unit with a large public open house/science fair. This is very much a community event and many townspeople as well as parents attend. The students work hard to prepare their displays and are ready to teach the audience on the spot about their research.

A requirement for the final grade is for students to present their information outside of their class, e.g. to boy scouts, a gathering at a local library, the planning board or another classroom. Teachers accompany students on this presentation, which serves as their final exam.

Charlotte Central School

Cher Feitelberg, a fourth-grade teacher at Charlotte Central School, holds a large science fair at the end of their Lake Champlain study. Cher invites experts to attend and ask the students questions about their research.

Camel's Hump Middle School

Deb Higgins and Carol Livingston hold a simulated town meeting for parents. It is organized as follows:

A town (the class) is given an imaginary sum of money. Students are divided into cooperative groups whose task is to recommend how that money should be spent. The student groups represent citizens. Each group has a different interest:

- historians concerned about the preservation of historical sites and wrecks,
- developers interested in building a marina on the lake,
- citizens concerned about farm runoff,
- citizens wanting to clean up the barge canal,
- citizens wanting to rid the lake of lampreys and milfoil.

Science Fair

A science fair can be set up somewhat differently than an open house. Work is displayed and students are prepared to present and discuss their research with visitors.



Students do research and prepare reasons why the money should be spent on their cause.

At the town meeting, which is attended by parents, each group presents a resolution about the expenditure of funds. They present their argument with lots of background information. They also answer questions “from the floor” about their position. The “town meeting” of students and parents then votes on which “resolution” to support with the town’s money.

Shrewsbury Mountain School

Grace Brigham takes her students on a boat ride together as a class (from Vergennes Falls to the mouth of Otter Creek, then southward to the Maritime Museum) on the M.V. *Carillon*. The class uses the time to reflect on the work they have done and celebrate the beauty of the lake. Her third grade wrote the following poem:

Sounds of Our Creek

*Roaring, sound of thunder
Curtain of clouds falling
Water crashing, splashing
Wide pool at the bottom, smooth as glass*

*Curtain of clouds falling
Foamy pancakes wash toward us
Wide pool at the bottom, smooth as glass
River flows away from us, around a bend*

*Foamy pancakes wash toward us
Seven miles downstream, the river’s mouth
River flows away from us, around a bend
Silence of Otter Creek as it becomes Lake Champlain*

*Seven miles downstream, the river’s mouth
Water crashing, splashing
Silence of Otter Creek as it becomes Lake Champlain
Roaring, sound of thunder*



Missisquoi Valley Union Middle School

The XStream Team, a seventh-grade interdisciplinary team at Missisquoi Valley Union Middle School, brainstormed this list of activities that could take place during a culminating event:

- produce a video explaining the process of the water study project,
- produce a tri-fold brochure about the project,
- provide student demonstrations on water quality testing,
- exhibit artwork including technical drawings of macroinvertebrates and maps,
- exhibit charts showing the results of the tests,
- have a special person give a congratulatory speech.

CLOSING

Include a closing celebration or ceremony at the end of your event. If your event is ongoing, be sure to tell your visitors when the ceremony will take place. Lois Thompson, who taught for many years at School Street School, always found special ways to acknowledge student accomplishment. She made certificates that were decorated and had each student's name carefully written in calligraphy. The same certificate can be given to every student and say something like: "Lake Champlain Expert" or "Lake Lover," or you can individualize the certificate to acknowledge a student's special accomplishment such as: "Leader in Class Discussion" or "Wetland Wizard." Laminate the certificates for an added touch of class.



*This award
certifies that:*

is a
Lake Champlain Expert
*on all things past and
present on water matters.*



Some teachers give prizes. I usually don't unless everyone gets one. One year I found little candies wrapped in foil that looked like the earth, so all my students got a "little earth" with their certificates, since they had shown themselves to be caretakers of the earth.

Culminating events can be an integral part of your assessment. You may choose to formally evaluate students' work. I don't usually formally grade the final presentation for the open house. I do ask them to do a written evaluation of what they learned.

Schedule time on the day after your big event to savor your success. The flip side of the excitement that builds as students prepare for a closing event is the quiet satisfaction they feel as they clean up and put things away. Sometimes the day after is a good time for students and you to reflect in writing on your success. Give students the opportunity to make any suggestions for changes and additions in your lake study or with future open houses. If you are putting away portfolios, a written evaluation could be included.

Whatever you choose to mark the end of your lake study, take time to congratulate yourselves and celebrate all that you have learned!

