



III. Planning & Conducting a PLT Workshop

Most of the work for a successful workshop is done before the workshop day. Following are suggestions for planning and conducting your workshop to ensure success, as well as information about a few essential post-workshop tasks. See the “Workshop Planning Checklist” that follows for a summary of all these tasks.

1. Arranging the Workshop

PLT workshops generally happen in one of two ways. Sometimes a sponsoring organization identifies a need and then arranges with a facilitator to plan and present the workshop. More often, a PLT facilitator decides to do a workshop and arranges it through a sponsoring organization or workshop facility.

To arrange a workshop, begin by checking with your school, school district, teaching colleges or universities, county office of education, or other organization to find out whether they would be interested in sponsoring a workshop. Other possibilities include contacting local nature centers, county parks, other agencies, or conservation-oriented organizations (such as an urban forestry organization, Girl Scouts, or 4-H) and gaining their interest in sponsoring a workshop.

Although sponsors are not required, some workshop sites require proof of liability and accident insurance before you can hold a workshop there. *PLT cannot cover facilitators with insurance for workshops.* Therefore, we recommend that you find a sponsor for your workshop that can provide you with the necessary insurance protection.

2. Co-Facilitating

We highly recommend that you co-facilitate your workshop, especially if you are a new workshop facilitator. You may co-facilitate with one or two others who attended your facilitator training or with an experienced PLT facilitator (lists of facilitators are available from your State Coordinator). If possible, you might co-facilitate with a resource specialist trained in PLT (for more information, see *Inviting a Resource Specialist* that follows).

Co-facilitating has many advantages, both for you as the facilitator and for the participants. It is helpful to have someone to share ideas with, to help plan the agenda and your delivery, to help gather necessary materials, and to share the responsibility for presenting activities and for fielding questions. Participants will have the advantage of seeing varying teaching styles and will learn from presenters with different areas of expertise. In addition, if one facilitator has an emergency, the other facilitator(s) can cover and the workshop will not have to be cancelled.

If you do work with a co-facilitator, be as explicit as possible with each other *before* the workshop. It is important to identify what each of your roles will be. You may find it useful for each of you to write your answers to the questions in the “Co-Facilitating that Works” chart below and discuss your responses. This cooperative planning early on will allow for smooth transitions between facilitators and will also enhance your working relationship.

Co-Facilitating That Works:

As you begin to plan a workshop with a co-facilitator, consider these questions and share your answers with each other to help clarify your roles.

- For which parts of the workshop would you like to be responsible? Which parts would you like your co-facilitator to handle?
- What would you really like to include in the workshop because it is important to the targeted audience, because it worked well in other workshops, or for another reason?
- How will you make transitions between each of your presentations?
- If necessary, how will you adjust your agenda?

Workshop Planning Checklist

Planning for the Workshop

- Find someone to co-facilitate the workshop.
- Request permission from your school system or organization (if necessary).
- Select and reserve workshop site for the date, time, and number of hours needed.
- Submit workshop plan to district or college for approval (if necessary).
- Submit workshop proposal and planning form to State Coordinator at least four weeks prior to the workshop date. This allows enough time for your Coordinator to process the PLT guide orders.
- Develop and distribute promotional materials such as flyers, pre-registration forms, posters, or articles at least four weeks prior to the workshop date.
- Develop workshop design, taking into consideration:
 - the audience
 - workshop objectives
 - constraints (for example, space or time)
 - strategies for overcoming constraints
 - requirements for credit (district, college, or university), if offered
 - materials and equipment needed for activities
- Outline workshop agenda and plan schedule.
- If possible, contact/invite a resource specialist.
- If planned, arrange for refreshments and snacks.
- Gather support materials such as AV equipment, paper, pens, and art materials.
- (Optional) Send confirmations and maps to those registered.
- (Optional) If possible, visit workshop site to check things out.

At the Workshop Site

- Set up workshop space (if possible, the afternoon or evening before).
- Check to be sure equipment is working.
- Locate restrooms, light switches, plugs, and easiest access to the outdoors.
- Select appropriate areas to conduct activities.
- During the workshop, orient participants to the restrooms and refreshments.
- Provide a brief overview of the agenda, including when breaks and lunch will be taken.
- At the end of the workshop, be sure each participant fills out a Participant Survey Form (evaluation).
- Distribute PLT certificates.

Post-Workshop Tasks

- Complete the Facilitator Survey Form and send it to your State Coordinator along with the completed Participant Survey Forms. [You may wish to insert your state specific address here].
- Complete the Workshop Expenses Summary Form and send to the State Coordinator.
- (Optional) Send thank you letters with a list of workshop participants, addresses, and phone numbers. Remind participants of any follow-up meeting.

3. Offering Credit

Offering credit can be a big incentive to potential workshop participants. If you are affiliated with a college or university, you may be able to offer college credit. If you are interested in doing this, you will need to make all the arrangements with the school. Depending on the school's specific requirements, your workshop may need to be longer than is required by PLT (usually a total of ten to fifteen hours) and participants may need to complete a written assignment. Also, participants will usually need to pay a fee to the college or university for the credit.

You may also be able to arrange for continuing education credit for workshop participants through your county or state office of education or school district office. In some states, PLT is actually a provider of credit.

Foresters and other resource professionals participating in the Society of American Foresters' (SAF) "Continuing Forestry Education and Professional Development Recognition Program (CFE)" may be able to earn credit by participating in a PLT workshop. Contact your Coordinator for the name of the SAF person in your area to verify CFE credit. Be sure you know if it is graduate or undergraduate credit that your participants need. Also, volunteers serving as members of the national service program known as "Americorps" have received service hours as part of their educational plan.

4. Deciding Where and When

Two important considerations you will need to keep in mind when designing your workshop are the workshop site and time frame. Everything you do during the workshop will depend to some degree on these two factors.

Workshop Site

Successful workshops have been conducted in a variety of settings—from school sites to city parks, from museum classrooms to wooded retreats. Before selecting a site for the workshop, think about its advantages and disadvantages and compare these to the workshop goals. For example, a workshop at an environmental education center in a regional park can acquaint teachers with resources available to them in their area, while one held at the school site might help teachers see how PLT activities can be used in their own classroom and will show them that the environment is wherever we are!

Think about ways you might overcome any disadvantages or constraints the space presents. For example, a retreat location may be wonderful for the spirit, but consider ways to include activities and discussion that help teachers relate to the day-to-day classroom setting. A meeting room can help participants focus on the day's task, but can be stifling for nature lovers; plan a way to get participants outside for at least part of the workshop.

Wherever you plan to conduct the workshop, be sure to reserve the facility well in advance. Some facilities may book up quickly.

Workshop Length and Time

A PLT workshop needs to be at least six hours long for participants to receive the *PreK-8 Environmental Education Activity Guide*, and at least two hours for a secondary module. You have a lot of flexibility in terms of how this time is distributed.

For a six-hour workshop, you may wish to conduct one day-long workshop. Participants may be more focused during a one-day session.

For the six-hour or longer workshops, there are advantages to two or more shorter sessions spaced over a two- to four-week period. One possibility is to have an after school workshop for an hour or two, and concentrate on activities that fit into the teachers' curriculum. Between sessions, you may ask participants to conduct with their students the activities you presented during the first workshop session (or other activities they select). At the following workshop session, they can share what happened, and discuss adaptations or extensions they developed. Participants are also able to review the PLT activity guides and prepare additional activities for classroom use or for presenting to other participants at the next workshop session. This multiple session format provides a wonderful opportunity for the participants to try out activities while they are excited about PLT. If you decide to use this format, be sure that participants have an incentive and are accountable for attending *all* sessions. For the after school format, you may want to provide high-energy snacks or dinner. (See the chart "Possible PreK-8 Workshop Formats" in Section II for more ideas.)

The secondary module workshops must be a minimum of two hours, with an additional hour added for each module introduced at the workshop. For shorter workshops (three hours or less), it is best to hold them in one time block. If possible, arrange to include a field experience for participants or provide a guest speaker to complement the PLT secondary module materials. **See Appendix C for sample agendas, and Appendix D for suggestions specific to secondary workshops.**

5. Publicizing Your Workshop

Pre-workshop publicity announces your workshop to those who may be interested in attending. **See Appendix B for sample publicity materials.**

Effective publicity gives potential participants enough information in advance so they know what to expect, including:

- a brief description of PLT
- the goals of the workshop and key concepts to be covered
- who will be conducting the workshop
- the sponsors
- the date, time, and location (including a map and directions, if necessary)
- if the workshop is two or more sessions, that attendance is required at all sessions
- the registration fee, if any (see “Workshop Fees” in Section II)
- whether credit is available
- what participants will receive: a PLT activity guide — at no charge!
- the materials they receive are correlated to state academic standards
- contact person, including address and phone number for further information
- appropriate clothing (for example, dress for the outdoors)
- whether a bag lunch is needed
- registration deadline or cutoff date

Use your imagination to create a flyer, poster, or announcement that conveys this information (Helpful Hints are included below). Use whatever format works well in your setting. Whenever possible, make use of existing communication channels within your organization or within your school, district, or county education system. For example, announcements can be sent by mail or fax to local schools (addressed to the principal or curriculum supervisor), or can be advertised on teacher workroom bulletin boards. You may want to include the workshop on the county or district calendar. In addition, the PLT national website offers a spot for posting state workshops.

As with most advertising, word-of-mouth is usually best. For example, if you are inviting educators from more than one school site, ask one person at each site to help spread the word and send extra announcements for that person to share. Many department chairs and lead teachers are willing to forward workshop announcements by email to groups of teachers they commonly work with.

Another possibility is to announce your workshop through the newsletters and websites of various local educational associations (such as local science, social studies, or math councils) or environmental education and outdoor education organizations.

Press releases may be sent to local newspapers for their calendar section or for a regular section they may offer on schools/education.

It will be helpful to know in advance the number of people who will be attending your workshop. You may want to include a tear-off registration form at the bottom of your flyer. Besides letting you know how many people to expect, a pre-registration form can also help you plan to meet their specific interests. To encourage early sign-ups, you may also state “Enrollment is limited,” or “Register by (date).”

In order to make the workshop experience as positive as possible for those attending, you might consider setting a minimum and maximum number of participants. If you do this, make sure you have a way to contact participants before the workshop to let them know they are registered or if the workshop is canceled. Many PLT facilitators have stated that 10 is the about the minimum and 40 the maximum number of people for a successful workshop.

Helpful Hints for Making Flyers

General Rules:

- Define the audience and make sure the flyer is geared to that audience.
- Keep the flyer simple. Give just the information needed and avoid distractions.
- Make sure the style of the flyer and the information given are consistent.

Things to think about when making a flyer:

- Who is the audience? What do they need to know?
- What kind of heading will you use? How will it “catch the eye” and be recognized?
- How will you inform? What is the right amount of information?
- Be sure to include WHO to contact, WHAT to bring or expect, WHEN to come, WHERE the workshop is to be held, and HOW to get there.
- How can you group your information into chunks that inform and can be distributed nicely throughout the flyer?
- How will you format your flyer? A symmetrical format is “calm” whereas an asymmetrical format communicates “action.” What typefaces will you use? Never use more than three different typefaces per piece — too many typefaces will look disorganized.
- What art can you include? You are encouraged to include the PLT logo and graphics, which you can obtain from your state coordinator.

6. Considering the Audience

Before you plan the specifics of your workshop, it is helpful if you know some of the needs and interests of your participants. If you have enough lead time, you might prepare a pre-workshop questionnaire to find out their expectations for the workshop, what grade level and types of young people they work with, academic standards they are working on, and any special needs they have. If you know beforehand that the group you will be working with has a special area of interest, you may want to tailor the entire workshop to suit their needs.

Even if you do not know the specific needs of your audience, before you begin planning try to visualize what the audience would want from the workshop. Is their attendance mandatory or voluntary? If it is mandatory ask yourself, “Why would the participants *want* to attend?” and be prepared to show what they can gain from using PLT with their students. **For information about ways to meet the needs of your audience as adult learners, see “Working with Adults as Learners,” in Appendix D.**

You might also consider whether there are any local issues or current movements in education the participants might be concerned about. If you identify possible issues or trends, think about how you could address these during the workshop. For ideas on topics you might model and discuss, see Section IV.

7. Selecting PLT Activities

After you have considered your audience, you are ready to select PLT activities to present. Do this in tandem with planning the agenda (see “Planning the Agenda” that follows) so that you get an idea of how much time you will have for activities. In a six-hour PreK-8 workshop, we recommend that participants’ experience a minimum of *five* PLT activities. In a two or three-hour secondary workshop, we recommend that participants are engaged in at least *two* PLT activities. Research on professional development suggests that participants are more likely to do those activities in their classroom that they did in workshops. Therefore, the more activities you have time to model the better.

The PLT activities you choose for the workshop should depend on the goals of your workshop, the interest areas of the participants, the time and space available, and your own personal preference. For a diverse group of educators, select activities that reflect the interdisciplinary nature of the materials, their usefulness in many subject areas and at all grade levels, and, if possible, the range of concepts addressed by PLT. If you know that your audience has a special area of interest, select activities to meet their needs. If the workshop focuses on a particular theme, grade level or academic standards, choose activities that tie in with that theme.

Select activities that involve a variety of learning strategies, for example, creative writing, simulation games, drawing, outdoor investigations, and mathematics. You might also want to select activities that demonstrate PLT’s ability to help students move from awareness of environmental issues to action.

Give participants an opportunity to participate in action-oriented activities, as well as a chance to sit periodically during other activities. By providing variety, you give participants a nice sampling of the activities in the guides, and create a more enjoyable and well-rounded workshop. Also allow for a mix of indoor and outdoor activities, weather permitting. Educators can see first-hand how flexible PLT is and they get a chance to enjoy the outdoors, too.

In general, plan to include activities *you* find exciting — your enthusiasm and excitement will be contagious. Many facilitators are more comfortable using PLT activities they have experienced themselves or have done with their students. Trying out an activity will help you in several ways: you will know first-hand how the activity works; you may develop interesting extensions or variations or locate valuable resource materials you can share; and you can bring in student work to demonstrate the activity's effectiveness.

Feel free to modify any of the PLT activities with your own ideas and adaptations to fit local issues or interests, the time and space available for the workshop, and your own leadership style.

Through your variations, you will be emphasizing an important idea: The PLT activities are useable as written, and they can also serve as points of departure for new explorations. Clearly convey this flexibility during your presentations.

You might also plan your workshops in a way that shows how PLT incorporates current practices of conceptual learning. For example, you might use a storyline to connect the activities you choose to demonstrate. These activities can be built around one of the PLT themes, or focus on a special interest in your community.

If you plan to have workshop participants present activities to each other, keep in mind that they will also be selecting some activities during the workshop. You might lead participants through a few activities, then form small groups that select, prepare, and present an activity. The participants can be asked to select activities that follow a storyline or theme.

In addition, you should have a plan to include participants with physical limitations. Think about how you would include someone with limited physical mobility in all activities.

8. Planning the Agenda

After you have considered your audience and have begun selecting activities to present, you are ready to plan the workshop agenda. The following sections and the “PLT Workshop Agenda Highlights” that follow will give you some ideas about elements to include. **Also look at the sample “Workshop Agendas” in Appendix C for approximate times to allow for various types of workshops, including workshops for a secondary module.**

PLT workshops should follow the steps to lead the workshop participants from an *awareness* of PLT, to *knowledge* about the specifics of the PLT program, to an opportunity to *challenge* the ideas or come to consensus on the new ideas, then finally to *action*—to use PLT materials in their teaching.

<i>PLT PreK-8 Workshop Agenda Highlights</i>			
AKCA Model Stage	Activity	Description	Time
Awareness	Welcome	Introduce presenters, brief overview of agenda and workshop goals, logistics	10 min.
	Getting Acquainted	Participants introduction; icebreaker	20 min.
	Background on PLT	See Section I of this handbook or the PLT guide for information on PLT’s mission, goals, sponsors, history, etc.	15 min.
Knowledge/Skills	Lead selected activities	Lead a series of activities (5) that demonstrate a storyline or meet a goal related to state content standards or other local objectives; provide time for feedback, application, and reflection	2 hours
	Distribute PLT guides – “Hike” through Guide	Overview of the PLT activity guide – themes, activity components, appendices, copyright	15 min.
	Discuss other resources	Guest speaker; special topic (content specialist, reading connections, <i>GreenWorks!</i> , Earth & Sky, etc.)	30 min.
Challenge	Personal use	Small groups select and lead a PLT activity (or facilitator leads additional activities) Try using “PLT on the spot” strategy	90 min.
Action	Individual Planning	Individuals explore: How can I use PLT in my classroom or other situation?	20 min.
	Wrap Up	Evaluation – survey forms, certificates	15 min.
	Feedback	Were needs met?	5 min.

The most critical workshop elements are:

- Welcome and Overview
- A brief history of PLT and acknowledgment of national and state sponsors
- PLT and Educational Issues (see Topics to Model and Discuss, Section IV)
- PLT Activities experienced by participants (**minimum of 5 activities for the PreK-8 Guide and 2 per secondary module**)
- “Hike” Through the PLT Guide(s)
- PLT Resources
- Other Resources
- Individual Planning
- Discussion of how the PLT activities meet standards (national, state, local, or school)
- Evaluation, Feedback, and Certificates
- Discussion of ongoing or follow-up support

Following are things to consider when planning each of the above workshop elements.

Welcome and Overview

Plan how you will welcome the participants, introduce yourself and other presenters, and give a brief overview of the agenda. No matter how clearly you have stated the workshop purposes and timeframe in your pre-workshop publicity, it is a good idea to restate them when you begin the workshop. People feel more comfortable if they know what to expect — and when.

Next, you may want to state the objectives of the workshop, and then ask participants to briefly write their individual and professional goals for being there. This should be something that they keep to themselves. Later in the workshop, take a moment to check in with them – how are they coming along in meeting their goals? You may also want to point out that while it is the facilitator’s responsibility to meet the goals of the workshop, it is the participants’ responsibility to make sure that they leave the workshop having met their own goals.

Plan how you will have participants introduce themselves. They are coming together for the workshop as learners and, especially if they do not know each other beforehand, you will enhance the learning environment by creating a friendly and informal atmosphere at the beginning of the workshop. You may want to provide nametags for participants, as well as leaders.

If appropriate, you may do a quick needs assessment to pinpoint the specific needs and expectations of each participant. For example, each participant might say, “My name is _____, I teach at _____, and I am particularly interested in _____ about PLT.” If you would prefer something lighter, you might plan an icebreaker activity. (**For ideas, see the “Sample Icebreakers” in Appendix D).**

PLT History

PLT is proud of its history and by offering brief highlights can give educators a better understanding of PLT's goals and purposes.

The history should include:

- when, why, and by whom PLT was initiated
- how the PLT guides were developed and evaluated
- that PLT is adopted by states and foreign nations on a volunteer basis
- a mention of PLT's national partners and of the awards PLT has received
- PLT's history and sponsors in your state

All the information you'll need to do this is in Section I of this handbook. **Also, a PowerPoint presentation is available on PLT's website at www.plt.org that you can use during your workshop.**

PLT Activities Presented by You

Plan how you will present each activity. If you have invited a resource specialist, consider asking that person to lead appropriate activities (see "Inviting a Resource Specialist" later in this section).

Plan to present PLT activities in a way that engages the participants as learners first, then allows them to reflect on the activities from their perspective as educators (for more information, see "Working with Adults as Learners" in Appendix D). To help participants reflect on the activity, you might have a quick debriefing after each activity. For example, you might invite them to share:

- what they learned through the experience
- what they would like their students to learn
- how they might adapt the activity to fit the needs of their students (for example, to fit a particular grade level or students with special needs)
- extension ideas
- how the activities relate to state standards
- any classroom management ideas or other suggestions they might have

This debriefing is often the most important part of the activity.

Depending on your audience, you might have them share in small groups or in the group as a whole (for a comparison of Group Methods, see the box below). You might also consider modeling and discussing learning cycles in your activity presentation and debriefing. For more ideas on how to do this, see the box that follows on "Leading a Group Activity Using the Experiential/Learning Cycle."

<i>Group Methods</i>			
Method	Main Feature	Strengths	Weaknesses
Lecture	Provides information.	Provides presentation of information in an organized, systematic way.	Provides few opportunities for interaction. Can be dull. Participants may not listen.
Lecture Discussion	Provides information and opportunities for interaction.	Provides efficient presentation while allowing audience to probe areas of interest to them.	Tends to make lecturer the only authority. Usually involves only "vocal" participants.
Large Group Discussion	Provides opportunity for extensive interaction.	Provides pooling of ideas, knowledge, and experiences. People can contribute at own level.	Becomes unwieldy with groups larger than 20-30 people.
Small Group Discussion	Allows almost 100% participation.	Provides pooling of ideas, knowledge, and experiences. More people can contribute at same time.	Can be time-consuming to report back to larger group.

Leading a Group Activity Using the Experiential/Learning Cycle

Learning is a cyclical process that builds on the learner's previous experiences and knowledge. Consider modeling this cycle when leading a Project Learning Tree activity:

Experiencing

The learning process usually starts with experiencing: the learner becomes engaged by doing, observing, or saying something. Start the activity by involving participants, rather than "telling" what will happen.

Processing

The processing phase involves learners in thinking about and sharing what happened. Use questions to help participants process their experiences: What was ___ like for you? What did you feel when ___ happened? What do you think the consequences of ___ were?

Generalizing

In this phase learners explore what they learned from the experience and abstract generalizations from it. Ask participants question such as: What did you learn from this activity and what would your students learn? What was the most difficult part? What would you do differently another time?

Applying

This phase helps the learner confer personal meaning into the generalization. In your workshop, ask questions such as: How will you use this with your students? What will you do with the information gained in this workshop? These bring closure, and lead to new experiences.

“Hike” Through the PLT Guide

Plan how you will help participants become familiar with the contents of the activity guide(s). You may choose to conduct a walk-through using questions in a competition between small groups or in a “Jeopardy” game format. **See Appendix D for sample questions and answers.** Or, you might prefer to lead the whole group through the guides pointing out important elements along the way. See the box below for important topics to cover on your “hike” through the PreK-8 Guide. See Section 10 that follows for information on Secondary Module “hikes.”

“Hike” Through the PLT PreK-8 Guide

Topics to Cover

Copyright – PLT Policy

Introductory Pages

- Acknowledgements, more in Appendix 16
- PLT mission & goals
- What is environmental education (EE)?
PLT = Quality EE
- Teaching methods & strategies
- PLT program overview & network

Activities

- Icons, p. 9
- Activity components, p. 10-11
- References & resources by activity in Appendix 4

Appendices

- Glossary
- Conceptual Framework & storylines
- Earth & Sky, differentiated instruction, technology connections
- Two Hats, teaching controversial issues, and much

PLT Resources

Allow some time during the workshop to let participants know about the wealth of PLT resources that are available to them. A brief overview of these resources follows:

- The PLT website, at www.plt.org, includes additional resources to support PLT activities, standards correlations, special initiatives, and more.
- The *Earth & Sky* partnership with PLT provides a correlation of PLT activities to *Earth & Sky* radio shows, (please see Section I for more information and visit the Teachers Section of the *Earth & Sky* website at www.earthsky.org).
- The Urban and Community Forestry Education section of the PLT website provides an annotated bibliography and links to websites of urban and community forestry organizations and similar organizations to help enhance the teaching of the PLT activities that are related to urban and community forestry.
- PLT has launched a national initiative *Every Student Learns Outside*[™] and website (www.learnoutside.org) to help educators make outdoor experiences part of their everyday lesson plans, (see Appendix G for more information).
- GreenWorks! is the service-learning component of PLT that blends service activities with academic curriculum. PLT provides a helpful guidebook (available at www.plt.org) and offers competitive grants for implementing projects.
- PLT provides an online newsletter, the *Branch*, to inform workshop participants about new PLT projects and resources. Workshop participants can check a box on the PLT Participant Survey Form to receive notifications when a new edition of the *Branch* is available.

Other Resources

Consider how you will introduce participants to books, materials, or local resources that can supplement the PLT activities. You could display books and materials at a resource center throughout the day. For resources such as parks, arboretums, nature centers, museums, local conservation groups, you might make a “resource list” chart that participants add to throughout the day — then copy and send the ideas to participants afterwards.

If the workshop is at a park or nature center, perhaps a staff member could welcome the group. They could take a few minutes to discuss the center, what it has to offer for groups, and additional resources for educators.

Individual Classroom Planning

One of the initial questions participants are most likely to ask when they attend the workshop is “How can I use PLT in my classroom (or other setting)?” Individual classroom planning is an important component to include. Once your workshop participants have become familiar with PLT and some of the activities, they need time to directly connect these new materials to the needs of their students and to their own teaching goals.

Plan adequate time for this component, even if you have to shorten something else. You might lead a brainstorming session and ask everyone to share their ideas. Another approach would be to

have participants form groups and devise plans for implementing PLT in their classrooms, and then come together for discussion with the whole group at the end.

You could also ask participants to select lessons that they will be using in the next month or so. This helps to emphasize that PLT is not something extra, but rather it helps teachers teach what they already have to teach in the classroom.

Participants might also work independently to prepare specific plans for using PLT in their everyday teaching. Use PLT's Lesson Planning Worksheet to assist with this process (see Appendix D for a sample). You might ask participants in advance to bring textbooks and lesson plans to the workshop. This works well in a school or inservice setting.

Evaluation, Feedback, and Certificates

Plan time for each participant to complete a Participant Survey Form at the end of the workshop. **See Appendix A for a sample.**

It is very important that these evaluation forms are turned in since this is how PLT-trained educators are added to the national PLT database and how State Coordinators keep track of trained teachers. You might also allow time for verbal feedback and suggestions for improving future workshops. Once participants have turned in their forms, you may want to give them a certificate of completion (see Appendix A for a sample Certificate).

This is also a good time to encourage participants to let other teachers, administrators, and others know about the workshops and resources that PLT provides.

Ongoing Support

Of particular importance to formal educators is the need to provide ongoing support and mentoring. One method that incorporates this is to deliver the workshop in small chunks with assignments for trying out some of the activities in between the workshop sessions. If possible, the facilitator can assist in the classroom, through modeling, resources, and so forth. The sessions can be tied together with the school's goals and standards.

In addition, by checking off the appropriate box on the evaluation form, educators can stay in touch with PLT by receiving the *Branch* online newsletter. The newsletter provides information on PLT's new curriculum projects, educator tips, EE resources, and more.

9. Determining the Schedule

Once you have thought about how you will present the different workshop elements, you will need to decide how much time to allow for each element and the order of the elements.

When planning the schedule, remember that the pacing of workshop activities is important. Offering a variety of activities helps participants stay interested in the materials and ideas you present. Keep in mind that certain modes work better at certain times of the day. For example,

after lunch – when many of us tend to get sleepy – you might consider physical movement or visual activities outside that can be more stimulating than making lists or watching a video. If possible, include “alone time,” when individuals can reflect on the ideas or events of the workshop, as well as small group time, when they can share ideas with each other.

Be sure to include time for breaks. Short frequent breaks can do wonders for reviving everyone’s energy level.

10. Planning and Conducting a PLT Secondary Workshop – Additional information

The Basic Elements

The basic elements of a PLT secondary educator workshop are similar to those of a PreK-8 educator workshop. The beginning should include the following:

- Welcome & overview of goals
- Participant introductions/ice breaker
- Introduction to PLT (state/national history, what is PLT) with an emphasis on why PLT has developed a series of secondary modules

The next is **modeling of activities**. Workshop facilitators model activities from the modules that the participants will receive. It is recommended that you model at least two activities and also use the icebreaker as an opportunity to introduce another activity. Key elements of modeling include:

- Going through and conducting the steps of the activity
- Finding out how the participants could use the activity with their intended audience
- Debriefing at the end of the activity (adaptations, questions, etc.)

After the participants get a feel for the activities, it is time to hand out the modules and go for a **“hike” through the guide**. Following are two sample secondary module “hikes.”

“Hike” Through “Exploring Environmental Issues: Focus on Forests”

(This “hike/quiz” can be done verbally with prizes awarded)

1. Six key benefits from forests are highlighted in the Background Information of “Exploring Environmental Issues: Focus on Forests” – name them. (Page 7 – oxygen recharge, nutrient recycling, soil protection and flood control, climate control, wildlife habitat, and forest resources)
2. In “Exploring Environmental Issues: Focus on Forests,” how are references cited in the background information? (Author, Year - Book, Journal, etc. to make it easier to find the reference in the Bibliography)
3. What are the skills to be learned from Activity #5, *Balancing America's Forests* in “Exploring Environmental Issues: Focus on Forests”? (Page 34 – Analyzing, Comparing and Contrasting, Inferring, Interpreting, and Organizing Information)
4. What is the definition of "Silviculture"? (Page 53 – the science and art of cultivating forest crops on the basis of studying the life history and general characteristics of forest trees)
5. Where in the module Exploring Environmental Issues: Focus on Forests, can you find out how much timberland is in your state? (Page 69)
6. When was the Endangered Species Act enacted? (Appendix 3 – 1973)
7. How many educators tested Exploring Environmental Issues: Focus on Forests module? (Page 4 – seventeen)

“Hike” Through “Exploring Environmental Issues: Focus on Risk”

(This “hike/quiz” can be done verbally with prizes awarded)

1. What is risk? (Background Information for Educators; glossary)
2. Where is PLT's Conceptual Framework found in the *Risk Module*? (Appendix 12)
3. Where can you find addresses for additional information? (Appendix 2, Additional Resources)
4. Where can you find out how the student activities are related to the Conceptual Framework? (Under the heading “Concepts” in the beginning of each activity)
5. Where do you find out what materials are needed for each activity and how long the activity will take? (Under the headings “Materials” and “Time Considerations” in the beginning of each activity)
7. Where can you find suggestions for evaluating students learning? (Under the heading “Assessment Opportunity” at the end of the instructions for teaching the activity)
8. How do you know if a word is in the glossary? (Bold and italicized)
9. If you wanted to teach a set of chemistry-related activities, where would you look to easily identify those activities? (Appendix 10, subject matrix)
10. Where can you find an activity relating to forests and risks? (Activity #7 – Decision Making: Ecological Risk, Wildfires, and Natural Hazards)

Consider also the following extensions of a hike:

- Divide the group into teams of 3-5 people and assign each team a theme. Their goal is to plan a 3-5 day unit around that theme, using activities from the module you are presenting in the workshop. They should write up their plan and then have each team present their plan to the whole group.
- Divide the group into teams of 3-5 people and assign each team an activity from the module. Their goal is to create a “coat-of-arms” for the activity so that it gives a clear synopsis of what it is about. They should include things like time considerations, materials needed, extensions, and the basic objectives of the activity.

Once the hike is complete, you should again explore the potential for **using the activities** from the module(s) with students.

Before the formal closing it is a good time to go over any remaining **questions**. Finally, the participants should fill out the evaluation forms receive their certificate of completion.

Adding to the Basic Elements

While the basic elements get the job done, it can be a more meaningful and effective workshop if you are able to:

- Invite a local resource specialist (i.e., forester, solid waste specialist, toxicologist, natural resource manager, etc.) to share local resources and to answer content related questions
- Set up learning stations that allow participants to get a taste for more activities
- Spend some time on lesson planning in small groups where educators can share ideas on how they are going to implement the activities in their classes

Planning a Secondary Workshop

The essential details for planning an educator workshop are found in Section III of this handbook. The major difference for a secondary workshop is that there is often less time to work *with*. Here are some time guidelines:

If you have:	You can cover:
2 hours	→ 1 module
3-4 hours	→ 2 modules
5-6 hours	→ 3-4 modules

If you plan to cover more than 1 module, you may consider grouping the modules to work around a theme (see some specific examples below). It may also be useful to find out what subject(s) the participants teach and create a workshop that is tailored to those needs.

Possible Secondary Module Workshop/Session Formats

You may want to consider trying one or more of the following secondary module workshop or session formats:

- Hold a two-hour workshop after school
- Hold a session at a conference (1-3 hours)
- Embed in a one-day science or social studies professional development inservice day
- Embed in secondary methods science and social studies courses

Setting up a Workshop around a Theme

If you are able to cover more than one module at a workshop, you may want to use one theme that ties the modules together and shows how they can complement each other. Below are a few thematic ideas along with the corresponding activities.

Sample Topics and Supporting Activities (by module)

Module →	Places We Live	Focus on Forests	Forest Ecology	Municipal Solid Waste	Focus on Risk	Biodiversity
Topic/Focus ↓						
Forest Issues	Green Space	Tough Choices	Saga of the Gypsy Moth		Decision-Making (Part B-Wildfires)	Global Invaders; Protected Areas
Wildfires			Understanding Fire, and Fire Management		Decision-Making (Part B-Wildfires)	
Solid Waste & Risk	Far Reaching Decisions			Waste -to - Energy	Risk Perception	
				Recycling and Economics	Plastics, Risk/Benefit	
Math and EE			Cast of Thousands	Recycling and Econ.	Probability and Risk	
Decision Making	A Vision for the Future	Tough Choices or Squirrels vs. Scopes	Saga of the Gypsy Moth	Landfills	Decision-Making or Weighing the Options	Protected Areas; Potatoes, Pesticides, & Biodiversity

Promoting Secondary Workshops – Reaching the Secondary Audience

One of the biggest challenges is marketing the PLT workshop to secondary educators. When doing PR for your workshop, include the following information – as applicable - in your flyer or other publicity materials:

- Correlation to state and/or national standards
- Credit for professional development requirements (if available)
- Networking opportunity
- What in-depth content will be presented
- Eligibility for GreenWorks! -- highlight service learning
- Encouraging quotes from teachers who have taken a workshop
- Hands-on opportunities
- Career connections
- Content experts—speakers
- Fee waived or stipend for substitute teacher
- Materials and other EE resources participants will receive

If possible, try to find out who your prospective audience is beforehand so you can advertise according to their specific needs.

Learning Stations

Since time is a limiting factor during the workshop, learning stations provide an opportunity for participants to check out some of the activities that you do not get to model. The basic idea of learning stations is that you display the objectives of the activity, any necessary props, and any student pages. If you happen to have done the activity and you have any photographs or completed student pages that would be excellent as well.

As an example, if you are facilitating a workshop for the Municipal Solid Waste module, you can set up the Landfill activity at a learning station (if you are unable to model it). The station would include a poster board with the objectives, maybe some background information or the steps of the activity, and the student pages. You could also have a landfill in a bottle so that the participants could see what it takes to put it together.

The following is a list of activities for each module that could work well as learning stations:

Secondary Learning Stations

Biodiversity	Forest Ecology	Focus on Forests	Municipal Solid Waste	Places We Live	Risk
<p>Global Invaders: Student pages, “Common Characteristics” on p. 2; student presentation samples f/ Part A; world map to show species movement</p>	<p>Adopt-a-Forest:: The “Adopt-a-Forest Profile” and “Forest Inventory Chart” student pages filled out; any photographs from a site visit.</p>	<p>Who Owns America’s Forests: Copies of maps showing forests around the U.S. (could use the PLT map); copies of the student pages.</p>	<p>Source Reduction: Samples of overly packed items and efficiently packaged items; the student pages.</p>	<p>Mapping Your Community Through Time: Aerial photos and GIS maps, regional planning documents.</p>	<p>Chances Are...Understanding Probability and Risk: A collage of the overview, instructions, graphs, and charts – with some pennies scattered around.</p>
<p>Protected Areas: Student pages; samples of group representations f/ Part A and Protected Area presentations f/ Part B</p>	<p>Cast of Thousands: See materials list in activity for things to display at a table along with a poster with the overview and some of the student pages</p>	<p>Tough Choices: Highlight the elements of an environmental issue – can put each element on a piece of paper and then highlight the topics that are discussed.</p>	<p>Composting: Student page on compost bin designs; Appendix 6 – Composting in a Bottle (show different materials separately and then have one completed example).</p>	<p>Green Space Maps of your local community, green maps of your community.</p>	<p>Risk Assessment: The student pages, plus some packets of artificial sweetener.</p>
	<p>The Nature of Plants: See the Getting Ready sections for parts B and C for the materials for the experiments, and display those.</p>	<p>Words to Live By: Cut out and enlarge the information on pages 44 – 46 and display on a poster.</p>	<p>Waste-to-Energy: Display titles of the interest groups; have the interest group positions on pieces of cardboard; the W-T-E facility graphic on page 81.</p>	<p>Far-Reaching Decisions: Link to various websites showing your ecological footprint.</p>	<p>Electro-magnetic Fields: Student pages 134-5 (with 134 filled out) on the poster (along with the overview, etc.); index card with the interest group positions; an EMF reader, if available.</p>

11. Inviting a Resource Specialist

Consider inviting a resource specialist — someone involved in the field of resource management or conservation — to the workshop you are planning. This person can help with specific content information or provide technical assistance in hands-on activities. The resource specialist can help provide one-on-one contact with participants and can handle specific questions that may not be appropriate for the entire group.

Adding a resource specialist to your workshop can complement your expertise and provide participants with two perspectives during one workshop. Meeting and working with a resource specialist can also give participants a local resource contact who may help them plan classroom visits or identify field trip sites. They may also be able to help by providing supplies such as tree cookies or water test kits, and by offering ideas for “action” projects.

Resource professionals include individuals with expertise in such areas as forestry, biodiversity, air quality, solid waste management, soil conservation, risk management, or wetlands. Specialists may be found at local, state, or federal natural resource agencies, private conservation groups, or colleges and universities. If you are planning in advance, you can ask the State Coordinator for ideas about who to contact to help with the theme of your workshop.

Once you have identified a resource specialist, clarify your expectations for his or her involvement in the workshop. Help the specialist understand that the objective of the workshop is to help educators feel confident in using PLT with their students, so they must not be overwhelmed by the activities or information presented. Send the specialist a copy of the workshop agenda and review the specialist’s roles during different times. For example, discuss whether the specialist will participate with educators in a particular activity or whether he or she will provide expert commentary to introduce the activity. Also discuss strategies for facilitating rather than forcing learning.

12. Planning for Food and Beverages

Snacks and beverages will help participants feel comfortable and welcome. Find out ahead of time whether the sponsoring organization will provide snacks and beverages or whether you will be responsible. Remember to provide a choice of beverages and food to accommodate different dietary requirements. Also find out whether the workshop site has equipment for serving food and beverages such as a hot water pot, cups, spoons, or serving trays. If not, you may need to make arrangements for these items.

If the workshop will be an all-day session, you should also consider how much time to allow for the lunch break. If there are restaurants nearby, you will need to allow enough time for participants to get there and back. (If participants will be going out, it may be helpful to provide a list of close-by restaurants with directions and their menus.) If there are no restaurants nearby, ask participants to bring a bag lunch or consider providing a simple catered lunch or buying groceries for a sandwich, fruit, and cookie smorgasbord. Whatever you decide for lunch, be sure

to allow the time needed for the type of lunch you plan. In addition, remember that participants will need to know what to expect *ahead of time*.

13. Planning for Health and Safety

Medical emergencies may occur at any time. As a PLT facilitator, be aware of your own safety, use common sense, and do not put yourself in any possible danger. To be prepared, consider the following:

- Bring a first aid kit or check to see that one is available at the workshop site. It should include basic supplies such as band-aids, antibiotic ointment, an ice pack, and rubber gloves. Let participants know that you have a first aid kit on hand.
- Be familiar with your site. Locate exits, hazards, sources of water, and telephones; and be able to explain the location.
- Know the emergency numbers for the area.
- Consider the physical safety of your participants. Encourage them to participate in activities within their physical capabilities and “comfort zone.”
- Make sure to have water and shelter available.
- In case of an emergency, use a “land line” rather than a cell phone to make emergency calls; that will allow emergency 911 operators to trace your location, and reception is more reliable.
- If individual medical issues arise, stay calm and seek medical attention.
- Check the weather for any possible severe weather advisories that may be predicted for the day of a workshop.

14. Gathering Materials and Equipment

Well before the workshop date, carefully plan what materials and equipment you will need for your workshop. Decide what you will need to present each agenda item and what participants will need. Find out what equipment is available at the workshop site and how you can reserve the equipment you need.

Materials from the State Coordinator

At least **four weeks** before your workshop, send a completed “**Workshop Proposal Form**” to the State Coordinator. The coordinator will send you the following materials:

- PLT activity guides.
- PLT “**Participant Survey Forms**”. During the workshop wrap-up, participants *must* complete this form. Survey responses are used to measure progress toward the statewide implementation goal. Return the forms to the State Coordinator as soon after the workshop as possible.
- PLT **Certificates**.
- Other supplementary materials on hand.

Other Materials

In addition to the materials from the State Coordinator, you may want to bring the following supplies as well as any other props for specific activities you are planning. If you conduct workshops often, you may wish to keep a workshop box, full of miscellaneous items such as these:

- Masking tape
- Flip chart and easel
- Non-permanent marking pens, different sizes and colors
- Pens or pencils
- Scissors
- Name tags
- Paper clips, rubber bands
- Supplies and props needed for specific activities such as blank paper, crayons, or instructions
- Resource materials for participants to peruse, including children’s literature that supplements PLT activities and related environmental education curricula and guides
- First aid kit and emergency numbers (in case of an accident or medical emergency)
- Extra extension cord (for audio-visual equipment)
- Release forms (for use of photos or videos), see Appendix B for sample
- Computer and LCD projector, and any other audio-visual equipment that the host site is not providing

15. Preparing Necessary Visuals

Think about any visuals you will need, such as flip charts or overhead sheets, and prepare them before the workshop. See the box below on “Visual Aides Compared” for tips on making them as effective as possible. Be sure to consider the group size when choosing delivery methods.

Develop a written agenda and write it on a flip chart or reproduce copies for all workshop participants.

16. “Day of” Workshop Tasks

When you have finished planning and preparing for the workshop, you can focus your attention on setting up and conducting the workshop. When the workshop is over, do not forget a few essential post-workshop tasks that are described in the next section.

<i>Visual Aids Compared</i>			
Visual Aid	Advantages	Disadvantages	Tips for Use
Chalkboard or Dry-Erase Board	<ul style="list-style-type: none"> ▪ Familiar and convenient ▪ Allows spontaneity 	<ul style="list-style-type: none"> ▪ Lettering may be hard to read ▪ Can lose eye contact when writing on board ▪ Bad for large groups ▪ Chalk dust is dirty; dry-erase pens have strong odor 	<ul style="list-style-type: none"> ▪ Plan use of space in advance – especially if you have drawing or charts. ▪ Write heavy and large. ▪ Use colors, if possible. ▪ Write some things on board ahead of time and cover until used. ▪ Keep the group talking while using. Ask follow-up questions.
Flip Charts	<ul style="list-style-type: none"> ▪ Can store and use readily ▪ Can use for display after presentation ▪ Materials are easily prepared and can be prepared ahead 	<ul style="list-style-type: none"> ▪ Bulky and awkward to handle ▪ Not legible for very large groups ▪ Time consuming to produce ▪ Paper can rattle, crease, rip, or smudge 	<ul style="list-style-type: none"> ▪ Make charts simple to read and understand. ▪ Have them in correct order and set up ahead of time. ▪ Keep the number of charts to a minimum. ▪ Write information reminders or key points lightly in pencil on the chart. You'll be able to read these during the session, but they won't be visible to participants.
Overhead Projector	<ul style="list-style-type: none"> ▪ Can maintain eye contact ▪ Materials are easily prepared and can be used over again 	<ul style="list-style-type: none"> ▪ Requires practice ▪ Not every workshop venue will have equipment 	<ul style="list-style-type: none"> ▪ Set up equipment beforehand and check it. ▪ Practice using overhead: don't stand in front of image, don't look behind you at screen, and don't move the transparency.
Presentation from Software (such as Powerpoint)	<ul style="list-style-type: none"> ▪ Can prepare ahead ▪ Can easily make changes to presentation for next time ▪ Can print out hand-outs from presentation 	<ul style="list-style-type: none"> ▪ Can make presentation seem "canned" ▪ Requires time and some skill to prepare ▪ Can become difficult to read if too much information presented ▪ Requires lots of equipment 	<ul style="list-style-type: none"> ▪ Keep slides simple. ▪ Do not get carried away with special features. ▪ For a consistent, professional look, use templates provided in software package. ▪ If possible, try out presentation on a test audience. ▪ Set up all equipment in advance and test to make sure everything works.
Hand-outs	<ul style="list-style-type: none"> ▪ Good for reinforcement and review ▪ Good for presenting ideas for discussion ▪ Can eliminate need for participants to take notes ▪ You can copy and use them again 	<ul style="list-style-type: none"> ▪ Must prepare in advance ▪ Distribution can be distracting ▪ Cost of copying 	<ul style="list-style-type: none"> ▪ Design handouts clearly to promote understanding. ▪ Number handouts beforehand in case you want to refer to a particular handout.
Video/DVD	<ul style="list-style-type: none"> ▪ Compels attention, making presentation dramatic ▪ Good for introducing or reinforcing a topic 	<ul style="list-style-type: none"> ▪ May be difficult to locate the right video for your purpose ▪ Doesn't work well with large groups (unless you have projection equipment) 	<ul style="list-style-type: none"> ▪ Set up beforehand and check machine operation. ▪ Brief participants – give them something to watch for. ▪ Preview thoroughly.

Setting Up

Allow yourself at least 60 to 90 minutes to set up the workshop space. If possible, you may want to set up the night before the workshop. By setting things up in advance, you will be more at ease.

If you are not already familiar with the workshop site, locate restrooms, the quickest or easiest way outside (for outdoor activities), and light switches and plugs for audio-visual presentations. If you will be using any audio-visual equipment, test and set it up in advance. Remember, the arrangement of tables and chairs can help or hinder your workshop.

Arrange the room in a way you feel will best accommodate your workshop goals. For example, if you will be presenting both small group and large group activities, arrange tables and chairs to promote small group activities and enable participants to get up and move around in larger

groups. If it is a smaller group, a circle of chairs may be most appropriate.

Set up the materials you will be using so they will be easily accessible when you need them. You might want to establish one table as your “home base” and place on it the items you will need during the workshop such as handouts and materials for the PLT activities you will lead.

Set up a table near the entrance with a sign-in sheet, nametags, and pens. If you like, make a sign that asks participants to make name tags for themselves and to print their names on the sign-in sheet as they would like them to appear on their PLT certificates. You may want to set up a separate table to display materials such as children’s books about trees and forests, sample student projects for specific PLT activities, or other resources.

Post the workshop agenda where everyone can see it or have copies available for each participant on the sign-in table. If beverages or snacks will be provided, set up a convenient — but separate — snack area.

Facilitator Skills Checklist

A good workshop facilitator promotes participation in many different ways:

- Setting a relaxed climate for learning.
- Listening to understand participants' needs.
- Developing a credible trust level with participants—never putting people down, but being firm when necessary.
- Having a composed and friendly manner.
- Having a sense of humor.
- Being an active listener—not boxed in by preconceived notions or answers.
- Conveying key concepts, but not overwhelming participants.
- Organizing time, materials, and people effectively.
- Being well prepared.
- Encouraging feedback and questions from workshop participants.
- Increasing the quality of participation by using “wait time,” pausing three seconds or more after asking a question and after a participant response.
- Being willing to learn from mistakes and experiences to improve leadership skills.

Conducting the Workshop

If possible, allow time before the workshop to greet the participants. This will help them feel welcome and will also help you feel more at ease with the group as a whole.

Begin the workshop on time to be fair to those who come on time. Throughout the workshop, keep in mind the checklist of facilitator skills (see box). Keep an eye on the pacing of activities and when participants need a break or a change of pace.

For one-day workshops, some facilitators like to fill in the PLT certificates during the lunch break so that they can distribute them at the end of the workshop.

Be sure to reserve time at the end of the workshop for participants to fill out the Participant Survey Forms.

Getting Release Forms

If you took pictures or videos during your workshop that you or your organization would like to use in the future, be sure to have participants complete a release form. **See Appendix B for a sample.**

17. Post-Workshop Tasks

When the workshop is over, pat yourself on the back! Then take time to do the following essential tasks.

Evaluating the Workshop

Spend some time evaluating the workshop for yourself: What went well and what things would you like to improve for the next workshop? Jot down your thoughts. You will find these notes helpful when planning future workshops.

Sending Forms to State Coordinator

As soon after the workshop as possible, complete the Facilitator Survey Form and mail it to the State Coordinator along with the completed Participant Survey forms. Without these forms, the State Coordinator cannot place participants on the mailing list to receive future mailings and notifications.

Additional Follow-Up (Optional)

The extent of your post-workshop follow-up will depend on your available time and resources. If time permits, a thank you note to each participant along with a summary of key concepts and a list of names and addresses of the workshop participants is helpful. This helps participants begin their own local PLT network. If you did not distribute the certificates during the workshop, you may send them with a thank you note. If participants will be receiving college or district credit for attending your workshop, provide the follow-up needed to secure their credits.

Curriculum specialists and mentor teachers may appreciate additional follow-up to determine the long-term effectiveness of their inservice training programs. A few weeks after the workshop, you may decide to phone or e-mail a few of the participants to see how they are doing with the activities. If appropriate, suggest that they contact other workshop participants to compare notes regarding effective ways of using PLT. You might send a brief follow-up questionnaire to your group at the end of the school year to encourage their use of www.plt.org and the *Branch* newsletter, and to see what success they have had with the activities. This can provide you with good justification for future workshops, and indicate where your workshop might benefit from changes and modifications.