

ADVENTURE WITH A PURPOSE

A TEACHER'S GUIDE TO

# EXTREME

*"It's about doing what you are dreaming about. If you go to sleep and you are dreaming about some climb or some beautiful place and you get up and go out there and do it. That's what it's all about."*

—Nancy Feagin, Rock Climber - Extreme

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**SAAB**



Outward Bound® USA and Expeditionary Learning Outward Bound

# EXTREME

AN EDUCATIONAL RESOURCE FOR TEACHERS

by *Emily Cousins*  
*Expeditionary Learning Outward Bound*

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# Scaffolding

Facing unfamiliar challenges and taking physical and emotional risks may make some of your students uncomfortable. Below we suggest a few ways you can help scaffold your students' experience and create a respectful, cohesive classroom community.

## Community Circles:

The ritual of forming a circle plays a central role on all Outward Bound courses and classrooms. Whether it is on the ground or amidst school desks, gathering in a circle offers an opportunity to pause, reflect, debrief, listen, and share ideas. When everyone's face is in full view, both communication and the sense of personal safety are enhanced. Teachers often discover that the sense of respectful communication built in the circle spreads throughout the rest of the day. Below are some suggestions for building a community circle.

- If time allows, try beginning and ending the class with a circle, no matter how brief.
- Try starting with a few moments of silence. Silence can help focus the energy of the group and set a tone of quiet reflection. You can start with just 20 seconds and build to a few minutes.
- As a group, set guidelines for accepted behavior, such as no interruptions, respectful tone, etc.
- Encourage students to talk and look at one another, not just at the teacher.

## Readings

Outward Bound has a long-standing tradition of beginning and ending days, community circles, or events with a reading from a favorite book, poem, or journal. These readings set a tone for the upcoming event and give the group a shared focus. We encourage you to find readings that relate to the themes of the film, or to use the quotations from the film included in this guide. You can also invite your students to share related readings they enjoy or excerpts from their journals.

# I. GETTING STARTED

Outward Bound pedagogy asserts that people learn best through experience. Experience alone may not inspire students to draw new conclusions about the world. They must also stop and reflect on what they have experienced. Guided reflection helps students on an Outward Bound course transform rock climbing or running rapids into a time of personal growth and insight. The same holds true in the classroom. When Expeditionary Learning students stop and reflect on a play they have performed, a service project they have completed, or fieldwork they have conducted, they turn experience into significant intellectual and character development.

Below we suggest ways to debrief the experience of seeing *Extreme*. Through journal writing, poetry exercises, and visual art, students can deepen their understanding of the film's themes and make connections between those themes and their own lives.

## Group Debrief and Facilitation

An essential aspect of debriefing is sharing individual reflections with the group. Eliciting those thoughts can take some artful guidance, and we have listed here some practices that can help you facilitate a discussion with your students. Please regard them as a starting point and keep in mind that there is no one right way to debrief. Each group is different and requires your unique creativity, compassion, boldness, and honesty. The habits of working in a group take time to develop, so do not give up after just a few attempts.

### In advance

Choose a few key questions to ask before you start. Arrange your questions so they follow the expanding progression of: What happened? What did you learn? What are you going to do with that learning? Have a plan, but be prepared to let it go. Sometimes it is better to follow the twists and turns taken by the group.

### Set the tone

The leader's attitude will set the tone for the group. As a facilitator you should be alert, centered, positive, and focused on the group. Remember to speak less than the participants and to open and close on a positive note.

### Encourage full participation

Get a response from everyone on the first question before moving to the second, but allow people to pass if they are uncomfortable responding. Help others to clarify and articulate their thoughts by asking them follow-up questions. It is often helpful for someone to hear you repeat their words in a different way. It tells them that you are listening and understanding. Encourage group members to talk to each other, not just you, and to ask questions of each other.

## Silence

Become comfortable with silence. Do not start talking yourself or piling on additional questions just because no one responds quickly to the first question asked. This is easier said than done, but it is worth waiting through those uncomfortable moments.

### Common challenges & ideas for addressing them

#### No one talks:

- Give participants time to write responses to your questions in a journal before talking together.
- Lighten up your tone. Make it fun, not boring or intimidating.
- Have students discuss in pairs or trios and report back.
- Ask individuals specific questions based on what you observed of their experience.
- Have the group pantomime their reflections, make up a rap about it, or draw pictures.
- If any one person is sabotaging the group, pull him/her aside while the rest of the group talks.

#### Some people talk a lot, others not at all:

- Set the expectation in advance that everyone participate; explain why it is beneficial to the group.
- Get the group to agree that no one talks twice before everyone has spoken once.
- Go around the circle, asking each person to respond in order.
- Pass a talking stick or object that empowers the holder to speak.
- Go around the circle asking for one-word responses.
- Check in privately with people who are not speaking so you understand their reasons before the next discussion.

by Sharon Leean, Expeditionary Learning Outward Bound

## a) Journal Writing

Journal writing is an excellent way for students to look back on an experience and articulate their thoughts. If possible, it is best to have a special journal only for writing, even if it is a handful of pages folded over and stapled together. This way, students can look back at their past entries and see how their thinking has changed. After students write in their journals, be sure to allow time to discuss the themes and journal entries in greater depth. Below are suggested prompts which can be used for both journal writing and class discussions.

### Initial Prompts

- What do you think the movie was about besides sports?
- What was important to the athletes about doing these sports?
- What questions do you have about the movie?

### Risk

*When I am going out to push against what I am capable of doing, I have to have fear. Fear is the thing that keeps you sane. Without fear you'd do something insane. Twenty years of climbing have taught me to use that fear as kind of a friend and let it focus my concentration and just bring me into the moment of what I'm doing and really concentrate on the climbing and perform better.*

—Barry Blanchard, Ice Climber

- Write in your journal from the point of view of one of the athletes. What is it like to confront the risks he or she faces?
- Describe a risk you have taken recently.
- There are many different kinds of risk taking, and everyone's level of risk is different. For instance, some courageous rock climbers might be afraid to write and read a poem out loud.
- Describe both a physical risk and an emotional risk you have taken.

### Preparation and Safety

*You really need to train, not only your mind, but your body and your soul, you know, get ready for that intense wipe out... My biggest strength is knowing my weaknesses and trying to strengthen my weaknesses in whatever I do.* —Brian Keaulana, Surfer

- People are injured and die doing sports. What allows people to reach high levels and survive?
- Choose one of the athletes and describe the steps he or she had to take to prepare for the sport.
- List dangers you saw in the film. How did the athletes address them?
- Describe something that you do well that takes preparation or training. List all the steps.
- Some of these athletes may have had coaches help them. Who has helped coach you in something you love to do?

### The Natural World

*You learn respect when you are sensitive to nature and all its forms and beauty... and you can stop and listen and be open to perceiving it. Nature is the best form of art to me.* —Lynn Hill, Rock Climber

- Name a place in the natural world that is special to you, a park, a plant, a tree, or a mountain. Why is this place special? When do you like to go there?
- Lynn Hill, a rock climber, says that nature is her favorite kind of art. What is the most beautiful place you have been to? What did it feel like to be there?
- Surfer Brian Keaulana says his ancestors taught him to read and respect signs in nature. These signs tell him about the power of nature and how to be safe within it. Can you describe some natural signs that you pay attention to, like the sky before a storm or wind or the tides? What do these signs tell you?

### Teamwork

*[Surfing] is a sport of a team, of a group. You can only survive by your teammate, from the man who's pulling you into the wave to the man who's safetying you from the side. When that lifeguard has to respond to a worst case scenario, it's a life-and-death situation where you can't hesitate.* —Brian Keaulana, Surfer

- What are some of the ways the athletes relied on their teammates?
- Describe a time when you had to rely on your friends.
- Describe a time when you were responsible for making important decisions that would impact a friend or family member.
- What qualities are essential for working in a team?

### Pushing Yourself

*For me to have the same excited feeling of learning and accomplishment that I had, let's say my first day of snowboarding, I have to continue to push myself and do things I didn't think I could do so that I have that feeling of overcoming a fear or accomplishing something.* —Victoria Jealous, Snowboarder

- Describe a time when you pushed yourself to do something you did not think you could do.
- Name a challenge you would like to achieve in the near future.



## b) Poetry Exercises

*I think the best part of snowboarding is that while I'm doing it, there's nothing else on my mind. When I'm snowboarding and I'm really in tune with myself and in tune with the run, I feel like I'm experiencing the moment for exactly what it is and no distractions and no hindrances... I feel like I'm where I'm supposed to be.*  
– Craig Kelly, Snowboarder

These following poetry exercises are designed to help students identify something they feel passionate about. We suggest that you, as the teacher, participate in the activities as a way to model their importance to the students. Also, as you discuss the concept of passion with your students, stress that there is no wrong answer. Everyone's passions are different and may include anything from playing basketball to fishing to visiting family.

For an added sense of risk, ask students to read their poems aloud. Similarly, to provide a greater sense of consequence, arrange to have students exhibit their poems in school or a community space. If you plan to do this, give them the opportunity to write numerous drafts and take extra care with their work.

### i) STEPPING OUT OF TIME

#### Step One

Experience is a powerful teacher, but you need not experience everything to be able to imagine doing it. Imagine that you are one of the athletes in *Extreme* and write a poem in his or her voice. You can imagine yourself before an event, during, or after. In your poem, have the lines begin with the following:

I see...  
I hear...  
I smell...  
I feel...  
I taste...  
I wonder...

#### Step Two

Now it is time to imagine yourself doing something you love to do. Is there something in your life, or can you imagine doing something, that you love so much that you lose track of time

while you are so engaged? Write a five-line poem in which each line begins:

I step out of time when...

#### Step Three

Pick one of the lines from the above poem and write another poem describing what it feels like to have that experience.

#### Variations

If students have trouble thinking in terms of a passion, you can also ask them to write a poem about one of the following:

- What do you daydream about?
- Name someone you admire and explain why you do. Do they do something you want to do?
- Some of the athletes said it was important for them to live near the sea or the ocean so they could always be near what they love. Write a poem about where you want to live and why.



## C) Visual Arts

You get this adrenaline feeling and then the endorphins and you get addicted to that feeling, but after awhile that feeling, I don't think it's really enough to keep you fully stoked as a lifestyle but the things that go with it, the people that you meet and the attitudes that they have and just your integration with the environment, with mountains, with the ocean. That whole lifestyle-environment is what keeps me going.

– Craig Kelly, Snowboarder

The next two visual arts activities build on the reflections students have about their own personal passion. They offer different opportunities to explore what the students dream about doing.

### I) THE SHIELD

Adapted from *Into the Classroom*, edited by Mitchell Sakofs and George Armstrong, (Dubuque, IA: Kendall / Hunt, 1996)

#### Equipment

Paper, pencils, crayons, markers

#### Overview

This activity calls on students to identify what they love and value and to translate those things into visual symbols on a shield that comes to represent who they are.

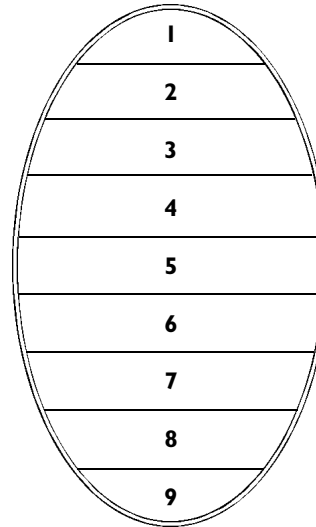
#### Activity Introduction

The athletes in the film feel passionately about the sports they do. They love them because of the way the experience makes them feel about life, nature, friends, and themselves. Being able to pursue a passion energizes you and gives your life greater meaning, but sometimes it is hard to know what we are passionate about.

#### Description

On a large piece of paper, have students make a pencil drawing for each section of the shield according to the Shield Key. Before they draw it on the shield, ask them to share their drafts with a partner or in community circle to find out 1) what their peers like about the draft and 2) how they think it could be improved. This is a good opportunity to talk as a whole class about the qualities of a good drawing. This will help students know what to look for in their own and their partners' drafts. If they are unaccustomed to doing multiple

drafts, remind them that personal passions are very precious and should not be drawn hastily or with little care. Once they have perfected their drawings, ask students to make a final draft on the shield in markers or crayon.



#### Shield Key

1. What do I do best?
2. What am I trying to get better at?
3. My family.
4. My greatest success of the last 12 months.
5. Three words that describe me.
6. Three words that I would love people to use to describe me.
7. What I love doing with my friends.
8. What I love doing when no one else is around.
9. What I dream of becoming.

#### Debriefing

After the students complete their shields, ask each member to present their shield in community circle. Public performances like this often get adrenaline going almost as fast as a thirty-foot wave.

### II) THE MOSAIC OF STRENGTH AND COURAGE

Contributed by Joseph Zaremba, Harbor School, Boston, Massachusetts

#### Time

Four 40-minute sessions or more.

#### Materials

Cut pieces of 6 x 6-inch foam core (or paper if foam core is not available) color pencils, paint, brushes, water container, tracing paper, construction paper, glue, and scissors.

#### Overview

Using visual images and written accounts of great explorations, myths, journeys to the unknown, feats of great courage, hardships and vision, have students identify the determination and strength of character needed to achieve one's goals. Students translate their interpretations of strength and courage into a visual symbol on a square which becomes a part of a whole-class mural.

#### Pre-Activity Preparation

Before beginning the project, create two 6 x 6 inch tile models yourself to give students a sense of scale, interpretation, and links between one tile and another.

#### Description

Begin by talking about the strength and courage exhibited in *Extreme*. Introduce students to historical or mythic sources of courage, hardships, and exploration. Ask students to recall who they see as a hero and ask them what they admire about those heroes. After these discussions, explore the role visual

symbols play in our culture, how they are used in television, in newspapers, magazines, billboards, and logos to communicate a larger concept quickly through a visual connection. To add a sense of consequence and even adrenaline to the project, let the students know from the beginning that their work will be displayed for a public audience in the school, at a community center, or at a gallery.

#### Project Steps

- Have students begin by measuring out a 6 x 6-inch square on a piece of drawing paper. Have students sketch out a characteristic of strength and courage. Students should consider placement of shapes, color that is symbolic, and size.
- After sketching out their first draft above, students should give each other feedback on their drafts, then move to the next level through tracing and redrawing.
- Using their final draft, students transfer their drawing onto the foam core square. It is important that they have reached accuracy and conceptual understanding of what they want to communicate at this step.
- As a group, students decide how the squares should be placed within the mural. Encourage students to consider patterns of color, line, theme, or shape that might link different squares together. This should develop into a group discussion with supporting reasons for placement.

#### Debriefing Questions

What inspired you to choose the trait you used for your symbol? How did you decide on the visual image you chose to represent that trait you chose? Who in your life or in history exhibits that heroic trait? What extremes did heroes you identified have to face?

# II. INITIATIVES

Initiatives are activities that present problems or challenges that do not have a right or wrong answer. The tasks are designed to challenge the physical and mental abilities of the group's participants. The skills and qualities practiced include perseverance, cooperation, compassion, support, expression, negotiation, risk-taking, leadership, and trust.

When using initiatives as learning tools, it is best to begin with less complex tasks, then advance to more complicated and difficult activities. Debriefing the behaviors and observation adds to the learning process and gives the feedback necessary to apply the learning to future activities.

## Guidelines for Leading Initiatives

### a) The Role of the Teacher

The role of the teacher is that of a guide. He or she does not provide the answers to the group. In fact, often the teacher does not know what answer the group will generate. The initiatives contain a certain amount of unpredictability that allows for spontaneity, fun, and adventure while learning. The goal for the teacher is to provide the experience and allow students to learn from each other.

### b) Selecting an Appropriate Activity

Initiative games are, generally, a means to an end, not ends in themselves. Each one is designed to develop a set of group skills. Think about your group's need and then select an initiative tailored to those needs.

### c) Instructions

Keep the instructions clear and concise, and ask if there are questions about the task before beginning. Let groups know that cooperation and effort are more important than success or failure.

### d) Communicating the Rules

Do not change the rules midstream. If, after the group begins, you realize that you forgot some of the instructions and the task is too easy, let the group have an easy success. You can try it again another time with the full challenge. If you have forgotten something that makes success impossible, either stop the group, admit your error, and try again later or say something like, "the warm winds of fate smile upon teams that work together" and adjust the rules or physical environment to make success more possible.

### e) Let Groups Struggle

Some of the most rewarding initiatives are ones that appear impossible but that students figure out on their own. Do note that there is a difference between struggling to overcome the challenge of an initiative and feeling unhappy with the activity itself. If a group is unwilling or unable to make progress, you probably need to cut the activity short and talk about it.

### f) Penalize Artfully

There are many ways to address a violation of the rules. If a group is supposed to be silent and someone talks, blind-fold that person, make them hop on one leg, or start over. Use your imagination. The most challenging penalties are those in which the whole group has to begin again when one person breaks the rules.

### g) Keep it Moving

Initiatives are often intensely engaging and it is better to cut that energy short than to prolong it to the point that people lose interest and investment.

### h) Pay Close Attention

Make mental notes of specific behavior or ideas you can mention in the de-brief.

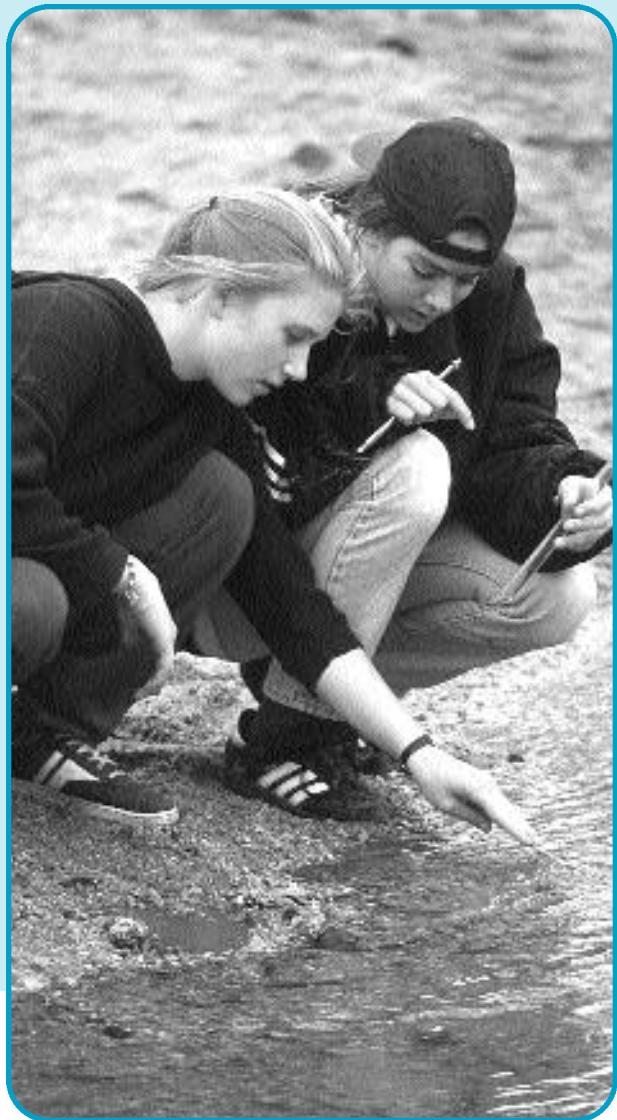
### i) Establishing a Supportive Environment

Reflection is key to creating powerful, meaningful learning experiences, but it's not enough. You also need to build an environment where people feel safe enough to share their thought and feelings with one another. Would you want to reflect deeply in the presence of others if you did not feel respected and cared for?

### j) Debriefing

When it comes time to discuss the initiative as a group, you can use the guidelines listed above at page 2 for debriefing.

Contributed by Sharon Leean, Expeditionary Learning Outward Bound



## Initiative 1 - The Human Knot

Contributed by Charles Reade, Hurricane Island Outward Bound School. Published in *Into the Classroom*

**a) Themes Connected to** **Extreme**  
Teamwork  
Leadership  
Communication  
Problem-Solving

### b) Overview

In this activity, students hold hands and form a human puzzle which they have to untangle. This is an excellent lead-up activity to other activities that require touching and physical support. Participation requires very close contact and cooperation with other group members.

### c) Activity Introduction

Circle-up and have each group member put his or her right arm into the circle and take hold of someone else's hand. Repeat the same with the left hand, connecting with someone else's left hand, creating a tangled human knot. Conduct an energy squeeze to ensure everyone is connected properly.

### d) Description

The objective is to untangle the knot to its most simple form—usually one circle or perhaps two interlocking circles. Group

members may shift the position of their hands, but they may not let go. If the group finds itself in a particularly difficult bind, one option available is to strategically allow one of the bonds to be briefly broken to help the group along. This last step requires judgment on the part of the leaders, for there are times when you may not want to help a group get through a difficult and seemingly unsolvable problem. There are, of course, other times when it is more appropriate to offer this type of assistance.

### e) Special Consideration

Because students will find themselves extremely close to each other and touching, assess the appropriateness of this activity for your students.

### f) Debriefing Questions

What were the keys to success?

How was a solution achieved?

Was there a leader or leaders?

How were they chosen?

What qualities did the leaders have?

Once you, individually, were untangled, what did you do? (stay involved, check out, etc.)

How did the physical layout of the task affect communication?

How did communication occur?

Identify a knot in your life where using what you've learned here would help to untangle it.

What do you need to untangle that knot?

## Initiative 2 - The Lapsit

Contributed by Steve Truitt

**a) Themes Connected to** **Extreme**  
Teamwork  
Support  
Trust

### b) Overview

A simple, fun activity that clearly illustrates that the whole is greater than its parts. The object is for the entire group to form a circle with each person facing the back of the person next to them and to sit down to form a circle of people sitting on each others' laps. You have to experience (or see) it to believe it is possible.

### c) Description

Have the group form a circle, and move close together, so that the participants are touching shoulders. Then ask everyone to turn the same direction to face their neighbor's back. To tighten the circle, ask them to take a sidestep toward the center. Repeat this until each person's inside foot is in line with and touching the heel of the person in front of them and the toe of the person behind.

### d) Ensuring Success

At this point you must make sure of four things in order to ensure success:

- 1) Inside feet need to be touching and forming a smooth arc at all points in the circle.
- 2) All members of the group are standing with feet spread a little more than shoulder width apart, no wider.
- 3) All members of the group agree that this will work. Even one tentative lap-sitter will cause every one to tumble down.
- 4) Everyone is prepared to sit down slowly but resolutely all the way onto the lap of the person behind them when the facilitator signals.

If all of these conditions are met, it is time to count to three and sit. For support, people can place their hands on the

shoulders of the people in front of them. It may take more than one try, but eventual success is equally as thrilling as first-time success.

### e) Variations

Have the group lean back.

Have the group take coordinated steps backwards and forwards while still seated.

### f) Debriefing Questions

Did you trust the people around you? What happened when you didn't?

What made this activity successful?

Did you think it was possible at first?

If the group broke down, what happened?

What insights does this experience give you into the way the athletes in *Extreme* worked together?





### Initiative 3 - The Apple Initiative

Contributed by Scott Gill,  
Expeditionary Learning Outward Bound

**a) Themes Related to** *Extreme*

The power of learning by doing  
The thrill of experiencing something first-hand

**b) Materials**

The word Apple (on a sheet of paper)  
A picture of an apple  
A model of an apple  
An apple  
Chart paper and pens

**c) Overview**

This activity helps participants discover the power of learning

through experience. By comparing a real apple to various representations of an apple, students see the limits of text, pictures, and models and the difference between observable and inferred attributes. Students experience the proverb: Tell me and I forget, show me and I remember, involve me and I understand.

**d) Steps**

Divide the participants in to four smaller groups. Explain that you will be giving each group an object and they have to make observations of the object using all of their senses and record the concrete, observable attributes of the object on a piece of chart paper. Reinforce that there should be no inferences.

Hand each group an object (the word apple, the picture of an apple, a model of the apple, or the real apple) and ask them to keep it out of sight it from the other groups.

Give them about 10 minutes to record the concrete and observable traits. Circulate around to the groups and make sure there are no inferences.

After 10 minutes (or so) have each group report out, showing the entire group their object and then the chart paper with the descriptors. It often works best to begin with the word apple, then the picture, next the model, and finally the real apple. As each group concludes, ask the entire group if all of their descriptors are concrete and observable. Are there any inferences?

**e) Debrief**

What can we learn from this activity?

If we want to really learn about apples, what do we need?

If you just came from the computer lab and were given the first product (the word apple) what might you infer?

In schools, how do we most often learn about things? By reading, looking at pictures, investigating models, or exploring the actual object or concept?

**f) Conclusions**

There are many conclusions you can draw, from recognizing the existence of different learning styles to understanding that to really know about adventure we need to do more than read about adventure; more than look at movies, films, or pictures of adventures; or more than participate in games and initiatives. True understanding is a result of the experience, putting yourself in the real experience.

### Initiative 4 - Point "A" To Point "B"

Contributed by Sterling Catkey,  
Voyageur Outward Bound School.  
Published in *Into the Classroom*

**a) Themes Connected to** *Extreme*

Teamwork  
Communication

**b) Equipment**

Markers, stickers, flags, string etc.

**c) Pre-activity Preparation**

Mark a starting point (A) and ending point (B) 20 to 25 feet apart. The area between the points should be level and free from obstructions.

**d) Overview**

This activity underscores the importance of cooperation and listening. If the group does not work as a team, the activity cannot be completed. It also brings people in touch with each

other and creates a feeling of closeness.

**e) Activity Introduction**

Before the group is a swamp full of swamp critters. If the group crosses the swamp in 10 moves the swamp critters will not be disturbed and the group can go on its way in safety.

**f) Description**

The group (no more than 5 people) must move together from Point A to Point B within 10 group moves. Each person's step counts as one move. Group sizes greater than five can be divided into two or more groups. A variation is to have the groups compete with each other.

**g) Debriefing Questions**

What obstacles did the group encounter while planning the 10 moves?

Was everyone willing to cooperate?

What were the different leadership styles?

How did individuals react to frustration?

What allowed the activity to succeed?

## Initiative 5 - Group Juggle to Warp Speed

Created by Project Adventure.  
Published in *Cowtails and Cobras II* and reprinted with permission from Project Adventure Inc.

### a) Themes Connected to **Extreme**

The importance of practice  
Surpassing personal record  
Collaboration

### b) Equipment

One or more items to juggle. (Example: tennis balls, oranges, koosh, balled-up socks, rubber snakes, large rubber insects, miniature footballs, or anything that is soft and can be juggled.) The objects used should vary in size and weight.

### c) Overview

This activity gets students moving around, working together, and most likely laughing through tossing objects based on an intricate pattern. Encourage gentle, underhand tosses when throwing the objects to be juggled.

### d) Description

Circle up and explain that you would like everyone to think of their passion or favorite pastime. Show them the item you will be passing around and explain that each person will be given an opportunity to tell the group their name and their passion when they have the item in their possession. The leader starts and provides an example of what to do. She then tosses the object across the circle to someone else. The person who catches the object says their name and passion and in turn tosses it to someone else. This pattern is repeated until everyone has introduced themselves. Each person needs to remember from whom they received the item and to whom they threw it. Once the group has completed the task with one

object, the teacher adds one or two more objects which the group has to circulate as well. When they master that task, the teacher challenges them with a time trial to see how fast they can move the item through the same sequence. Let the group go through the sequence once and then time it. Tell them that although it does not seem possible, you would like them to cut their time in half, then half again.

### e) Solutions

Most groups will assume that because they have to move the object through the sequence they must remain in the same position. To accelerate the movement of the object, people can reorganize themselves to increase efficiency. Some groups line-up in the order in which they touch the item, and have the first person hold it and run past everyone else, giving each person a chance to touch it. Other groups may form a tight circle around the item and then quickly, and in sequence, simply touch it. Both solutions are fine as is, any solution that gets people thinking and working together, is fine.

### f) Debriefing Questions

How were ideas communicated?

Were all ideas listened to? If not, what prevented listening from occurring?

What did you do as a group to accomplish this task?

Did you think that you'd have been able to do this so quickly at the first challenge? Why? Why not?

What helped you as a group to achieve what you did?

Were there any assumptions made about the directions or the objectives?

Are there times when you had to "juggle" more than one task at a time? How did you handle it?

How can we communicate our ideas in other areas of school?

How can we support each other's "juggling"?

## Initiative 6 - Use Your Common Sense

Contributed by Amy Bohigian

### a) Themes Related to **Extreme**

The importance of communication with team members  
Giving help and instructions in challenging situations

### b) Materials

A blindfold and a place where one blindfolded person can move around freely without threat of bodily harm

### c) Overview

Through a blindfold and instructions not to speak, this initiative gives students the challenge of communicating instructions through creative and alternative methods.

### d) Preparation

Clear some space in the classroom for the movement of one individual in a blindfold. There should not be any sharp objects or obstacles that could injure a person who was walking with a blindfold in this area.

### e) Roles

One volunteer who is willing to be blindfolded  
One individual who acts as the voice of the group  
One or more individuals willing to give signals

### f) Set-up

The collection of signal givers must be placed as a group together on one side of the cleared space. They must be facing the person chosen to be the voice of the group. The person chosen to be the voice of the group must have her or his back exactly opposite from the person with the blindfold and with her/his eyes directed only on the group of signal givers.

### g) Assignment

The object of the initiative is for the blindfolded person to complete a task designed by the group of signal givers. The group of signal givers must generate a task they believe can be realistically completed by the blindfolded person. The voice person and the blindfolded person must not be aware of the task that the signal givers are creating.

The only person who can talk is the person chosen to have a voice. Her or his back is facing the blindfolded person. The voice must take cues from the signal givers as to how to instruct the blindfolded person to complete the predetermined task.

### h) Special Considerations

The facilitator should ensure that the blindfolded person is safe throughout the exercise and is not instructed to do anything that might harm them. The facilitator must also direct the person with the voice to keep her or his attention directed solely on the group of signal givers, even if the voice person is tempted to turn around and look at the blindfolded person.

### i) Debrief

How did it feel to be blindfolded?

What was the best and worst thing about being the voice?

What techniques helped you accomplish the task as 'signal givers'?

Did it seem that it would be impossible to accomplish this at the beginning?

What are some of the things that made it possible?

How is this exercise like trying to do something in the classroom or in daily life?

What did you notice about the role you assumed in completing the task?

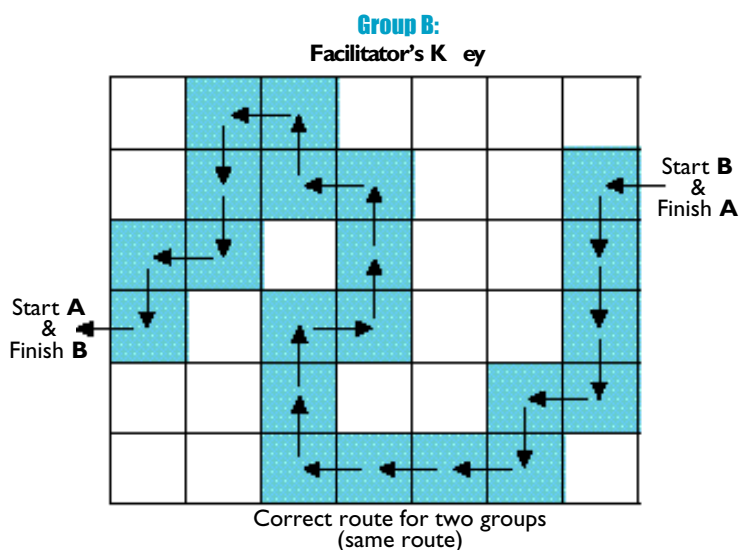
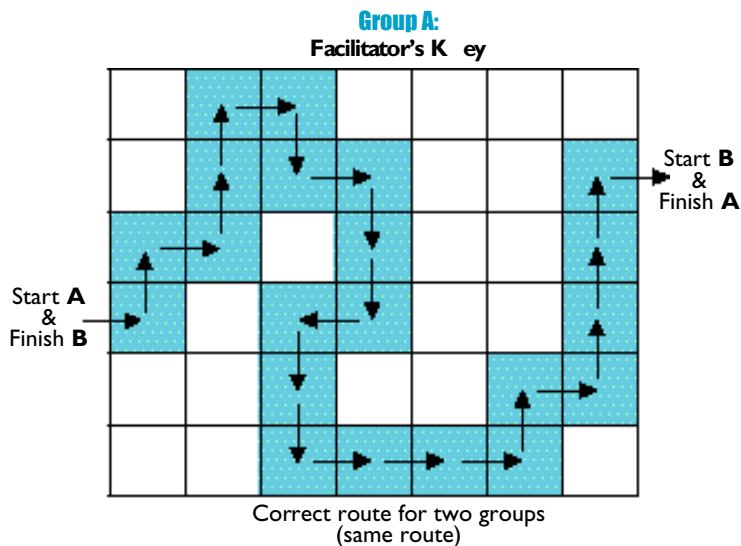
How is communication sometimes like this activity in different contexts of your life?

## Initiative 7 - The Maze

Contributed by Steve Truitt

### a) Themes Related to *Extreme*

- Facing the unknown
- Overcoming unexpected obstacles
- Planning before acting
- Collaboration



### b) Equipment

Masking tape

### c) Overview

The Maze is a very engaging and effective activity for learning about group behavior, planning, leadership, competition, and collaboration, and other issues of group problem solving. The Maze itself is a rectangular floor area marked in a grid seven squares long and six squares wide with masking tape. The teacher has a map that reveals which blocks in the grid allow students to progress through the maze, but students have to discover those blocks through trial and error. Two groups of five to ten members enter The Maze from opposite sides and navigate through in opposite directions. The object is to get every one through The Maze as efficiently as possible.

### d) Preparation Activity

Mark out the maze (seven squares by six squares) on a floor with masking tape. Make sure you have a copy of the map that has the key to the maze with you while you facilitate the initiative, but do not let any one see it and keep in mind that sun light may make it visible from the back.

### e) Description

Each group is allowed an initial two minutes of planning time, after which participants may not speak or make any other verbal utterances throughout the exercise. Each group will be given 10 black cards which will represent currency for the purpose of paying penalties or buying additional planning time (at the rate of one card for one minute).

During the initial planning time, each group must establish their order of play (i.e., David will go first, Maria second, etc.). Only one member of each group will be in The Maze at a time. They repeat the correct steps that have been established by previous members of their group and attempt to extend their route by one or more additional steps. Motion in The Maze can be forward, back, to the right or to the left: diagonal moves are not allowed.

Once a player repeats all the correct steps that her group has discovered up to that point, she attempts to extend their route by choosing another square and stepping into it. At this time, her group's facilitator indicates whether her choice is correct or incorrect. If correct, she can choose again, if incorrect, she must exit The Maze following the same (correct) route by which she came in. As soon as she has passed out of The Maze, the next player in her group's sequence may enter. There is no penalty for choosing a space that is incorrect, as long as it is the first time anyone from that group has stepped into it (this is an unavoidable error). However, the next time (and every time thereafter) someone from that group steps in that square, the facilitator will collect a card.

Penalties resulting in the loss of a card occur when:

- a player steps into an incorrect space on the way in or out of The Maze, varying from their group's already established correct route.
- a player steps into a space that has already been found, by a previous player from their group, to be an incorrect space (avoidable error).
- a player speaks, whispers, or makes any verbal utterances.

Once a correct route through The Maze has been fully discovered, all participants must complete the correct route (in their playing sequence) before the exercise is over.

### f) Note to Facilitators

Facilitators must pay careful attention to avoid making an error or letting an error pass. Facilitators should also watch for significant events that occur during the course of the exercise, e.g., evolution of non-verbal communication methods, relationships among group members, particularly between those in The Maze and those on the sides helping, and signs of cooperation or continued competition after the discovery of the identical but reverse nature of the two routes. Post Maze reflective discussions are nearly always very active, revealing and profound.

### g) Debrief

How did the group work to achieve the objective of the exercise? What roles did people play in the resolution of the problem? What styles of leadership were exhibited and by whom? At what point (if ever) did you discover that the two routes were the same? What was done with this information? Describe the level of collaboration or competition that existed between the two groups. What if anything, does this activity tell you about team work? About leadership? About supporting others? About problem-solving, decision-making, and risk-taking?

## Initiative 8 - Toxic Waste

Contributed by Steve Truitt

### a) Themes Related to **Extreme**

Problem solving  
Facing potentially dangerous situations  
Importance of concentration and careful planning

### b) Equipment

Two #10 cans  
Six 10-foot ropes (clothesline thickness)  
Rubber loops (made from strips cut from bicycle tires)

### c) Overview

Two circles of rope on the ground enclose highly poisonous zones which cannot be entered or even reached across without serious injury. A #10 can stands in the middle of each zone. One is one-third filled of highly toxic waste (water). It must be moved to the other circle and poured into the empty safe storage unit without spilling a drop. Safe removal equipment consists of the rope and rubber loops.

### d) Rules for Removal, Transport and Dumping of Toxic Waste

One minute of planning time is provided before the 20 minutes participants have to complete the task.

No one may step or reach inside either toxic area, as defined by the rope loops on the ground.

Only the provided materials (ropes and rubber loops) may come into contact with the toxic waste containers.

Toxic waste containers may touch the ground within either toxic area, but not outside a toxic area.

Spillage within a toxic area results in a two-minute time penalty. Spillage outside a toxic area, or elapse of time, results in global environmental disaster!

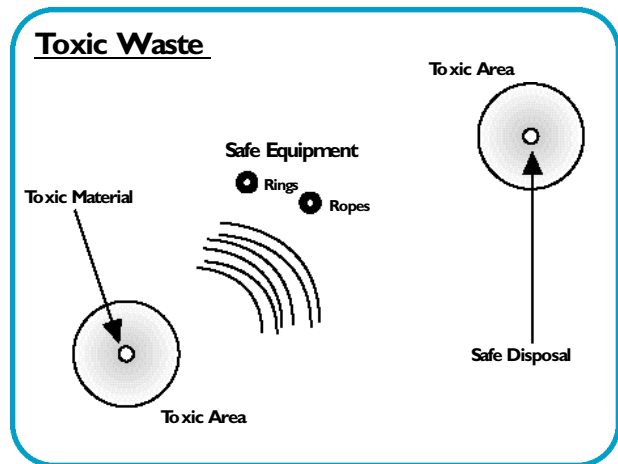
### e) Debrief

How does the group use their planning time? How do they allocate roles and tasks? How do they respond to the time pressure? How did the solution come about? Could it have been done faster or better?

### f) Variations

#### Don't Lose Your Dreams

Instead of using water in the cans and the metaphor of toxic material, use small pieces of paper upon which participants have written their dreams or hopes (it helps to have them fold them several times until they are as small as possible before putting them into the can). Now the can is placed on the "Continent of Unfulfillment" where hopes and dreams will never be realized unless they can be rescued and transported to the "Isle of Dreams Come True" where barriers to accomplishment don't exist. The initiative is framed with the same rules and time limits as Toxic Waste, but the debriefing can be rich for a group with common values or purposes. Question: What do we do with the dreams now that we have rescued them?



## Initiative 9 - Helicopter Rescue

### Themes Connected to **Extreme**

Rising to life-threatening challenges  
Communicating in the face of fear

### Overview

In this activity each person is asked to take on an imaginary role and justify why one should be spared the dangers of staying on a mountain in a storm. You play your part based only upon your personal experiences and values. This activity helps identify those values that are most important to you.

### Activity Introduction

Create a scenario that sets up a dilemma of choice, such as: A group of skiers is stranded on a mountain with a violent storm rapidly approaching. Usually, the helicopter makes several trips from the mountainside to the closest town, but with the storm coming, the helicopter can only make one trip and carry out six people. The others must face the storm and will perish in the cold or avalanches. In your group of eleven skiers there is a school teacher, a scientist, a teenager with AIDS, a minister, an honor student, a school dropout, a pregnant teenager, a politician, a military leader, a doctor accompanied by her husband. Assign each student a character, then ask them to begin deciding who should ride out on the helicopter.

### Special Considerations

This activity needs to be carefully monitored by the instructor. Emotions can run high and individual values are often challenged.

### Variation

You can expand or shrink the cast of characters to best suit your needs. Since a group of ten or twelve works best, you can break a class into groups and have one group participate while the other watches silently and gives feedback on what they witnessed at the end.

### Debriefing Questions

What prejudices surfaced?

What new individual values surfaced as a result of participating?

Were your early stereotypes accurate?

From what you learned, what new impression do you have of your classmates?



## Initiative 10 - Stranded!

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### a) Themes Related to **Extreme**

Making difficult decisions about safety  
Coming to consensus  
Devising a plan for facing a dangerous situation  
Working as a team

### b) Overview

This initiative places participants in the role of a group of campers who get lost on logging roads on their way to a campsite in the Maine woods. When their truck runs out of gas, they realize they have to hike out, but before they do, they must decide what to carry with them. Deciding what is safe to take becomes easier than reaching a group consensus.

### c) Description

Give students a copy of the problem sheet and ask them to rank in order of usefulness the first 15 items, and eliminate the 15 that are not necessary for survival. After students have done their own ranking, divide them into groups of four to seven and ask them to compare their ranking and then reach a consensus, i.e. to form a group list which satisfies all members.

Explain that consensus does not mean that everyone agrees unanimously. Rather, it is a way for group members to come to agreement through compromise. Suggest that students try to follow these guide-lines in their groups:

1. Avoid arguing for your own rankings. Present your position as lucidly as possible, with logic, but listen to the other members' reactions and consider them carefully before you press your point.

2. Do not assume that someone must win and someone must lose when discussion reaches a stalemate. Instead, look for the next most acceptable alternative for all.

3. Do not change your mind simply to avoid conflict and to reach agreement and harmony. When agreement seems to come too quickly and easily, be suspicious. Explore the reasons and be sure everyone accepts the solution for basically similar or complementary reasons. Yield only to positions that have objective and logically sound foundations.

4. Avoid conflict-reducing techniques such as majority vote, averages, coin flips, and bargaining. When a dissenting member finally agrees, don't feel that he must be rewarded by having his own way on some later point.

5. Differences of opinion are natural and expected. Seek them out and try to involve everyone in the decision process. Disagreements can help the group's decision because with a wide range of information and opinions there is a greater chance that the group will hit upon more appropriate solutions.

After the individuals have made their individual decisions and the groups their group decisions, the various results can be scored and compared. Scoring can be done by having each person keep track of the difference between his or her ranking of an item and answer sheet ranking. For instance, if an item is ranked by an individual as 2 and the answer sheet as 8, the difference is 6. The same difference would exist if the individual ranked the item as 14.

Ask each individual and each group to total up their scores. The lower the score, the better. The scores provide a useful basis for discussion. Ask each group separately how many individual scores were lower than the group score. If there are any, ask the group to consider how they arrived at a group decision which was worse than one of their member's decisions. All

groups should consider the value in the process which allows a group to arrive at a better decision than the separate individual decisions.

### Debrief

Who was chosen as reporter for the group? How were they chosen?  
Who were the leaders in your group? How could you tell?  
Why were they the leaders?  
Who were the quiet ones in your group?  
Did anyone try to get them to join in?  
How easy/hard is it to reach consensus? Why?  
What is compromise? How do you compromise?

### Modifications:

List 15 important items, but not in any order.  
Rank only the top 5.  
Get in groups and reach consensus on the top 5.

## Suggested Answers

### Most Useful

- Bug repellent—In early summer the bugs in Maine are so fierce as to drive people mad or bite them so badly that their eyes become swollen shut.
- Four sleeping bags—Full rest and warmth are essential to survival, (humans can live 30 days on stored fat).
- Tub of peanut butter—Each tablespoon of peanut butter contains 100 calories and is high in protein.
- Ten-pound cheese wheel—Provides calcium, fats, and is an easily digestible source of protein.
- Steak—A good morale booster, semi-perishable and should be eaten promptly since it is mostly protein.
- Transistor radio (lightweight)—Tune in for radio programs about a search for them or weather forecasts. Morale booster.
- Kidney-liver cat food—A valuable if somewhat unappetizing source of protein and fat. Protein lasts longer than any other nourishment in providing energy.
- Matches—Fire may be necessary to dry wet gear, boost morale, make signal fire and prevent serious hypothermia. Might also be used to keep away animals.
- Ten-pound tent—This can be rigged for use as a place to keep warm and dry or to keep bugs out and carry equipment in.
- Sheath knife—Useful for preparing any captured animals like frogs, or cutting strings, cheese, a pole, etc.
- Hook and line (fishing gear)—May provide a supplementary source of food. Or the line may be used for tying up supplies, etc.
- Wool sweaters—Provide light-weight warmth, wet or dry.
- First-aid kit—Band-Aids, aspirin, Vaseline may be useful for minor injuries.
- Instant breakfast—A lightweight source of vitamins and minerals.
- Map — An auto map might be useful for sighting major landmarks like lakes, rivers, etc.

### Not Needed:

- Marshmallows—Not necessary but a possible morale booster.
- House key—Light weight, but not useful for survival.
- Travelers checks—Not necessary for getting out of the woods.
- Clock—For survival it is not necessary to know time.
- Walkie-talkie—Will not carry any useful distance.
- Snakebite kit—No poisonous snakes in Maine.
- Paperback books—Weigh too much to be useful.
- Bathing suits—Not necessary.
- Rubber raft—Too heavy, also not likely to be useful.
- Paddles—No use without raft.
- Coleman stove—Too heavy, wood fires can be used.
- Pole—Knife can be used to cut a pole.
- Magnum gun—Accuracy too low for hunting. Caliber too large for small game.
- Five gallon water jug—The water in the Maine wilderness is potable.
- Cigarettes—Bad for health. It's a convenient time to quit!

## Initiative 10 - (contd.) Stranded! Problem Sheet

### The Scenario

On vacation in July, you and your family have been traveling through the wilderness of western Maine in a pick-up camper. In a blinding rainstorm you made a wrong turn on an unmarked lumber road. You have wandered more than 150 miles over a maze of lumber routes, into the wilderness. The truck has run out of gas and now you, your parents, a ten-year-old sister, a six-year-old brother, and the family cat named Charity are lost.

After a family conference, you decide it is not wise to split up. You are going to try to walk back all together. You think that if you pace yourselves, you can probably cover about 15 miles a day. There are no helicopters or jeeps patrolling the area, and you have seen no other cars or houses.

The family is dressed in lightweight summer clothing and sneakers. Temperatures at night go down in the low forties. It is also bug season. As you look around you pull the following items out of the camper, some of which may be useful.

- fishing gear
- 44 magnum handgun and ammo
- matches
- marshmallows (4 bags)
- walkie-talkie
- 5 gallon jug of water
- house and car keys
- Coleman stove (2 burner)
- snakebite kit
- five cans of kidney cat food
- bathing suits
- transistor radio
- sheath knife
- raft paddles
- paperback books
- \$500 in Traveler's checks
- 4 Dacron sleeping bags
- steak (3 lbs.)
- bug repellent
- road map of Maine
- instant breakfast (3 boxes)
- cigarettes
- family tent (10 lbs.)
- alarm clock
- 5 lb. tub of peanut butter
- 10 lb. wheel of cheese
- 6 ft. tent pole
- wool sweaters for everyone
- inflatable rubber raft (2 pcs.- 20 lbs.)
- first aid kit

### Student Notes:

*“Are you in earnest? Seize this very minute. What you can do, or dream you can, begin it. Boldness has genius and magic in it.” – Goethe*

A sense of adventure comes not only from things like rock climbing and skiing down mountains. Sustained academic projects that include a few key ingredients can evoke a sense of risk and get the adrenaline going using intellectual and personal challenges within the school environment. Incorporating these elements into your classroom on a sustained basis can help students experience through school some of the challenge and adventure that the athletes in *Extreme* experience through their sports.

The best projects give students a compelling reason to learn and foster deeper understanding by asking students to do real work that is meaningful and important. They are the major vehicle for learning important content, skills, and habits, as well as for developing qualities of character. Most complex projects are made up of a series of different activities and tasks that lead to a final product or performance that has value beyond the school. To reach opening night of a play, for example, a class must research the topic, study a variety of plays, and think about the qualities of a good play; think about the issues, characters, and content of the play; develop a script, revising it many times; rehearse until the play is good enough to perform; and put on the final performance for family and other community members. Below is a list of some of the essential elements of a challenging project.

#### Essential Elements

##### a) The Seemingly Impossible Task

History’s great expeditions have always sought difficult, seemingly unattainable prizes or destinations; ones that were worthy of their efforts. Achieving their goal required arduous, complicated work that endowed it with tremendous meaning and an aura of mystique. The best projects aim for summits that appear to exceed what could reasonably be expected of students. As fourth-grade teacher Steven Levy said, “Whenever I begin an expedition with my students I want them to feel it asks the impossible. I want them to believe that it can’t be done. And then, somehow, we do it.”

##### b) Projects with Consequences

Projects in which students test town wells for lead levels, petition city planners to turn a vacant lot into a community garden, or design a new addition to their school building ignite a sense of risk, excitement, and challenge. These types or real-world dilemmas motivate students to do their best work because they know it has meaning and that it will impact their school and community. They give students a reason to learn the approaches, tools, language, and standards used by professionals in the world outside of school.

##### c) Fieldwork

Reading information in a textbook does not rank as high adventure, but stepping out into the world to find answers for yourself is exciting business. Far from the passive model of field trips in which students are site-seers or spectators, fieldwork calls on students to become researchers and ethnographers. Fieldtrips are often an end in themselves, but fieldwork is a powerful means for gaining knowledge students need to complete a project. Before they head out, they learn the skills they will need, such as interviewing protocol for conducting a community survey. Students leave the building with a purpose and with the understanding that academic work will come from their fieldwork. For instance, when sixth-graders visited New York’s Department of Environmental Protection, they

knew they had to take note on procedures used for testing water quality because the students would be running similar tests back in their classroom. Even given barriers of time and logistics, teachers can still bring their students outside to interview passers-by, sketch buildings, measure shadows, and make detailed observations. The simple act of putting clipboards in students’ hands before they go communicates the idea that fieldwork is a time for learning.

##### d) Performance

Few events get students’ adrenaline pumping faster than the prospect of speaking before a large audience. In addition to infusing a sense of risk, sharing knowledge in front of a significant audience deepens students’ academic achievement. Students strive to do their best work when they know their work will be displayed in an art gallery or submitted to a city council, performed in front of theater critics from local papers, or presented to a panel of experts, parents, community members, and their peers. For instance, students at Central Alternative High School in Dubuque, Iowa recently presented their research on the all-African American Tuskegee Airmen of World War II not just to their history teacher, but to a seminar of 900 interested community members and four surviving Airmen.

##### e) Service

Acts of meaningful service to others call on students to step outside of their comfort zone and take emotional risks. Because these risks are taken for the good of others, students often are willing to push themselves. They work through the initial awkwardness they may feel about interviewing senior citizens or people in a homeless shelter when they know their work will make a difference. By acting in service to others, they discover their own strengths, limits, interests, and goals. Students who plant willows to stop erosion or give testimony on solar power at state legislative sessions discover that they have the ability to become active in their communities and make positive change.

#### When planning projects, consider the following questions:

- How will the project provide a compelling answer to the question, “Why do we need to learn this, anyway?” Is it challenging yet possible?
- How is it aligned with your learning goals, and will it allow students to demonstrate the most significant things they have learned?
- What are the real-world problems, issues, or questions that the students will face during a project?
- How will the project balance group and individual tasks, allowing individual students to stretch beyond their limits while developing teamwork skills?
- As they work on the project, how will students engage by using a rich variety of sources: books, models, experiments, expert speakers, poetry, hands-on math applications, primary documents and sources, paintings, music, and computer software?
- What purposeful fieldwork will support the students’ research and work on the project?

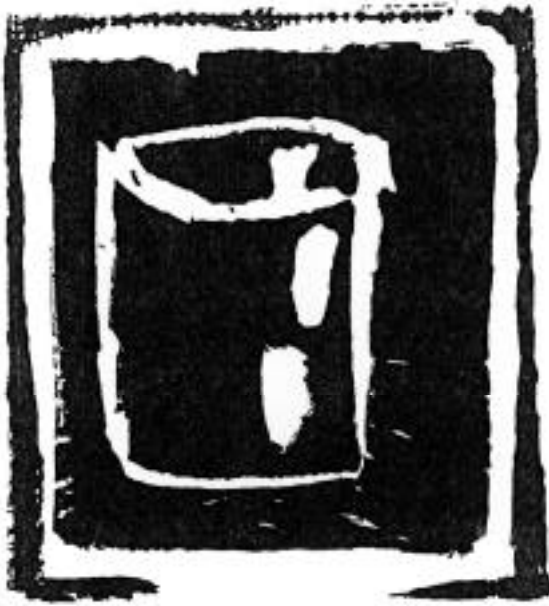
## Examples from Our Classrooms

When you're in a more traditional classroom and you just read about all these topics, it remains distant and ideal. Here it's read and it's also lived and so you make connections. Hopefully the reading is much more significant and the learning more long-lasting because you have the experience.

—Roberto Porrata-Doria, Director of Instruction  
Rafael Hernandez School, Boston, Massachusetts

Since 1992, Outward Bound has been involved, through Expeditionary Learning Outward Bound, in comprehensive school reform in American public schools. Expeditionary Learning is a design for comprehensive, school-wide changes in instruction, schedule, staff development, and culture leading to increased student achievement and character development. Expeditionary Learning takes the philosophy and pedagogy of Outward Bound and adapts them to school environments. Seventy elementary, middle, and high schools have now adopted the Expeditionary Learning design.

In Expeditionary Learning Outward Bound schools, curriculum and instruction center on learning expeditions. Learning expeditions are long-term, project-based investigations of a topic that engage students in the world through authentic projects, fieldwork, adventure, and service. The work students do within learning expeditions centers on critical thinking, essential skills and habits, and character development. Ongoing assessment is woven through the expeditions, pushing students to higher levels of performance in pursuit of academic excellence.



The following examples come from Expeditionary Learning classrooms. They demonstrate how challenging and rigorous projects can be done even in the midst of the difficulties with schedules, planning time, and logistics that all schools face. We encourage you to adapt these projects to your classes or use them as models to design your own projects for adventurous learning.

### a) Rocky Mountain School of Expeditionary Learning Denver, Colorado

#### ***A Sense of Place: Exploring Colorado History — Its Landscape and its People***

In this expedition, third- and fourth-grade students investigate Colorado history through researching and reading narratives of people who have impacted the state, and exploring important landmarks and historical sites in Denver and its surroundings. Through these studies, students gain an understanding of how people in Colorado history have interacted with the state's rich resources and natural landscape. This nat-

urally leads to a study of earth sciences and geology through direct field experience and classroom work. As part of this study, students create a visual representation of one facet of Colorado's physical landscape and how it has changed. During two separate simulated archeology digs on school property, students explore the physical landscape of Colorado through rocks and fossils, and they examine three distinct native cultures. As the culminating project, the children immerse themselves in rich historical fiction and learn historical investigative skills such as interviewing and note-taking techniques, archeology and ethnographic research, map making and reading skills. Using these research skills, students create a work of historical fiction exploring how the people of Colorado have interacted with the landscape.

*I set up the archeology dig with artifacts from three different cultures: a nomadic, basket-weaving culture; a native agrarian culture; and a European settlers' culture. The students made detailed observations on each artifact they uncovered. Next, they looked at their own and their peers' observations and began to make inferences about the collection of artifacts on that level. From the collection of inferences and observations, they created a story about the culture. All of our rich fieldwork experiences came to life as they began to unearth the artifacts from the different levels in the pit. I watched one student take an artifact, go to a shady spot, and begin furiously sketching his artifact. He told me the artifact reminded him of our fieldwork at the Colorado History Museum, and that it inspired him to tell the story of this dig. For the next hour, he wrote with great intensity. I was thrilled to see his and other students' connections between what they were reading about, what they were writing, and what they were doing. This was a tremendous way for the students to put together the essence of the expedition and really examine the life of the people of Colorado. The students were using important academic skills in a purposeful and meaningful way. This enabled them to create high quality research projects at the culmination of the expedition.*

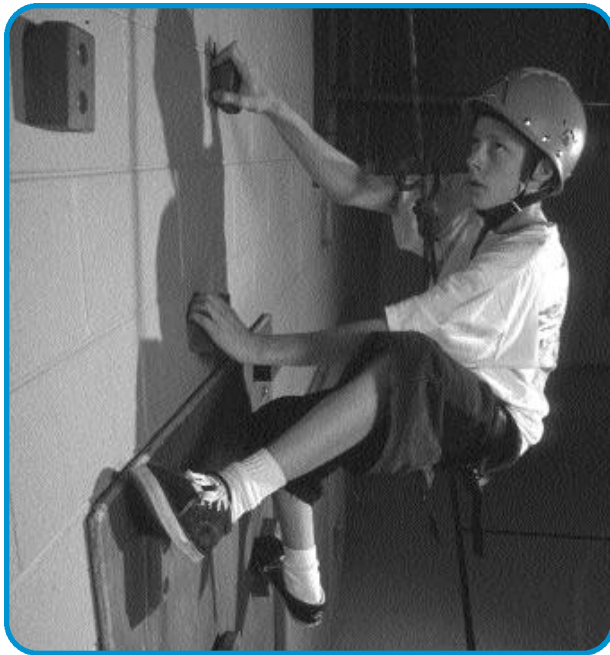
Jennifer Wood, third- and fourth-grade teacher

### b) Fulton Intermediate School - Dubuque, Iowa Investigations

Fifth-graders think and work like scientists, learn about birds, and improve their craft of writing as they conduct an in-depth, inquiry-based investigation into the properties and characteristics of birds. Students explore and use the scientific process to develop hypotheses about bird characteristics and conduct experiments that allow them to test their predictions about why, for example, birds have different kinds of feathers and how contour feathers enable birds to fly. Each student conducts research on a selected bird and writes a page for a class book on birds. The class develops rubrics for effective writing and does multiple drafts until the work is of publishable quality. As a culminating project, the class uses what they have learned to transform a classroom into a bird sanctuary complete with accurate habitats that include vegetation, water sources, nests, animal life, and food sources. During their final presentation, students guide visitors through the sanctuary to individual habitats where students stand behind lecterns fielding questions and sharing information from their own bird books.

*We saw the opportunity to teach students how to be learners instead of just teaching to the curriculum, by helping them build their repertoire of skills. We wanted our students to learn skills that would help them tackle any academic undertaking ahead of them. For example, we taught them how to write detailed plans when working on long-range projects. In order for a goal to be reached, a realistic plan must be developed and followed. These plans included sketches, narrative descriptions, a materials list, a very detailed "to do" list, and deadlines. The students also needed to work as team members and to communicate and work with others, which are skills used in the work place, at home, and in their neighborhoods.*

Sarah Johnson and Angela Budde, fifth-grade teachers



**c) School for the Physical City - New York City  
A Sixth-Grade Expedition into Ecology and Service**

Students gain in-depth understanding of the concepts of ecology by identifying a community need related to their studies. One year, students chose Madison Square Park as the ideal place for their service project. They decided they could realistically do park restoration. They contacted the superintendent of the Parks Department and made arrangements to work in the park each week to help undo some of the damage to the lawns that people had created by playing on them. Using what they had learned about ecological concepts, the students surveyed the park for human and animal use, and took an inventory of plant and animal species. They did a neighborhood walk to look at local gardens and parks, and made inquiries in plant stores about the best types of plants to grow in partly shaded areas. Students marked off quadrants that they would investigate in depth, where they took notes on soil erosion and dryness, estimated how much oxygen could be produced by the trees and shrubs of the area they mapped, and took measurements of the depth of soil compaction. From these observations students planned, with the help of park personnel, where strategically to place plants and grass seeds. Students created a needs assessment and restoration plan by using the same tools and approaches that professionals use in real life, and held themselves to real-life standards.

*As the sixth-grade students were adding the finishing touches to the park, a neighborhood elementary school asked them to host a third-grade class there. The students organized themselves into five groups. Each group created a station for the third-graders to visit. They taught the youngsters about planting flowers and about the anatomy of a flower; they also held a contest for picking up litter in the park and did a skit on why people should not litter. Students decided on and did fund-raising to pay for the flowers they used in their work with the third-graders. The last station taught them about environmental issues such as pollution and recycling. After the lesson, students played a game with the youngsters to assess their retention of the information. I was particularly proud of the way the students embraced the opportunity to help younger students learn what they had learned. While they were working with the third graders, I saw my class replicate some of the activities I had done with them. For instance, I taught them how to do a flower dissection so that they could get a sense of the components of plant reproduction. My students, in turn, did the same exercise with the youngsters using flowers they had purchased, literature from a science text, and a chart they had designed on poster board. This showed me that students had both developed an ethic of service and that they had really learned about ecology.*

Cheryl Sims, sixth-grade teacher

**d) Audubon Elementary School - Dubuque, Iowa  
Bethany Biography Expedition**

In an expedition that integrates service and writing skills, students learn history, art, interviewing skills, and produce high-quality writing. During the expedition, students develop long-term relationships with a resident at a retirement home and write the residents' biographies. Students present the biographies to the residents and their families, who cherish them. Students are highly motivated to do their best quality work. As one student said, "We know that it has to be perfect because this is someone's life story and you can't just write anything, you've got to write what's right and it's going to be something that they're keeping forever, so it's got to be good."

*My fears about digging so deeply into this writing process rather than writing a wide variety of things over the course of the year were dispelled the very day of the benchmark writing test. When I gave the students the topic, "Something I Have Lost," we verbally brainstormed several possibilities. But then I realized they were ready to fly on their own. They independently began webbing their own ideas, transferred them into well-constructed paragraphs, and topped the essays off with exemplary introductions and conclusions. Why was I so amazed at the ease with which they tackled the task? After all, this process is exactly what they have done six times already this year: brainstorm, web, and create organized paragraphs into meaningful "essays" called chapters, each of which has a catchy introduction and conclusion. They were so prepared for this assignment that the random sampling of sixth-graders from Audubon scored nearly twice as high as the district's sixth-grade average! To me, "less is more" means that if students deeply understand a concept or process, they will be able to apply their knowledge to other similar situations, pulling from their experiences and making connections in order to construct meaning. When they are asked to do a piece of persuasive writing or any other kind of writing we didn't get to because we were busy with Bethany, they will be able to take what they know so well and apply it with a new twist. The basic tools of writing will be there.*

Deb Fordice, sixth-grade teacher

**e) Rafael Hernandez School - Boston, Massachusetts  
Making a Difference**

Eighth-graders study "immersion journalism" as a vehicle to focus on social activism and Americans who have made a difference throughout history. Students research history textbooks, historical documents, fiction, and films to learn about activists' work in the context of historical events and trends during that period. Students bring this research to class discussions on the large questions at stake. For example, a discussion on a book on Harriet Tubman focused on the role of singing in enslaved communities. This historical research and a focus on interviewing, observing, and writing skills provide a foundation for the final immersion journalism assignment. Students spent a day with local activists, interviewing and shadowing them, and then went back another day for more information, based on critiques of their first interviews. After much editing and revision, the students compiled portraits of these people, short biographies of historical figures, and letters to the editor into a magazine.

*Until they had focused access to concrete examples of how other writers pieced together their portraits, students simply thought their job was to write up a description of the person's job, not of the person as someone whose history and experience drew him or her into making change in the community. With this new understanding in mind, we created a web of questions for the second round of interviewing and observation. These questions were hugely different from the simple name, age, and salary inquiries that students had begun by using. Now students wanted to know about the person's childhood, life as a young adult, and what drew him or her to activism.*

Connie Russell-Rodriguez, eighth-grade teacher

## Dream On

Karen McDonald and Phil Dyer

King Middle School

Portland, Maine

At the time the sixth-grade team began brainstorming ideas for our second expedition, “Dream On,” our school had started preparing for a renovation that would add one new wing to the building and remodel the remaining classrooms. We already knew we wanted to develop a math-driven expedition. Giving the students the opportunity to have a direct impact on the architectural project allowed us to focus on the math and make the expedition realistic to the students. We also thought that students should have a say in the design of the building that would serve middle school students, so we centered “Dream On” on this premise.

That first year we charged the students with designing their vision for a sixth-grade wing in the renovated school. In teams, students created their own architectural firms, designating names and creating a letterhead for correspondence. The expedition required a great deal of direct instruction in math class. Students studied area and perimeter and their relationship. We covered geometry terms as well as the effective use of angles and shapes for interior design. Several mini-projects led the students through instruction on drawing to scale. The final instruction for the floor plan included a set maximum area (35,000 square feet) and a fixed scale of one inch to eight feet. Using their math skills of measurement and geometry, the teams drafted floor plans of proposed wings and wrote accompanying proposals.

The students gave their final presentation to the architects designing the building at the time. The real-world expectations set by the presence of the architects, and the possibility that any of the student teams could influence the building design, helped make the expedition a great success.

The next year the biggest problem we faced when we considered doing this expedition with our next group of sixth-graders was the fact that now the renovation was under way, and we could not tell the students that they would have a real impact on this project. The “real life” aspect of the expedition was gone.

We still wanted to adapt this expedition for a new group of students because we had found the topic of architecture so engaging for students and perfectly suited for interdisciplinary teaching. So, after a great deal of brainstorming, we came up with the idea of having students design their vision for a Gulf of Maine Aquarium. This proposed project had been in the local news for several years. Supporters of the aquarium were having a difficult time finding public interest, as well as financial support. We now could incorporate science into this expedition, since students would learn about aquatic animals and habitats. Finally, we had returned the “real life” aspect to our expedition.

Brainstorming, planning, gathering materials, contacting local resources, and scheduling meaningful fieldwork soon followed. As our plans jelled we realized we had an even stronger expedition than before. In order to complete the final project successfully, students needed extensive knowledge about aquatic life and habitats. It brought science into this expedition, and we felt it made this effort more interdisciplinary and more academically rigorous than our first time through. We planned to have our students complete three final products: a floor plan of their vision of the Gulf of Maine Aquarium, a written proposal to describe details of the floor plan, and an oral presentation of their work.

Our team has completed the expedition twice with the focus on the aquarium design. Both efforts have been enormously successful in terms of the motivation and learning of the students. We started these expeditions at the beginning of November and completed both during the second week of January. Again, we believe that each time we work on an expedition we bring additional quality to our work. At the same time, we know that the students gain from seeing the models of students’ work from past years, and that those examples help push them to improve the quality of their own work.

### Plan Outline

#### Guiding Questions:

How do the needs of aquatic animals impact the design of an aquarium?

What design elements of an aquarium would effectively engage middle school-age children?

How do architects combine specific measurement requirements and creativity to meet the needs of a client?

#### Phase One

##### Project

Developing proposal and presentation of sites for Gulf of Maine Aquarium

**Activity 1** : Students traveled to the five proposed Portland sites for the Gulf of Maine Aquarium.

**Activity 2** : Students drafted a short written narrative about each site, including their response to the criteria. The narrative contained the advantages and disadvantages of each proposed site.

**Activity 3** : Students presented their site to the rest of the students. Presentations included pros and cons of the sites.

**Activity 4** : Students voted on the site they thought would be the most effective after hearing each presentation.

#### Phase Two

##### Project

Conducting a survey of the New England Aquarium

**Activity 1** : Students reviewed the survey sheet that they would complete. The purpose of each question was discussed, and students had the opportunity to discuss any other aspect of the aquarium they wanted to focus on.

**Activity 2** : Students were presented with information on the Behind the Scenes Tour at the New England Aquarium in Boston. They were invited to submit an application, as only a small group of students could attend.

**Activity 3** : Students visited the New England Aquarium, completing the survey sheet, which focused on their reaction to the architectural aspects and the educational aspects of the exhibits.

### Phase Three: Getting Started in Math

**Activities** : As “Dream On” began, math class focused on the skills needed for architectural drafting. During the first few weeks of the expedition, students learned about area, perimeter, geometry, drawing to scale, how to use architectural tools, and the function of line weights and universal symbols. The expectation was that students would include applications of the mathematical concepts in their proposal.

### Phase Four: Getting Started in Language Arts

#### Project

Creating a company and designing logo, business cards, and business letter

**Activity 1** : Students were asked to imagine that they were the president of their own architectural company. They created a company name and logo and designed business cards on the computer.

**Activity 2** : Students composed business letters to Don Perkins, president of the Gulf of Maine Aquarium Committee, persuading him to take a close look at their aquarium design and proposal.

### Phase Five: Getting Started in Science

#### Project

Research aquatic habitats

**Activity 1** : During the first stages of the expedition in science, the students researched aquatic habitats in preparation for designing their own aquariums. Research time on the Internet also allowed everyone to visit fantastic aquarium sites around the world.

**Activity 2** : Students completed fact sheets on five aquatic habitats that they researched.

**Activity 3** : Students used their research information to complete five exhibit outlines. The exhibit design needed to be based on the habits and habitat of the animals in the tank or exhibition area.

### Phase Six

Presentation by Joe Hemmes, a local architect, on his proposal for a Fort Gorges Aquarium. He modeled the type of presentation the students would give later in the expedition.

### Phase Seven

#### Project

Writing a proposal

**Activities** : Students spent several weeks writing the proposal that would accompany their floor plans. Rough draft proposals were typed, rewritten, and retyped, and on and on ...

### Phase Eight

**Project**: Developing rough drafts of floor plans

**Activities** : Student work on their floor plans coincided with work on the proposals. It was during this time that students had to put their new knowledge of scale, area, perimeter, and volume

to the test. Everyone was responsible for making sure that the exhibits in their aquarium were designed with precision.

### Phase Nine

#### Professional Critique

**Activity** : Professional architects from the area looked at each floor plan with a critical eye. Their role was to give feedback to the students before the final revisions were made.

### Phase Ten

#### Project

Producing final drafts of proposals and floor plans

**Activity 1**: Students completed the final drafts of their floor plans and proposals.

**Activity 2** : Students used the product descriptors for the floor plans and the proposals to self-evaluate their work.

### Phase Eleven

#### Classroom Presentation

**Activity 1** : Students from each of the four classrooms participating in the expedition presented their floor plans and proposals to classmates through an oral presentation.

**Activity 2** : After listening to all the presenters in their class, each group voted for the four students they believed would best represent them in front of a larger audience.

### Phase Twelve

#### “Final 16” Present to a Large Community Audience

**Activity** : Sixteen students presented their work to an audience of fellow students, parents, community members, teachers, and administrators, as well as to Don Perkins, president of the Gulf of Maine Aquarium Committee.

### Phase Thirteen

#### Assessment Conferences

**Activity** : Each student met individually with two teachers to review and discuss his or her work during this expedition. Reflection sheets were completed by the students prior to the conference.

### Phase Fourteen

#### Gulf of Maine Aquarium Committee Connects with Windsor - 6 Students

**Activity** : Sixteen students participated in an open forum with the committee of twenty community members. The committee actually incorporated some of the students’ designs into their guidelines for the architects. The architects came back to the group of sixteen for a critiquing session. The students gave feedback to the architects on their first draft of the actual plans for the aquarium (quite a turnabout). Finally, two students have joined the Gulf of Maine Aquarium Committee and attend monthly meetings. These students provide monthly updates to all of us. The committee is in the process of securing funding for the project.

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# IV. OUTWARD BOUND IN PUBLIC SCHOOLS

Since it was founded in England in 1941, Outward Bound has tapped the learning potential of adventure. A worldwide, adventure-based experiential education organization, Outward Bound holds that people learn best when they are called on by challenging, real-world experiences to make choices, take responsible action, acquire new skills, and work with others. Outward Bound courses bring students into the wilderness not only to feel the excitement of rappelling down a canyon or rafting through rapids, but to gain insights into themselves, others, and the natural world. Outward Bound courses harness the adrenaline of adventure activity for personal and collective growth.

Outward Bound originated in 1941 as a program to train British merchant seamen to survive at sea and save others. The brainchild of Kurt Hahn, the founder of Gordonstoun School in Scotland, Outward Bound came to the U.S. in 1961. Today, Outward Bound USA's five wilderness schools are the leaders in adventure education in the U.S. More than 700 challenging wilderness courses are available to students age 14 and up. Outward Bound urban education centers in New York, Boston, and Baltimore extend Outward Bound programs into public schools.

In 1992, Outward Bound's Expeditionary Learning was named a New American Schools design for comprehensive school reform. Now, Expeditionary Learning Outward Bound works in partnership with over seventy, primarily urban public schools to transform schools into centers of rigorous, experience-based, adventurous learning.

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## **Outward Bound Resources for Educators**

**Service at the Heart of Learning: Teachers' Writings** (1999), edited by Emily Cousins and Amy Mednick, explores the role of service within learning expeditions. This book is a collection of narratives by teachers who share their experience planning and guiding learning expeditions that have a strong service dimension. The teachers describe the role service plays in raising student academic achievement and building a strong classroom community. Available June/July 1999

**Reflections on Design Principles** (1998), written by Emily Cousins, offers brief essays on the design principles, giving examples of how they are integrated into teaching practices at Expeditionary Learning schools. The ten design principles are our best short statement of the Outward Bound and Expeditionary Learning philosophy of education. They focus our attention on what is important, and give us something to go back to when we need guidance. These essays also draw from a wide spectrum of literature to relate the design principles to the world at large. (74 pages/\$4.95)

**Guide for Planning a Learning Expedition** (1998), edited by Meg Campbell, Martin Liebowitz, Amy Mednick, and Leah Rugen, is a practical framework for planning learning expeditions, field-tested by thousands of teachers over several years. Future, new, and veteran teachers have often asked us how they would go about designing a learning expedition. This new book answers that question. It includes six examples of expeditions written by K-12 teachers from throughout our network from a range of grade level and subject area. (161 pages/\$14.95)

**Journeys Through Our Classrooms** (1996), edited by Denis Udall and Amy Mednick, is a collection of stories in which K-12 teachers describe their own journeys into guiding students through intellectual explorations called learning expeditions. The stories show us that curriculum can be both thoughtfully designed by teachers and open to students' choice and discovery; that it can address the major disciplines and essential skills as well as students' passions and interests; and that it can challenge both the mind and the heart. (180 pages/\$14.95)

**Into the Classroom** (1996), edited by Mitchell Sakofs and George Armstrong, offers an explanation of Outward Bound's educational ideas and practices and provides suggestions for applying them to the business of teaching in schools. The book

includes activities and lessons you can use with your students to build community, cultivate compassion and moral conviction, nurture leadership, teach academics, and equip students with the skills to be lifelong learners.

**Fieldwork, An Expeditionary Learning Outward Bound Reader—Volume II** (1996), edited by Amy Mednick and Emily Cousins, is a book of narratives that offers educators vivid examples and reflections on the Expeditionary Learning approach to teaching and learning. Capturing the voices of K-12 teachers, principals, administrators, and parents, this book grounds the reader in the caring and intellectually rigorous active learning underway in nearly 50 Expeditionary Learning schools across the country. Draw from it a broad framework of how Expeditionary Learning promotes comprehensive school improvement or become inspired by a testimonial of one teacher's practice. (168 pages/\$17.95)

**Fieldwork: An Expeditionary Learning Outward Bound Reader—Volume I** (1995), edited by Emily Cousins and Melissa Rodgers, is Expeditionary Learning's first collection of stories from the field. Hearing from Expeditionary Learning practitioners will motivate educators striving to bring about change in their own schools. We learn from this book that Expeditionary Learning is a design for comprehensive school improvement that transforms time, space, and relationships. (184 pages/\$17.95)

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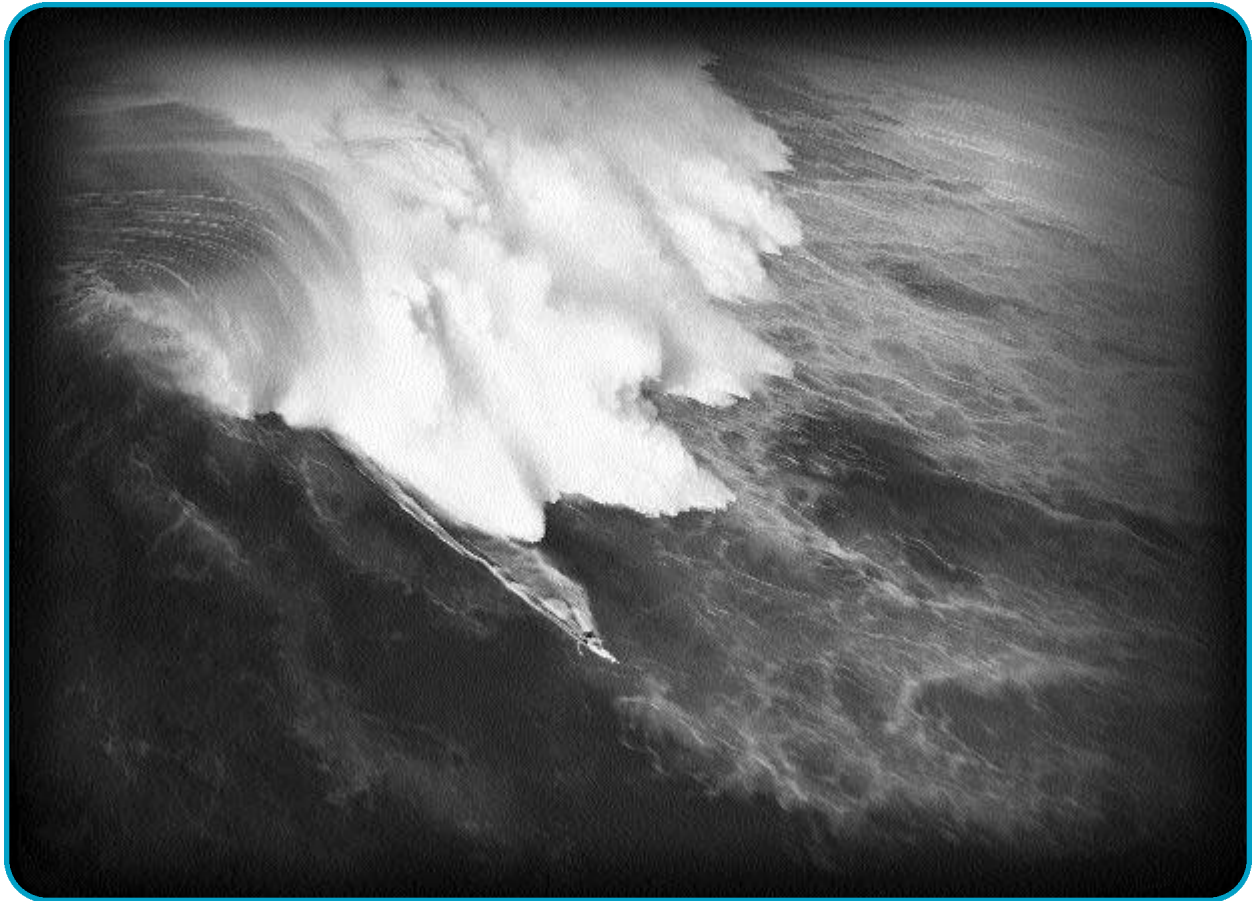
**The Web: The Newsletter of Expeditionary Learning Outward Bound** offers a view into the work of Expeditionary Learning educators. It is distributed to educators throughout the Expeditionary Learning network as well as to those in the wider education community annually from September through May. (free of charge)

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Illustrations:

Page 7 - **Yuann Trinidad**, a sixth-grade student at IS 30 in Brooklyn, NY did this etching for a learning expedition on water.

Page 11 - **Cody Sanderson**, a fourth-grader at Midway Elementary School in Cincinnati, OH, did this memoprint "Skiing" during the "Winter Olympics" learning expedition.

Page 15 - **Mohamed Belakhdor**, a sixth-grader from IS 30 in Brooklyn, NY did this etching for a learning expedition on water.

Back Page - **Gilan Byloun**, a sixth-grader from IS 30 in Brooklyn, NY did this etching for a learning expedition on water.

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