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### Chapter heading.

### Intended Use

This Facilitator Handbook is a guide to facilitating Project Learning Tree (PLT) professional development (PD) events. You can refer to this resource at any time for updated information on PLT, materials and resources, facilitator roles and responsibilities, your state PLT program, and best practices in developing and conducting PLT PD events.

To better address the interests and needs of educators and youth leaders attending your PD event, it is important for you to be familiar with both National PLT and your state program.

This handbook sometimes refers you to the [PLT website](https://www.plt.org/). The website provides additional information and resources that will help you as a facilitator, as well as information you will want to share with the participants you are serving.

### Structure of the Handbook

If you are a new [facilitator](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit), this handbook can help you plan and conduct your PD event. If you are a seasoned PLT facilitator, use the guide as a reference and to enhance your understanding of relevant topics.

Most of the chapters have three levels of information:

1. **Quick Reference Checklists** provide a list of key points to remember. Experienced facilitators can glance at the list for a quick review or use it as a reference when planning a PD event.

2. **Expanded Details** provide more information on each of the items listed in the

Quick Reference Checklist. Links throughout the chapters will take you to additional information about the content you are reading.

3. **Delve Deeper: Supporting Articles and Research** link to articles and research that provide the supporting evidence for the content.

There are two types of hyperlinks within the notebook. Words highlighted in red link to Appendix A: Definition of Terms. Words in blue link to more information about a specific topic or to supporting forms.

### Accessing the Handbook

The PLT Facilitator Handbook is located on the [Google Drive](https://drive.google.com/open?id=1j38SltSFjFnB9JiGZECT6u1q75lFPBA_). All PLT facilitators can access and read the handbook, but cannot edit or make changes. Accessing the handbook online will allow you to follow the links to additional information. You may also download and print the handbook.

### Acknowledgments

Project Learning Tree’s Facilitators Handbook is a culmination of the efforts of many individuals, including PLT State Coordinators, PLT Education Operating Committee members, and PLT staff.

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## 

**Chapter heading.**

## Welcome from the Project Learning Tree (PLT) Family!

Dear Facilitator,

Whether you’re a new facilitator or you’re getting a refresher on current PLT practices, we are excited to have you as a PLT facilitator. You are part of an extensive network of people throughout the United States and several other countries who are helping to develop a new generation of environmental stewards. Your work will encourage educators to use the natural environment to engage youth in learning – both outside and indoors – and will make a difference in the lives of adults and youth in your state.

Facilitators such as yourself are the lifeblood of PLT and have reached over 775,000 educators. As a facilitator, you will be representing PLT and the State PLT program as you facilitate [professional development events](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit), deliver PLT educational materials, and build relationships with educators in your state.

This facilitator handbook will provide you with information and resources to help you succeed as a PLT facilitator.

We sincerely thank you for choosing to become an integral part of the PLT network.

With gratitude,

National PLT Team



## 

## Introduction to PLT

PLT and environmental education (EE) were born out of the 1970s environmental movement and focus on helping individuals, communities, and organizations learn more about the environment, as well as developing the skills and understanding to address global challenges.

### Environmental Education

EE is a process that increases the learner’s awareness and understanding about the environment and related issues**.** As a result, individuals develop the skills to make informed decisions and take responsible actions. EE provides opportunities for people to:

* Learn about the environment and environmental challenges, with a focus on [systems thinking](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit#heading=h.fsh8tbvtq1b2) and the ways that humans affect the environment;
* Examine and clarify their values about and attitudes toward the environment, including the natural world and the human-built environment;
* Build skills to address environmental and social issues; and
* Undertake behaviors that help protect the environment and work toward a more sustainable future (Ardoin & Merr, 2013).

[Learn more about why environmental education is important](https://www.plt.org/about-us/why-environmental-education-is-important/).

EE does not advocate a particular viewpoint or course of action. Rather, it teaches individuals how to weigh various sides of an issue through [critical thinking](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) and enhances their own problem-solving and decision-making skills (EPA).

Since its inception in 1976, PLT has been recognized as an advocate for EE and leader in EE programming, development of best practices, and support of EE policy.

PLT’s programming, curriculum, and resources promote critical thinking, problem-solving, and effective decision-making skills. We are committed to **teaching young people “how to think, not what to think”** **and using trees and forests as windows on the world** to increase students’ understanding of the environment and actions they can take to conserve it. PLT promotes the process of education and advocates sound principles of teaching. Our professional development and educational materials are designed to treat issues fairly and do not advocate a particular point of view. Actively engaging with partners and networks in the development of our materials and programs ensures that we promote critical thinking through a fair and balanced approach to topics and issues.

### PLT’s History

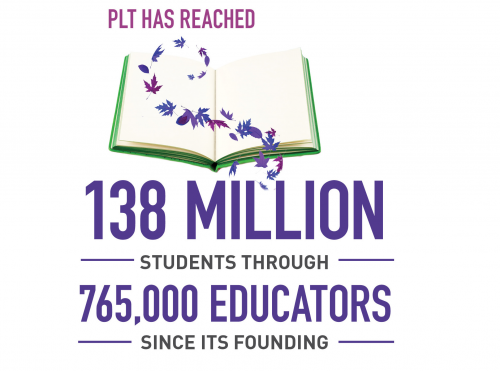
Today: PLT is one of the most widely used preK-12 environmental education programs in the United States and abroad. PLT is available in all 50 states, the District of Columbia, several U.S. territories, and five other countries.

2017: Sustainable Forestry Initiative (SFI), an independent, nonprofit organization dedicated to the future of our forests and promoting sustainable forest management, becomes the home for PLT.

1982: American Forest Foundation (AFF) co-sponsors PLT with Western Regional Environmental Education Council (WREEC); in 1993, AFF takes on all administration for PLT.

1976: Ten states launch the New PLT Curriculum Guide for Kindergarten through Grade 6 and five states do the same for grades 7-12.

Mid-1970s: PLT begins as a collaboration between the American Forest Institute (now the nationwide Council on Environmental Education) and the WREEC. These founders developed PLT with three goals in mind:

1. **Design an environmental education program that would gain the confidence of the education community**, one that educators would like, trust, and use.
2. Develop partnerships between public and private sectors to **ensure the curriculum was balanced, fair, and accurate**—and that the curriculum encouraged students to consider all sides and factors when making decisions about the environment.
3. **Design an effective system of implementation for the program** that enabled educators to use the curriculum easily on a regular basis with their students and present lessons that were locally relevant.

[Learn more about significant milestones.](https://drive.google.com/open?id=1ege71-mfM3xvHhU3_04mn785a_baz-DN)

[Learn more about one of PLT’s founders, Rudy Schafer](https://www.plt.org/about-us/mission-history/the-beginnings-of-plt/).

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### About SFI

SFI is a solutions-oriented sustainability organization. SFI collaborates on forest-based conservation, research, and community initiatives that enhance our quality of life and demonstrate the life-sustaining value of forests. SFI also champions responsible procurement and helps people, organizations, and companies around the world make informed choices when it comes to sustainably-sourced forest products and the management of forest resources to ensure a healthy tomorrow.

SFI connects youth to forests through education by fostering an appreciation and understanding of the natural world. Because the future of well-managed forests depends on developing the next generation of forest stewards, SFI’s community engagement initiatives, like PLT, have long included support for educating youth and connecting them to forests.

****

### About PLT

### 

To achieve this goal, PLT works to:

* Provide students with the **awareness, appreciation, understanding, skills, and commitment** to address environmental issues.
* Teach students to **apply scientific processes and higher order thinking skills** to resolve environmental problems.
* Promote an **appreciation and tolerance of diverse viewpoints** on environmental issues, with attitudes and actions based on analysis and evaluation of the available information.
* **Encourage creativity, originality, and flexibility** to resolve environmental problems and issues.
* **Inspire and empower students** to become responsible, productive, and participatory members of society.

### PLT Organizational Structure

#### The National PLT Staff. The National PLT staff is responsible for the “behind the scenes” operation of the PLT program. This includes developing all education materials, producing PLT’s online courses, providing guidance on high-quality professional development and adult learning, administering grants and national-level partnerships, creating communication and marketing pieces, and handling special projects. [Learn more about current staff members](https://www.plt.org/about-us/staff-leadership/).

#### Education Operating Committee (EOC). The EOC provides guidance and leadership to PLT at the national-level program, representing its many partners and stakeholders. [Learn more about current EOC members](https://www.plt.org/about-us/governance/.).

#### State Partners and Sponsors. State sponsors sign agreements with SFI to implement the PLT program in their state. These organizations include state government agencies, state forestry associations, universities, state environmental education associations, and other nonprofit entities. State sponsors nominate a PLT State Coordinator, who’s the main point of contact in that state, and a Steering Committee, which provides guidance and leadership to PLT at the state level. [Learn about PLT State Coordinators](https://www.plt.org/your-state-project-learning-tree-program/) here.

### How PLT Works

### The PLT Program is characterized by three equally important components:

1. [Instructional Materials](#_oscwlp20s2wk)

2. [Professional Development](#_1lz3kevvys1h)

3. [Distribution and Support Network](#_suxb3y2qjpmm)

#### 1. High-Quality Instructional Materials for Grades PreK-12 and Beyond.

##### Curriculum Materials. PLT’s high-quality units and lesson plans for early childhood through grade 12 and beyond can be used to supplement existing curricula in formal school settings and enhance educational programming in nonformal settings. The activities can be integrated into lesson plans for all grade levels and subject areas (especially STEM, reading, writing, and social studies). Topics include forests, wildlife, water, community planning, climate, waste management, and energy.

### Although the PLT curriculum contains in-depth information on specific topics, it is not designed to be an all-inclusive or comprehensive curriculum. Educators are encouraged to fill in the gaps with content that relates to their communities, expertise, interests, and state or national standards.

PLT’s hands-on activities make teaching and learning fun. They connect to nature, engage students in learning, improve student achievement, and grow 21st-century skills—including the ability to think critically and solve problems.

The activities are aligned with **national academic standards**, including the Next Generation Science Standards (NGSS) and other 3D science standards, Common Core State Standards (CCSS), College, Career, and Civic Life Framework, Head Start, and the National Association for the Education of Young Children. In addition, PLT connects with many nonformal education programs. For example, PLT activities meet the requirements for Boy Scout Merit Badges and Cub Scouting Adventures, Girl Scout Badges and Journeys, and 4-H Life Skills.Furthermore, many states have aligned PLT activity guides to state standards. [Learn more about national and state standards alignment.](https://www.plt.org/alignment-to-standards)

Most PLT guides are available in print and electronic versions (e-books or e-units). The PLT curriculum has been translated into seven languages.

[Learn more about PLT’s educational materials.](http://www.plt.org/curriculum-offerings/.)

##### Conceptual Framework. PLT’s curriculum materials are founded on a **conceptual framework**. This framework lets users know what kinds of knowledge students can expect to acquire while participating in PLT activities. The framework provides the structure, direction, and purpose for the activities.

The current conceptual framework (updated in 2017) is arranged into five major themes:

1. Diversity

2. Interrelationships

3. Systems

4. Structure and Scale

5. Patterns of Change

Each theme covers the topics of Environment, Resource Management & Technology, and Society & Culture.

[Learn more about PLT’s conceptual framework](https://drive.google.com/open?id=1ehORABqBN1QjwsTmDOb5FQpizzLqbADh) (also available for reference in the PreK-8 Activity Guide, secondary modules, and the E-Units).

##### Teaching Methods and Strategies. PLT activities reflect several methods and strategies for teaching environmental literacy and values.The **constructivist theory of learning** recognizes that students construct new understandings by combining prior knowledge with new discoveries.

* The **whole-language approach** supports the idea that students learn holistically rather than in “bits and pieces.”
* **Service-learning** helps students make real-world connections to what they learn in the classroom.
* When students take **environmental action** together, they develop a sense of belonging and self-esteem. Their belief that they can make a difference and contribute to positive change is strengthened.
* **Inquiry-based teaching** develops essential 21st century skills, such as identifying problems, developing questions, testing solutions, evaluating outcomes, and predicting new problems.
* During **cooperative learning,** students work together in small groups to achieve common goals and develop collaboration and communication skills. [Learn more about Successful Cooperative Learning Steps](https://drive.google.com/file/d/1us-J9La1r-Mtqz5U-Y9f6tSbpxiR6ETt/view).
* **Differentiated instruction** helps educators reach students who have varying individual strengths, needs, and talents; different academic preparation and prior experiences; and a wide range of English-language proficiency.
* Each PLT activity highlights **reading connections** and uses literature to meaningfully expand students’ learning and imaginations, while providing educators with tools to address current education initiatives.
* **Authentic assessment** matches an activity’s instructional goals with the application of knowledge or skills, to assess students’ conceptual understanding.
* PLT **technology connections** suggest ways for students to use technology to support their learning and support the teaching of lesson objectives through the authentic use of technology, as well as formulating a product that can be used for assessment.

Each activity is designed to guide the learner through the process of **awareness, knowledge, challenge, and action** using active involvement and hands-on experiences.

##### Online Resources. PLT has many **online resources that support educators in using the PLT curriculum**. These include student pages, teacher-generated materials, grant opportunities, STEM connections, recommendations for children’s books, educational apps, videos, interactive websites, and career pathways for students. **The Branch Newsletter** provides monthly updates, news, and opportunities of interest to educators.[Subscribe to The Branch](https://www.plt.org/signup).

##### Curriculum Development and Evaluation. PLT uses an extensive multi-layered curriculum development and evaluation process to guide the creation of its materials.

This process includes research, surveys, and reviews with hundreds of teachers, nonformal educators and subject-matter experts. Revisions to curriculum materials are based on pilot and field testing in the classroom and formal impact evaluations by independent consultants to ensure that the activities meet the intended learner objectives (identified at the top of each activity description). Past evaluations have confirmed that students exposed to PLT show increased knowledge and positive attitudinal growth. [Learn more about evaluation findings](https://docs.google.com/document/d/1n2TdvJRoIInGvspzKbsWCYTNdetff2wXzsEnaZDWo94/edit?usp=sharing).

Check PLT’s website to [learn more about research and evaluation results](https://www.plt.org/about-us/research-evaluation/).

#### 

##### **Awards and Recognition.** PLT consistently receives prestigious awards and recognition from leading educational and community organizations, including the 2011, 2019, and 2020 Learning® Magazine Teachers’ Choice Awards. [Learn more about awards and recognition.](https://www.plt.org/about-us/awards/)

#### 2. Carefully Designed Professional Development (PD) Events. PLT curriculum materials are distributed through in-person PD events or online courses. As a facilitator, you will offer one or more of these multi-disciplinary curricula in the professional development event you deliver.

PLT’s PD events help educators integrate environmental education into their teaching and become comfortable teaching outdoors—in urban, suburban, and rural environments. PD events and online courses teach participants how best to use PLT’s instructional materials with youth in their own settings and how to engage with (and draw on) their community in learning about and taking action to address local environmental issues. Because PLT programs are implemented locally, participants also receive state-specific resources that complement PLT’s educational materials and address the local environment. Continuing education credits are available in most states. For more information, [contact your PLT State Coordinator](https://www.plt.org/your-state-project-learning-tree-program/).

##### In-person PD Events. These include one-day PD events, in-service days, a series of classes spread throughout a semester, week-long institutes, and other sustained and intensive models. These events are planned and conducted by trained facilitators and customized for specific grade levels, topics, and teaching situations. [Learn more about in-person PD events.](https://www.plt.org/examples-of-trainings/)

##### Self-paced Online Courses. PLT offers six self-paced online courses that are composed of several 20-30 minute learning experiences called coursels. These can be completed from any computer or mobile device with an internet connection and include demonstration videos, simulations, planning exercises, and state-specific resources.

* [*Environmental Education for Kindergarten to Grade 8*](http://shop.plt.org/prek-8-environmental-education/)
* [*Treemendous Science! for Grades K-2*](http://shop.plt.org/treemendous-science-grades-k-2/)
* [*Energy in Ecosystems for Grades 3-5*](http://shop.plt.org/energy-ecosystems-grades-3-5/)
* [*Carbon & Climate for Grades 6-8*](http://shop.plt.org/carbon-climate-grades-6-8/)
* [*Early Childhood*](http://shop.plt.org/early-childhood/)
* [*GreenSchools*](http://shop.plt.org/greenschools-online-course/)

Learn more about online courses in [Introduction to PLT’s E-Units for Grades K-2, 3-5, and 6-8](https://www.plt.org/introducing-plt-e-units/story_html5.html). [Learn more about PLT’s online PD](https://www.plt.org/news/online-professional-development).

##### Blended PD Options. Blended PD opportunities are completed partially online and partially in-person and are available in some states. Check with your [PLT State Coordinator](https://www.plt.org/your-state-project-learning-tree-program/) for more information.

#### 3. Extensive Distribution and Support Network. PLT engages internationally and nationally to advance [environmental literacy](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) and promote stewardship through excellence in environmental education. The National PLT staff and the larger PLT network are active and contributing members of professional organizations such as The North American Association for Environmental Education (NAAEE), National Science Teaching Association (NSTA), and Association of School Administrators (ASA).

Their partners at the national level include the Arbor Day Foundation, Bureau of Land Management, National Association of Conservation Districts, National Association of Professional Forestry Schools and Colleges, National Association of State Foresters, National Audubon Society, U.S. Department of Education Green Ribbon Schools, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, USDA Forest Service, Society of American Foresters, and World Forestry Center. PLT also partners with educators and academics nationwide. [Learn more about partners](https://www.plt.org/about-us/network-partners/).

These networks and partnerships contribute to PLT’s status as a premier environmental education organization. They allow you as a PLT facilitator to have credibility and build support at the local level.

## Introduction to the State PLT Program

PLT is delivered in all 50 states and several countries through sponsoring organizations. The **sponsoring organization** in each case signs an agreement with SFI to implement the PLT program and follow specific policies and guidelines, including support of a PLT State Coordinator. Some states have more than one sponsoring organization. Primary funding for administering the state program is provided by the sponsoring organization(s) and varies greatly from state to state. Therefore, states will differ in the resources available to support the State PLT program. Funding determines the number of employed staff who are dedicated to PLT, compensation for facilitators, cost of educator PD events, and the number of PD events offered each year. Review your state website for specific details about your state’s program.

The **PLT State Coordinator** ensures that PLT is delivered using current information and best practices for high-quality professional development. Most states use facilitators to deliver PD events. The National PLT program supports the state implementation of PLT by providing resources, training opportunities, and support to the PLT State Coordinators.

An **advisory or steering committee** guides many state programs. The committee includes representatives from organizations such as the state department of education, environmental organizations, business groups, universities, other nonprofits, and preK-12 schools. These committees provide valuable input and assistance on budgets, fundraising, marketing, and facilitator recruitment.

[Learn more about your state program in Chapter II: Role of a PLT Facilitator.](https://docs.google.com/document/d/1_4cZjs81blSaZFBp2EYIfuPI14uX7wGZTlMOn2tT6K4/edit)

## 

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## Delve Deeper: Supporting Articles and Research

Ardoin, N., and Merr, C. (2013). Environmental Education: A Brief Guide for U.S. Grantmakers. Retrieved September 14, 2019.

Carter, R. and Simmons, B. (2010). The History and Philosophy of Environmental Education. 10.1007/978-90-481-9222-9

eeWorks. (2017). From Anecdotes to Evidence: Demonstrating the Power of Environmental Education. Retrieved February 28, 2019, from https://naaee.org/our-work/programs/eeworks

Examines the evidence base in support of environmental education and K-12 student outcomes. Analysis of 119 peer-reviewed studies published over a 20-year period. Research/Communications team: Stanford University (research); NAAEE (communications)

Environmental Education Act. (1970). P.L. No. 91-516, 84 Stat. 1312.

Environmental Protection Agency. What Is Environmental Education? Retrieved November 23, 2019, from <https://www.epa.gov/education/what-environmental-education>

North American Association for Environmental Education (NAAEE). The History of EE Online Course. <https://naaee.org/eepro/learning/eelearn/history-ee>

3 hours/free online course.

North American Association for Environmental Education (NAAEE). What Is EE? <https://naaee.org/eepro/learning/eelearn/what-is-ee>

2 hours/free online course.

**Becoming a PLT Facilitator**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Expanded Details*](#kix.pvh5rwfblee2) [*Delve Deeper: Supporting Articles/Research*](#kix.kdus59ejn48z)

## Quick Reference ChecklistElementary age student standing in a hollowed out tree

* [**Getting Started**](#_u6xcy7mqtr8b)
* [Understand PLT facilitator responsibilities](#_1rxpt35x6ev7)
* [Attend orientation and state PLT facilitator training](#_hpf8sy6lpp3m)
* [Communicate and participate](#_js5d9asjfzrl)
* [**Your Role as a Project Learning Tree Facilitator**](#_nq74un9kk3ru)
* [National PLT guidelines](#_id4to9rgvjkw)
* [State PLT guidelines](#_aw5816sb586w)



## Expanded Details

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.dzlhn53j44b3)[*Delve Deeper: Supporting Articles/Research*](#kix.kdus59ejn48z)[*Forms*](https://drive.google.com/drive/folders/1imQ-AqnekS_-3ypik2UFS1t5qQBidejl)

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### Getting Started

National PLT and State PLT programs depend on facilitators to deliver programming that reflects the organization’s commitment to and standards for high-quality environmental education. Most facilitators go through an application process within their state, and the PLT-sponsoring organization provides training related to upholding National PLT standards and best practices. The training may include some or all of the following steps, depending on the State:

#### Understand and commit to PLT facilitator responsibilities. When you apply to become a facilitator, the PLT State Coordinator will provide a description of the expectations, responsibilities, and duties of the facilitator. Some PLT-sponsoring organizations require a resume and application, whether it is a volunteer or compensated position. You may be asked to sign an agreement or contract that ensures that both parties have read and understand their respective roles, responsibilities, rights, and policies.

#### Attend orientation and state PLT facilitator training. An important aspect of your facilitator commitment is participating in orientation(s) and PLT facilitator training (also called facilitator professional development). These events—offered by the National PLT office and by your State PLT program—ensure that PLT facilitators provide consistent PD that reflects professionalism, presents current and relevant content, models [best practices](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) in instruction, and provides a high-quality educational experience for participants. They also are opportunities to build relationships with other state PLT facilitators. Learn more about your state.

##### Orientation. The orientation will familiarize you with PLT curriculum materials as well as with the National and State PLT program policies and practices. It will cover details and procedures used to conduct PLT PD events. States use different models to get their facilitators started; your orientation may be by phone, in-person, or a combination.

### You can expect to learn and engage with:

* The PLT educational materials, online training, and resources.
* The PLT-sponsoring organization’s mission, structure, procedures for conducting PD events, and state-specific resources.
* Best practices in environmental education PD.
* The ADDIE instructional design model to organize and carry out PLT PD events. ADDIE (more about this model in Chapters IV-IX) stands for
  + - * + Analyze
        + Design & Develop
        + Implement
        + Evaluate

*Regular Facilitator Training.* PLT frequently improves and expands its materials and updates its PD practices. Facilitator training is a vital conduit for staying up to date. Many facilitators find that the content of these training sessions is not only relevant and applicable to their professional work, it makes them assets to their employer. The trainings may be done in person or as online training or webinars and generally focus on the following types of topics:

* PLT curricula, materials, online PD, new initiatives, and organizational updates
* State PLT program information and updates
* PLT alignment to current state and national academic and nonformal education standards
* Facilitation skills
* Priority content (e.g., fire, climate, STEM)

#### Communicate and participate. Reciprocal communication is an important aspect of any successful program. As a PLT facilitator, you will receive communications from the National PLT program and your State PLT program. These provide important information and updates on the program and learning opportunities as well as information relevant to the educators with whom you work (e.g., information about state educational mandates). Participating in webinars, online meetings, or a listserv will increase your skills and keep you in communication with other PLT facilitators. As a PLT facilitator, you are expected to communicate with your PLT State Coordinator about events or opportunities at which you will represent PLT and the PLT-sponsoring organization for your state, including PLT PD events or projects that you are facilitating or co-facilitating.

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### Your Role as PLT Facilitator

PLT strives to reach every student, regardless of their social or economic identity, and connect them to nature. In order to reach this goal, PLT has set promoting diversity, equity, and inclusion as a priority for its network.

All students deserve high-quality learning experiences that connect them to the natural world. Reaching new and diverse audiences is a priority for PLT, particularly reaching People of Color, Indigenous People, Hispanics, Latinxs, and marginalized communities.

As a representative of the PLT program, you are expected to provide equitable opportunities for all individuals, regardless of race, ethnicity, income, gender, sexual orientation, national status, ability, or any other characteristic that may cause individuals to feel excluded, marginalized, or disenfranchised.

At PLT, all of us have a responsibility to maintain the integrity of the program. Supporting materials for keeping PLT’s approach to education consistent, PLT’s conceptual framework, PD, and guides and resources can be found on the [PLT website](https://www.plt.org/about-us/).

#### Your role is to guide and assist participants in constructing their own learning. You will guide the group to make observations, create interpretations, and draw conclusions, as well as assisting them in raising their level of interaction, teamwork, and problem-solving abilities. You will, in essence, model the PLT mission of engaging students in “*how* to think; not *what* to think.”

#### In order to achieve this, you will need to determine the most appropriate type of PD to meet the needs of your audience, the specific content of the PD, and the location. PD refers to different types of learning experiences that focus on improving people’s professional competence, content knowledge, and skills on a specialized topic. Chapters III-VII will provide more details on the different formats of PD and how to provide high-quality PD experiences.

#### National PLT Guidelines. The PLT website has background information and resources that will help you communicate the benefits of PLT, the impact of PLT’s PD, alignment of educational standards to PLT, and much more. This information will support you to convey the important contributions and value of PLT during interactions and meetings with school administrators, educators, natural resource professionals, funders, and others. Take a moment now to explore the [PLT webpage](https://www.plt.org/).

##### Inclusivity. PLT is committed to providing professional development that is inclusive of all. We strive to be a learner-centered program that values the perspectives and contributions of all people. This facilitator handbook includes information and guidance that will assist you in developing and implementing an inclusive PD event. If you have additional information, resources, and tips to share that can help us promote inclusivity, please email information@plt.org.

##### Political Agendas and Viewpoints. PLT should never be used to promote political agendas. This does not mean that facilitators and PD event participants cannot have their own political views. In fact, PLT promotes tolerance for diverse viewpoints. PLT’s activities encourage the type of lively debate about controversial issues that promotes understanding. However, when a facilitator leads a PD event, and ideally when PLT-trained educators use PLT’s materials, their job is to promote PLT’s philosophy of “how to think; not what to think” rather than their own views, no matter how well founded these views might be. The bottom line is that PLT PD events should not be used as a political platform; to do so adversely affects PLT’s standing and possibly the professional reputation of the facilitator.

##### Reproduction of PLT Materials. All PLT curriculum materials are protected under copyright laws. The Student Pages may be copied for educational use in conjunction with a PLT activity. No other reproductions or adaptations to the content or layout of PLT materials are allowed without written permission from National PLT. All requests for reprints must be submitted to the National PLT office via the [Reprint Request Form](https://www.surveymonkey.com/r/PLTReprint). See the inside front cover of each guide and [the Content Reprint and Adaptation policy](https://securisync.intermedia.net/us2/s/file?public_share=CvwgKXFVleXl2T7WgLlbWP001026ce) for more information. If you determine that an individual or organization might be in violation of PLT’s copyrights, please email information@plt.org.

#### State Guidelines. An important role of the State PLT facilitator is to provide relevant local resources that support the content of the PLT educator PD you provide. This content supports the topics and concepts in the PLT curricula and makes the content relevant. A local connection to content might be in the form of written material, a field session, or a presentation by a local expert. It is important to communicate with your PLT State Coordinator if you have any questions or concerns about the source of the information and whether it meets the standards for fair and balanced.

##### While all of the state programs coordinate with the National PLT program and follow core policies and practices, the state program maintains control of administering the program at the local level. Your State PLT program will provide direction on planning and implementing educator PD events. In the following chapters, you will learn about best practices for planning and implementing a successful PD event. Learn about [your State PLT program.](https://docs.google.com/document/d/1E7ONvSi9ZeKogR9VbHF1Wl4BJG2YzIBxbkNhW6H4Tc0/edit)

## Delve Deeper: Supporting Articles and Research

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit) [*Quick Reference Checklist*](#kix.dzlhn53j44b3) [*Expanded Details*](#kix.pvh5rwfblee2)[*Forms*](https://drive.google.com/drive/folders/1imQ-AqnekS_-3ypik2UFS1t5qQBidejl)

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McCarthy, J. (2015). [Student-Centered Learning: It Starts With the Teacher](https://www.edutopia.org/blog/student-centered-learning-starts-with-teacher-john-mccarthy). Ecotopia. Retrieved from https://www.edutopia.org/blog/student-centered-learning-starts-with-teacher-john-mccarthy

Educators encourage student-centered learning by allowing students to share in decisions, believing in their capacity to lead, and remembering how it feels to learn.

Mizell, H. (2010). Why Professional Development Matters. Learning Forward. Retrieved from <https://learningforward.org/wp-content/uploads/2017/08/professional-development-matters.pdf>

This article specifically addresses the importance of PD in schools and school districts to strengthen their practice. It proposes that the most effective PD engages teams of teachers focused on student learning.

Neal, M., and Holland, B. (2005). [When Service Learning Meets Howard Gardner](https://drive.google.com/open?id=12x5PV2YhWIbdMPMQs0fdYXmrURZ1ggNe). National Service-Learning Clearinghouse. Retrieved on June 19, 2019. NYLC Resource Center at [www.nylc.org](http://www.nylc.org).

Howard Gardner, a developmental psychologist, is best known for his [theory of multiple intelligences](https://www.verywellmind.com/gardners-theory-of-multiple-intelligences-2795161). This article explores Gardner’s work and contributions to our understanding of service-learning.

North American Association for Environmental Education (NAAEE). Guidelines for Excellence in Environmental Education Series. Retrieved September 15, 2019 from <https://naaee.org/eepro/publication/guidelines-excellence-series-set>

Oregon State University. [Adult Learning: Overview of Theories and Theorists](https://drive.google.com/drive/folders/10-tM6u6q84USKwy7Ib37Os8INFkmKfP4). School of Education, ED 553 Learning Theories Course.

This matrix lays out theories and theorists who have contributed to adult learning. It also addresses key concepts of each theory and the methods, strategies, and activities associated with it.

Ültanır, E. (2012). [An Epistemological Glance at the Constructivist Approach: Constructivist Learning in Dewey, Piaget, and Montessori](https://files.eric.ed.gov/fulltext/ED533786.pdf). International Journal of Instruction, 5 (2): 1308-1470. www.e-iji.net, p-ISSN: 1694-609X.

The article defines the constructivist learning theory and reviews the literature.

**Chapter heading.**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Expanded Details*](#kix.hdm9ub4w36z5)[*Delve Deeper: Supporting Articles/Research*](#kix.jd16jy2yrbkm)

## Quick Reference Checklist

* [**What Is Instructional Design**](https://docs.google.com/document/d/1sMe2jmarnnpA1leD0ysqmxkwUe_QJBse7XEawnKC-PU/edit#heading=h.qnnolbvp9lts)**?**
* [**What Is ADDIE?**](#_7rwygb5t4ipl)
* 1. [**A**nalysis](#_rgrk9a3eikv3)
* 2. [**D**esign and **D**evelopment](#_b8xq4s3uts7)
* 3. [**I**mplementation](#_74oo8w61cuj4)
* 4. [**E**valuation, Assessment, and Follow-up](#_so6qiuq0gmck)
* [**The Term: Professional Development Event**](#_w48vz5x1zt7u)

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## Expanded Details

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.6wcw83ms5imv)[*Delve Deeper: Supporting Articles/Research*](#kix.jd16jy2yrbkm)[*Forms*](https://drive.google.com/drive/folders/1imQ-AqnekS_-3ypik2UFS1t5qQBidejl)

### What Is Instructional Design?

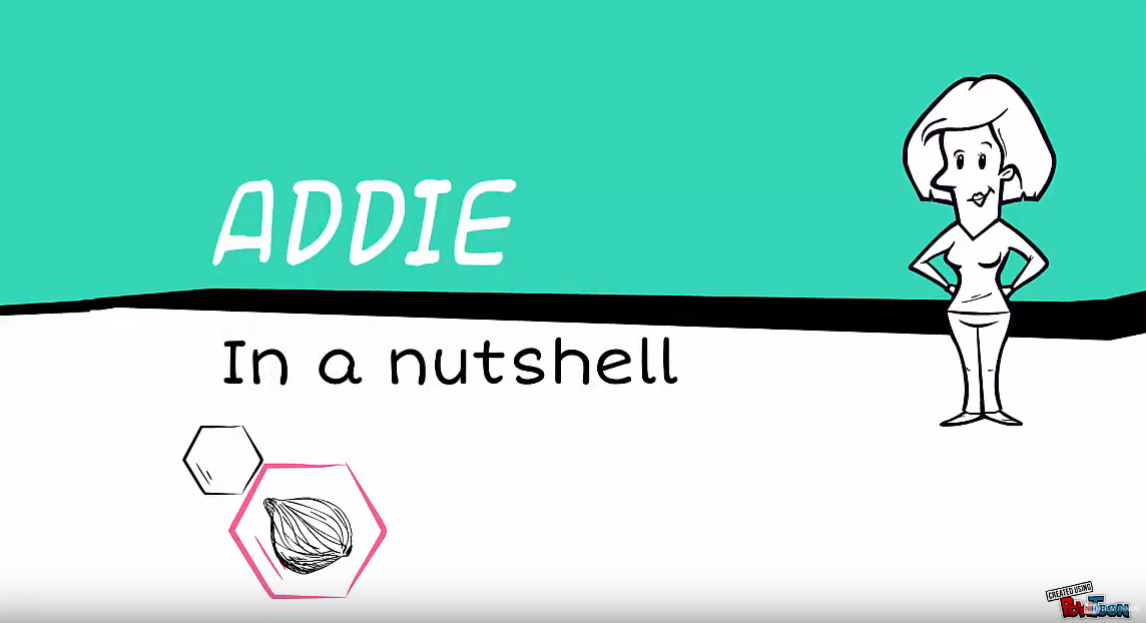
#### Instructional design:

* Is a process used to organize an instructional event
* Considers intentional and systematic elements throughout the instructional process
* Focuses on the learner and learner-centered outcomes

### PLT is committed to providing high-quality professional development to educators, formal and nonformal leaders, and youth leaders. To this end, we strongly encourage State PLT programs and PLT State Coordinators to adopt the ADDIE instructional design model to design professional development events. Here’s a quick overview of this model.

### What Is ADDIE?

ADDIE is a widely used and accepted instructional design model that promotes high-quality instruction and aims for a “learner-centered” rather than an “educator-centered” approach to instruction so that effective learning can take place. According to Steven McGriff, education consultant at Penn State University, ADDIE is an effective model because “every component of the instruction is governed by the learning outcomes, which are determined after a thorough analysis of the learners’ needs.”

(Source: McGriff, S., 2000, Penn State University)

ADDIE uses a systematic approach to create instruction. It is centered around the idea of alignment among the goals for the PD event, the content, the materials, and the assessments. The ADDIE acronym stands for **A**nalysis, **D**esign and **D**evelopment, **I**mplementation, and **E**valuation. [Watch an overview of the ADDIE instructional model.](https://www.youtube.com/watch?v=B6y4Ygs6oSs)

The National PLT program, working with PLT State Coordinators, adapted the model by combining "Design and Development" into one phase and expanding Evaluation to "Evaluation, Assessment, and Follow-up." PLT aligns the PD event to outcomes, rather than goals. In addition, in PLT’s adaptation, the characteristics within each of the ADDIE elements were modified to reflect specific PLT strategies and ensure practices that promote inclusivity.

#### Analysis. The *Analysis* element focuses on understanding the needs, interests, and background of the learner, as well as knowing where the learner lives and works. The information you gather during the analysis phase will help you write outcomes for your PD event that are learner-centered.

#### Design and Development. During *Design and Development*, you will formulate the PD event. Using the analysis you completed, you will develop outcomes and objectives for the specific event you will be hosting. (Chapter V defines outcomes and objectives and provides guidance on developing them.) The outcomes and objectives drive the content, methods, sequencing, and scaffolding of instruction. They determine the selection of PLT activities and associated resources, as well as the assessment of participant learning and evaluation of whether objectives are met. This element of ADDIE also includes working with the people who will assist you with the PD event and may include sharing your instructional plan with the PLT State Coordinator.

#### Implementation. The *Implementation* element puts everything you have done in elements 1 and 2 into action. It is the “doing” phase and includes setting up the space, welcoming participants, facilitating the event, and wrapping up the event. Chapter VI addresses the on-site facilitation of the PD event.

#### Evaluation, Assessment, and Follow-up. *Evaluation, Assessment, and Follow-up* activities are based on the outcomes and objectives you have defined. They include the continuous assessment of learning during the event and the cumulative evaluation of the PD event’s impact on learning and application. While the ADDIE instructional model addresses only evaluation, PLT’s version of the ADDIE model includes assessment and follow-up with participants.

PLT created the [PLT ADDIE Instructional Self-Assessment and Checklist Tool](https://docs.google.com/document/d/1JjqbNZFY-JVIH_2EzoF7uLhkQuebQxuMEDxYBCMyJ_U/edit) to guide you through the instructional design process. The checklist includes characteristics or considerations for each of the four ADDIE elements. It allows the instructional designer (you!) to identify the degree to which your PD event addresses the essential characteristics of high-quality professional development. It can also be used as a tool when you are planning a PD event to check off the tasks accomplished and to double-check that you haven’t forgotten an important task or consideration.

Chapters IV through VII in this facilitator handbook provides more information on each of the four ADDIE elements of instructional design.

### The Term: Professional Development Event

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| Why the shift of terms? For much of PLT’s history, the terms “workshop” and “training” were used to describe the instructional experiences offered to classroom teachers, nonformal educators, and other PLT audiences. In the last few years, these terms have been replaced with PLT “professional development events” or PLT “PD events” to better describe the high-quality nature of the instructional design and educational experiences provided through PLT. This is an important change for two main reasons:**Perceptions**. Some perceive the terms “training” and “workshop” as a brief standalone experience. Many State PLT programs offer PD that extends beyond one day, such as multi-day events, weeklong institutes, college courses, and other options. Many PLT PD events (including one-day events) also build upon prior PD with PLT or partners in environmental education, thus contributing to a continuum of high-quality PD. Therefore, the term “PD event” reflects more accurately the many types of PD offered by states.**Preferences**. Classroom educators are a critically important audience for PLT. They constitute a large percentage of our participants, and they reach thousands of students every year nationally. Because of this, PLT pays close attention to school reform efforts and how those reforms might impact our work. Recently, PD for teachers has come under scrutiny. A new term has emerged: “high-quality professional development,” defined as instructional experiences that lead to changes in teacher practice and/or student academic achievement. As educators and their school administrators consider PD opportunities like those offered by PLT, it is essential for our language to accurately portray the quality of the experiences that we offer. ([See Why PLT Works](https://www.plt.org/about-us/research-evaluation/) for evidence of how our PD meets the definition of high-quality PD.) To this end, when we are working with formal educators, we describe our work as “professional development” or “PD events” rather than “training” or “workshops.” |

## Delve Deeper: Supporting Articles and Research

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.6wcw83ms5imv)[*Expanded Details*](#kix.hdm9ub4w36z5)[*Forms*](https://drive.google.com/drive/folders/1imQ-AqnekS_-3ypik2UFS1t5qQBidejl)

McGriff, S. (2000). Instructional System Design (ISD): Using the ADDIE Model. Retrieved January 2020 from <https://www.lib.purdue.edu/sites/default/files/directory/butler38/ADDIE.pdf>

Simple overview and visuals of the ADDIE model. This ADDIE Model descriptive summary was provided by three graduate students (Sherri Braxton, Kimberly Bronico, and Thelma Looms) in the Computer Science Department at The George Washington University in Washington, D.C. and reposted in 2000 by Steven J. McGriff, College of Education, Penn State University.

## Reigeluth, C.M. (1983). Instructional Design Theories and Models: An Overview of Their Current Status. Lawrence Erlbaum Associates.

Overview of eight of the most comprehensive and best-known attempts to integrate knowledge about effective and appealing instruction.

**Becoming a PLT Facilitator**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Expanded Details*](#kix.qeegjihbimuq)*[Delve Deeper: Supporting Articles/Research](#kix.qeegjihbimuq)*

## Quick Reference ChecklistElementary age student standing in a hollowed out tree

* [**Establish Facilitation Team and Determine Roles**](#_3nko77u44hqw)
* [**Determine Intended Audience**](#_c3r7g4ijif9x)
* [Audience type](#_sd8tokb4kp15)
* [Support available for PD event](#_kl355k1n48h7)
* [Demographics](#_fnid3ev5098x)
* [**Identify Motivations** **and Expectations of the Intended Audience**](#_scx1ml209oml)
* [Academic standards, district, and school priorities](#_e3pxz7oqxg09)
* [Nonformal alignments](https://docs.google.com/document/d/1N_SHmBV4JZLn2KylrclG2BBInfgNHst9kIN4bi2sYpM/edit#heading=h.8yw7u0c69u77)
* [Continuing education credit, certification, and licensure](#_5kg7grg1fajz)
* [Content relevancy](#_h34zm5mt7ycz)
* [Organizational culture](#_ti8rmr29t759)
* [**Identify Characteristics of Community at PD Location**](#_695zqb7oo9z6)
* [Historical context](#_3fofm7arb7ya)
* [Regional and local sensitivity](#_ir61dbnh8d2w)
* [**Assess Characteristics of the PD Event Site**](#_tduak4ucqwwe)
* [ADA accessibility](#_67976yw7bbh0)
* [Site setting](#_gev3pudwgik0)
* [Convenience and affordability of site](#_pboxo1cdwc6)
* [Safety considerations](#_iq1k09t466h7)
* [**Determine PD Event Details**](#_9nc7fmcuytxl)
* [Budget for PD event and cost to participants](#_nk3nb9d2xrb8)
* [Intended outcome(s](#_gbanyqhj8tjm))
* [Type, duration, and format of event](#_f9mhi98yg6pf)
* [Schedule options](#_gazxhaeftied)
* [Continuing education options](#_mz9ur7deqsqx)
* [Registration](#_kxmmpwqtfy8k)
* [**Establish a Timeline for Marketing and Registration**](#_4edr581ehgni)
* [**Coordinate PD Event Promotion and Marketing**](#_jlkptaeoyawi)
* [Customize messaging and PD event description to engage your intended audience](#_3sjvbafkvhug)
* [Market PD event broadly](#_hjpqs5qsmydp)
* [Ensure that PD event marketing uses best practices (accessibility, usability, and culturally appropriate language)](#_r50jhnlww0u0)

**Expanded Details**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)*[Quick Reference Checklist](#kix.qhw1grikzjc8)* [*Delve Deeper: Supporting Articles/Research*](#kix.seex9aqj1h38)

This chapter provides the tools to organize a successful PD event. The analysis phase of the ADDIE model focuses on understanding the needs, interests, and background of the learners (participants), as well as knowing where the learners live and work (the setting where they will apply the knowledge and skills gained during the PD event).The information you gather during the analysis phase will help you design and develop a PD event that is learner-centered. Below are some of the questions that are addressed during this analysis phase:

PLT PD events are initiated in one of two ways:

1. The PLT State Coordinator identifies a need for a PD event or is asked to provide one to a particular group of people. In this case, your PLT State Coordinator may contact and work with you to plan and conduct the PD event.
2. A PLT facilitator chooses to offer a PD event to meet an identified local need and arranges it in coordination with the PLT State Coordinator. If this is the case, before you begin any aspect of this phase, contact your PLT State Coordinator to communicate your interest and intent and to ensure that your efforts are coordinated with their procedures and timelines.

### Establish Facilitation Team and Determine Roles

Many State PLT programs require or recommend that two facilitators plan and conduct PD events. Your PLT State Coordinator can recommend a co-facilitator who complements your skills and strengthens the relevancy of the PD event to your intended audience. Working with a co-facilitator can be rewarding. It allows you to share the workload, provides an opportunity for you to learn from one another and to collaborate on ideas and problem-solving, and creates synergy.

You and your co-facilitator should meet as soon as possible after you have determined that you will be conducting a PLT PD event to establish each person’s roles, responsibilities, and tasks. [Learn more about co-facilitation](https://docs.google.com/document/d/1JMuM_MoojsnPfIm7aVoKllNR5DpInzZ-qeOHvndkROw/edit).

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| **Tips for** **Establishing a Facilitation Team and Determining Roles**  * Consider working with a facilitator whose skill set, expertise, or background differs from yours. For example, if you are a classroom teacher, consider finding a co-facilitator who is a natural resource professional. * Take time to share your facilitation background, experience with PLT, and reasons for conducting the PLT PD event with your co-facilitator, and solicit theirs. |

### Determine the Intended Audience

The more you know about your intended audience, the more successfully you can promote your PD event, determine the intended outcome(s), and design a learner-centered event. Tailoring your event to a specific type of professional and a specific [grade-level band](https://docs.google.com/document/d/1Aqw7jPti7b0e7-cb4FkYaTQEV-gsYjt8OS2i0Df7vFM/edit) will make it easier for you to craft a PD event that is focused and relevant.

#### Audience type. There are four primary types of professionals who attend PLT PD events. Each of these audiences has certain interests, characteristics, and needs that you should consider. For example, do they work with a specific grade, a grade-level band (e.g., K-2), or a wide range of grades? Do they possess specific expertise as, for example, a science specialist, naturalist, forester, or local tree farmer? Sometimes you might want to focus a PD event on one of these professional groups, while at other times you might open the PD event to a broader audience. Either way, understanding who your audience is will help you plan.

##### Formal educators. These educators teach or work within a public or private school or district. Formal educators include classroom teachers, aides, administrators, curriculum specialists, subject specialists (e.g., science, reading), Career and Technical Education teachers, counselors, and homeschool parents. Formal educators work to address specific academic standards and may have district-wide priorities.

##### Nonformal educators. These professionals work or volunteer in organizations as educators or youth leaders and have some responsibility for delivering programming to K-12 students and/or educators. They might work for a state or federal agency such as the state forest service, USDA Forest Service, a nature center, a youth development program, a county or state park, a tribal council, a nonprofit organization, or another entity.

*Pre-service faculty (instructors) and pre-service educators (students).* Pre-service faculty are instructors at a community, public, or private university or college, who prepare college students to become educators. Pre-service educators are students attending a university or college as undergraduates or graduates, who are studying to become educators. Both may participate in PLT PD events and may engage with PLT in several ways:

1. Pre-service faculty or other university/college faculty may attend a PLT PD event and use the PLT activities within their courses.
2. A PLT facilitator may conduct a PLT PD event for the students of a pre-service faculty. The PD event might take place during the scheduled class time or on a weekend.
3. Pre-service faculty may become trained as PLT facilitators and integrate PLT into their course(s) over time. The students may be required to develop a teaching unit using PLT, include PLT materials in their work samples, or deliver lessons using PLT activities as part of their student teaching.

##### Foresters, natural resource professionals, and landowners. These professionals often have a strong interest in engaging with students or community members using PLT. They may engage them through a field trip or classroom presentation and use PLT materials to translate highly technical or scientific concepts into versions that their students can access.

#### Support available for professional development events. Providing an incentive such as financial support to participants can be a motivating factor to your intended audience and their supervisors or administrators. Check with your PLT State Coordinator to determine whether funds are available for this purpose and how to solicit sponsors for your PD event. If you are offering an event during the workday, determine whether the school or organization will allow its educators to take time off to attend and whether its budget can support registration fees for PD.

#### Demographics. Demographics matter! The participants who attend your event will be interacting with students of different ethnicities; students who are English language learners and speak a diversity of native languages; students who have few or no resources; and students who have diverse backgrounds and experiences. This information will help you design a PD event that reflects the principles of inclusivity. [Learn more about cultural competency in PD events](https://docs.google.com/document/d/1UMf5IXyly9B8O7wbg7Y0NtUSES9NRjz5au2JvCeh-hk/edit).

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| **Tips for Determining Your Intended Audience**  * Your state department of education and the school district website have a wealth of information about schools. You may be able to get information by school district on demographics, the percentage of students who qualify for free and reduced lunch, and the percentage who are English language learners, as well as school contact information. * Build relationships with educators in your area. They have information and tips that will help you plan and market your PD event. * Consider asking participants about their expectations, motivations, and current knowledge and skills when they register for the PD event, but do not make registration too cumbersome for participants. You can also collect this information at the beginning of the PD event. * Communicate with your PLT State Coordinator on your strategy. For example, if you are reaching out to teachers in a particular area of the state, check with your PLT State Coordinator to ensure that there are no competing PLT P being planned for that area. * Consider designing a PD event that specifically addresses the intended audience based on what you know about the demographics. For example, you might design an event tailored to English language learners. |

### Identify Motivations and Expectations of the Intended Audience

#### Academic standards, district, and school priorities. Academic standards define what students should know and should be able to do at each grade level or grade-level band. Aligning learning to academic standards helps ensure that students progress in their learning toward graduation and helps educators assess their students’ learning. Therefore, formal and nonformal educators and youth leaders are motivated by PD events and curricula that are aligned to academic standards and that assist them in meeting these standards.

#### Activities from PLT’s PreK-8 Activity Guide, E-Units, and secondary modules are aligned to many state and national standards, including:

* Common Core State Standards
* Next Generation Science Standards
* National Social Studies Standards
* National Head Start Performance Standards
* National Association for the Education of Young Children
* U.S. Dept of Education Green Ribbon Schools

#### [Learn more at PLT’s Alignment to Standards webpage.](https://www.plt.org/alignment-to-standards) On this page you will also find a link to your own state’s correlations.

Districts and schools often have specific priorities, initiatives, or goals. For example, a school district may set a goal of increasing reading scores in grades K-2 and may make PD related to that goal a priority for all teachers of those grade levels. A little research can help you design an event that will be engaging and supportive to both educators and administrators. PLT’s website has many resources that will help you and your educators on specific initiatives and priorities. Are you looking for some STEM tools? Climate activities? Age-appropriate books on specific topics? [Learn about PLT’s resources](https://www.plt.org/resources/).

#### Nonformal Alignments. PLT activities are correlated with programs such as 4-H, Boy Scouts of America, Girl Scouts USA, and Your True Nature. These correlations can be important motivators to participants. [Learn about nonformal alignments](https://www.plt.org/alignment-to-standards/nonformal). Also, some State PLT programs participate in the certification of environmental educators. [Learn about environmental education certification](https://naaee.org/our-partners/affiliates).

#### Continuing education credit, academic credit, certification, and licensure

* *Formal educators*. Educators in many states are required to participate in continuing education and earn credits, so offering this opportunity is an incentive for them. The type and benefit of the continuing education and credit they need vary by state. Your PLT State Coordinator will be able to assist you in determining the appropriate and preferred type of credit, so check with them first before contacting your state department of education, district offices, and educators. Be sure to check whether your participants need undergraduate or graduate credit.
* *Nonformal educators.* Many organizations encourage their employees to seek PD and professional certifications related to their positions and include these achievements in their yearly work or educational plans. For example, AmeriCorps national service members receive service hours as part of their educational plan. Contact your PLT State Coordinator about providing certification credits or service hours in your state.
* *Pre-service faculty and* students*.* Pre-service students may be able to use university or college-level academic credit to advance to graduation and licensure. Pre-service faculty and other university/college faculty find PLT instrumental to model best practices in their methods courses. Your PLT State Coordinator will be able to assist you in determining the appropriate and preferred type of credit, and getting your PLT PD event approved for university or college-level credits.

#### Content Relevancy. Your PD event should be relevant to the professional context in which the intended audience works and to the community. Take into consideration local issues or topics, annual celebrations or events, cultural connections, or specific organizations with a particular focus. For example:

In a community where wildfires are frequent, the PD event might focus on understanding fire or fire ecology.

At an annual salmon celebration coordinated by the community and the local tribe, the PD event coinciding with the event might focus on keeping forests healthy to protect water quality and including tribal perspectives on the value of water, salmon, and forests.

#### Organizational Culture. Organizational culture refers to how things are done at an organization, as well as prevailing attitudes, patterns of accepted and expected behavior, and the habits that become part of the organization’s principles and philosophy (Winkler and Fyffe, 2016). Organizational culture impacts how your intended audience might apply the PD content and implement the activities (e.g., team teaching, flexibility in the curriculum, attitudes regarding outdoor learning, the importance of community education and outreach). Understanding the culture is particularly important when you are targeting your PD event to a specific group, such as educators in a specific school, a science teacher conference, or a landowner event. For example, if you are working with a school that has an organizational culture of collaboration, where educators usually work in teams to move their curricula forward, you might not need to spend time on practicing HOW to work together. In contrast, when you are working with a school or organization whose staff have fewer opportunities or less experience working together, it might be important to spend extra time on skills that build collaboration.

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| **Tips for Identifying Motivations and Expectations of the Intended Audience**  * Review your state department of education website to determine national educational and state standards, as well as continuing education and licensure requirements. * Check the school district website(s) for schools whose educators you anticipate will attend your PLT PD event. This site will provide additional information on district-wide initiatives and focus. * Review the PLT website for [alignment](https://www.plt.org/alignment-to-standards) to national standards, state standards, and nonformal education programs, as well as [resources](https://www.plt.org/resources/) that support educators. * Be familiar with the standards that are relevant in your state and to the PLT materials you will be covering. * Be attentive to important issues and events in the community you are looking to serve. |

### Identify Community Characteristics of PD Location

#### Whenever possible, design the PD event learning environment to be similar to the environment in which the participants will apply what they have learned. Consider locations that are well-known, respected, or appealing to visit, such as museums, science centers, state parks, and zoos. This helps with "buy in" from people who may not be familiar with PLT. It is also appropriate to host PD events in the same environment the educators teach. Some examples:

#### A PLT PD event for formal educators working in an urban school that has little natural space could be held at that urban school to model how to utilize PLT activities on-site.

#### A PLT PD event for forest landowners who want to engage students at their tree farms could be hosted at one of their tree farms or at a natural area that has similar features to their tree farms.

#### Historical context. This term refers to social, religious, economic, and political conditions that have existed over time. The historical context of an area is tied to the present and the future of a community. Consider a small school in a rural community that was based for many years on a timber economy. Then the mill closed, forestry-related jobs dwindled, people moved away, stores closed, and student enrollment dropped. Understanding the context can help you communicate with your intended audience about their interests and needs and what PLT has to offer.

#### It is important to remember that all lands are historically tribal lands. Begin by educating yourself about the original inhabitants of the territory where you’re presenting and acknowledge them during your event. You can [learn more about honoring native lands.](https://docs.google.com/document/d/1JDDzARED-BhAkDP8-5OttXHLTKHqZCenyOhdnaavQIU/edit) In addition, you can emphasize the importance of local Indigenous Traditional Knowledge within environmental education and encourage participants to seek out and learn from traditional knowledge holders in their own areas.

#### Regional and local sensitivity. To get a sense for regional or local sensitivity, check news reports and county commission and city council agendas and talk with people in the community. Consider the scenario described in the prior paragraph. Given the historical context and their experiences, community members may be wary of an educational program that teaches students about forests and forestry. Knowing this will help you frame your communications and marketing and prepare you to address any comments or concerns that might come up during the PD event.

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| **Tips for Identifying Community Characteristics of the PD Location**  * Check local newspapers and city and county websites. * Identify and research local tribes. Many have excellent websites full of information about their community, history, and culture, as well as contact information for representatives who may be interested in participating in your PD event or teaching you about local tribal protocols. |

### Verify Characteristics of the PD Event Site

### Whenever possible, visit the place where you will conduct your PD event in advance. It is helpful to have a checklist of required site characteristics with you when you visit the site. If you or your co-facilitator cannot visit, be prepared to discuss your questions and needs with your site contact.

#### ADA accessibility standards*.* As a PLT facilitator, you must consider the physical, intellectual, social, and emotional needs of your participants. Your first requirement for a location is an event site that will allow everyone to fully participate. Over 57 million people in the United States experience some type of physical, cognitive, or social disability. These disabilities include vision, hearing, mobility, cognitive/development, autoimmune, and more.

The Americans with Disabilities Act (ADA) became law in 1990. It is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.

Under Title III of the ADA (28 C.F.R. sect. 36.303), “public accommodations shall take those steps that may be necessary to ensure that no individual with a disability is excluded, denied services, segregated, or otherwise treated differently than other individuals because of the absence of auxiliary aids and services, unless public accommodations can demonstrate that taking those steps would fundamentally alter the nature of the goods, services, facilities, privileges, advantages, or accommodations being offered or would result in an undue burden, i.e., significant difficulty or expense.”

While complying with ADA standards is the law, not all locations meet ADA standards, so make sure to check whether potential event sites meet the standards and follow accessibility best practices. Work with participants to determine whether they have any additional needs and make reasonable accommodations. These accommodations might include contracting an American Sign Language interpreter or sending materials to participants early so they have time to read through them at their pace, read them using a screen reader, or use another accommodation technology software. It is critical to work with participants and provide adequate time to make reasonable accommodations and openly communicate the needs and resources of all parties. [Learn about event accessibility](https://docs.google.com/document/d/1wNt9lz459oKqeI0WPpYUPU05BkPQaAR9mCMNepTkkic/edit).

#### Site setting. Successful PD events can be conducted in all types of settings—school sites, city parks, museum classrooms, or wooded retreats. Think about what type of site would most successfully enable the intended outcomes and objectives of your PD event, as well as meeting the needs of your intended audience. For example, a PD event at an environmental education center in a regional park can acquaint educators with resources that are available to them in their area, while one held at an elementary school site might help teachers see how PLT activities can be used in their own classrooms or on their school grounds. Show them that the environment is everywhere!

Plan in advance how to overcome any disadvantages or constraints of your space. For example, a retreat location may be wonderful for the spirit, but consider ways to include activities and discussion that help teachers relate to their day-to-day classroom setting. A meeting room can help participants focus on the day’s task, but can be stifling for nature lovers or active learners. Whenever possible, plan to get participants outside during the PD event.

Wherever you plan to conduct the PD event, be sure to reserve the facility well in advance and before doing any advertising. Consider reserving the day before your PD event too, so you may prepare the meeting room and event site. If a PD event site requires you to show proof of liability or accident insurance, or to sign a contract, you *must* contact your PLT State Coordinator.

Find out what policies, equipment, and supplies the PD event site offers for serving food and beverages.

#### Convenience and affordability of site. Consider the accessibility and convenience of the event site for your intended audience. If the site is located in a beautiful forested area, miles from public transportation, how will your participants get there? You may need to make arrangements for transportation or arrange carpools. For multi-day events, also consider the affordability of lodging available at or near the site. Challenging transportation and expensive lodging can limit participation, especially for individuals from underprivileged communities who depend on public transportation or might have budget restrictions. If there is a cost associated with the site or lodging, determine whether your PLT State Coordinator can assist with the cost or help you find a sponsor.

#### Safety considerations. Planning for a safe PD event should be a priority. As you review site locations, consider the potential hazards and risks.

* + **Identify**: Consider the potential participants and identify safety hazards both inside and outside.
  + **Assess**: Consider the level of risk and your (or the site manager’s) ability to eliminate or mitigate the risk.
  + **Mitigate**: Consider solutions such as eliminating a hazard, employing safety devices, checking out safety equipment or gear, and identifying safety locations (e.g., exits, AED device, first-aid kit). 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 or your participants in any possible danger.

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| **Tips for Verifying Characteristics of the PD Event Site**  * Visit the site in advance to determine the types of accessibility that may be needed. * Obtain contact information for a site manager during the event. * Know the location of the closest medical facility and how to get there. * Determine whether the thermostat will be programmed for comfortable temperatures during your event, and how to manage it if not. |

### Determine PD Event Details

#### Budget for PD event- cost to participants. There are several potential costs associated with a PD event. You should determine which of the costs will be offset by participant registration fees and include this information in marketing and in the participant registration information.

PLT strongly recommends charging a fee for PD events. Our market research tells us that educators and others often correlate the value of PD with the price being charged, so free PD tends to be significantly undervalued in people’s minds. In addition, when participants pay a registration fee, they are more invested in attending and far less likely to be “no-shows.” Finally, the income raised from a registration fee helps to cover the costs of the PLT guides and other materials, which allows your State PLT program to reach more people. **Determine what funds are available from the school district, organization, and other sources to support the PD event.** If funds are not available and registration fees will not cover expenses, contact your PLT State Coordinator to explore options for sponsorship and/or grant funding.

Registration fees vary from state to state, generally ranging from $25-$50 per person. The registration fee might cover or offset the cost of PLT guides, other event materials, and the following expenses:

* Facility rental. If there is a rental fee associated with the site you would like to use for your PD event, check with your State PLT program or sponsoring organization to determine whether they can cover the fee.
* Refreshments. Determine in advance whether the State PLT program or a sponsoring organization can cover the cost of refreshments. If you will be providing food and beverages, remember to accommodate the different dietary requirements of participants. If you are planning to go offsite for lunch, make a list of restaurants that are close enough for participants to get there and back in the alloted time, and check their availability.
* Transportation to field session (when applicable). If you will be travelling offsite for field sessions, you will need to determine whether to provide transportation or have participants carpool.
* Transportation, meals, and lodging to multi-day PD events. This type of event requires considerably more time for planning and budgeting. You will need to determine and communicate to participants what meals will be offered as part of the registration fee, and how meals that are not covered will be handled. Will they have access to a kitchen? Are there restaurants nearby? How much time is scheduled for meals? If some participants are coming from out of town, you will need to consider access to an airport, lodging options, and who will be responsible for payment. [Learn about your state registration fees](https://docs.google.com/document/d/1E7ONvSi9ZeKogR9VbHF1Wl4BJG2YzIBxbkNhW6H4Tc0/edit).

#### Intended outcome(s). The information you have gathered about your intended audience during the analysis phase will help frame outcome(s) for your learner-centered PD event. PLT has established four PD Outcomes.

#### PD Outcome 1: Educators use PLT activities in their teaching and seek additional opportunities to engage with PLT.

#### PD Outcome 2: Educators use PLT activities to engage students in active learning about the environment inside and outside the classroom.

#### PD Outcome 3: Educators use PLT activities, along with other resources and strategies, to engage students in action-oriented projects.

#### PD Outcome 4: Educators use PLT activities, along with other resources and strategies, to facilitate student-led investigations, planning, and implementation of action-oriented projects*.*

#### These outcomes progress in complexity from building understanding through exploration and engagement, to increased content and pedagogical knowledge, to increased experimentation and implementation. Each outcome has specific characteristics. [Learn about the outcome continuum and outcome characteristics.](https://drive.google.com/open?id=1b4LJWmQE64Y8hlDi2W1nUjnXfAKKMjG5)

#### Once you have determined the PLT PD Outcome that best suits your PD event, consider what specific details to include in marketing. For example, you should include information about the topic or focus, who should attend, why they would want to attend, and what benefits they will gain from attending. In [Chapter V](#kix.y5dqtjokyxal) you will craft additional outcomes that are specific to your PD event.

#### Type, duration, and format. The type, duration, and format of your PD event is determined by the needs of the intended audience and the intended outcomes, as well as the PLT curriculum materials you distribute. With that in mind, the following guidelines provide general timespans for PLT PD events related to PLT PD Outcome 2. These guidelines are based on our practical experience of how long it takes to prepare participants to successfully use the educational materials distributed during a PD event.

**PD Outcome 2:** Educators use PLT activities to engage students in active learning

about the environment inside and outside the classroom.

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| **Type of PD** | **Recommended Minimum Time** |
| Environmental Experiences for Early Childhood | 3-4 hours |
| PreK-8 Environmental Education Activity Guide | 6 hours |
| Secondary Modules:   * Focus on Forests * Forest Ecology * Forests of the World * Municipal Solid Waste * Places We Live * Risk * Southeastern Forests and Climate Change | 2 hours for the first module  Plus 1 hour for each additional module addressed in the PD event |
| GreenSchools Investigations | 4 hours |
| Plus Project WET or Project WILD | 4 hours per guide when conducting a joint PD event |

##### 

There are many ways to format a PD event to meet these general guidelines. Learn about [PD format options](https://docs.google.com/document/d/1UqOb4zyl1j1r59Vtq7lkIosbIEoSEqgEjqsVCX68a7U/edit).

#### Schedule options. There is no single best way to conduct a PD event. It depends largely on your audience, as well as factors such as time of day, week, and year. Additional factors include the following:

##### **For PD that is approved or sponsored by a school**, educators and administrators may prefer the PD be scheduled on weekdays during the school year or on an established school- or district-wide PD day.

#### Many classroom teachers (but not all) are willing to attend PD after school, on weekends, and during the summer. Factors to consider include:

#### Busy times such as the start of the school year, holidays, and the end of the school year

#### Parent-teacher conferences

#### Testing periods

#### Winter conditions

#### Nonformal educators tend to prefer PD events to be scheduled during their normal workday hours. Avoid the busy times in their programming. These are often school vacation weeks and summers, when they are conducting camps. Many are also busy hosting school field trips in the spring and fall.

#### Youth group leaders, such as 4-H or Scouts, are often parent volunteers unable to leave work, so they prefer PD events in the late afternoon or evening or on weekends.

* **Early childhood providers and educators** occasionally have some training days or a Saturday dedicated to PD. Work directly with the Director(s) of the early childhood education facility to determine a beneficial time and day for a PD event.
* **Foresters, natural resource professionals, and landowners** are often unavailable during seasons with mild weather as they are engaged in outdoor field work. Weekdays are generally acceptable. Many are supported by their organizations to attend.

#### Continuing education options. Continuing education varies greatly from state to state. [Review continuing education, credit, certification, and licensure](#_5kg7grg1fajz) or contact your PLT State Coordinator.

#### Registration. In some states, the PLT State Coordinator is responsible for setting up the registration. Your work during the analysis phrase to plan the event will provide critical information that the PLT State Coordinator can use in this process. It is helpful to have the registration method and information completed before you begin to market your PD event. Your PLT State Coordinator may need you to provide the following information through e-mail or a PLT PD Event Proposal Form. Please reach out to your PLT State Coordinator to determine what information they need and how you should submit it.

* Title and description of your PD event. You should develop a good title to grab the attention of your intended audience so they want to find out more.

#### *Example 1: Inquiring Minds Want to Know: Authentic Field Investigations of the Forest Next Door*

#### Build and reinforce the elements of science inquiry in your middle school students! Using a neighborhood park, you will learn how to develop inquiring minds and engage in Project Learning Tree (PLT) activities that build students’ critical and creative thinking skills. Be prepared to engage in learning activities, explore the alignment of PLT to Next Generation Science Standards and Common Core Standards, and work with peers to plan a teaching unit. We will spend approximately 2.5 hours outdoors and the remainder in the classroom.

* Date, time, and duration.
* Location and details about the site where your PD event will be held. Be specific about characteristics of the terrain, the environment, and methods for moving to field locations.
* Minimum and maximum number of participants. According to past PLT facilitators,10 is the minimum and 40 the maximum number of people for a successful event.
* What you intend to provide and what participants will need to bring.
* Information you would like to know about those who register, such as:
  + Specific grade level and subject they teach, whether they currently take students outside as part of their learning, and skills they want to build.
  + Accomodations needed.
* How much it will likely cost to run the event.

Your PLT State Coordinator may request other information on the registration form, such as participant contact information, school information, policy on cancellation or no shows, deadline for registering, payment information, photo release information, etc.

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| **Tips for Determining PD Event Details**  * Your desired PD outcome will determine the amount of time you need. What do you want your participants to know and be able to do when they leave your PD event? See more about outcomes in Chapter V. * Check the school district and school calendar for your intended audience to ensure that there are no conflicts with other events. * Discuss your plans with educators to determine their preferences. * Consider finding a sponsor to offset the cost of your PD event. Sponsors can provide a site, refreshments, or funds for PLT curriculum materials. They can also sponsor educators to attend by providing an educator stipend, augmenting materials, or substitute reimbursements. |

### Establish a Timeline for Marketing and Registration

### Start well in advance of your intended PD event to ensure that you have plenty of time to market your PD event. Communicating your intent to your PLT State Coordinator is critical. You want to ensure that your PD event does not overlap other PD events being planned, allows for timely coordination of marketing and resources by your PLT State Coordinator, and provides an opportunity for the PLT State Coordinator to provide input. The following timeline provides some general guidance. However, your PLT State Coordinator may set a specific timeline.

##### Sample Planning Timeline

* 3-6 months before event

- Complete your analysis.

- Submit information or proposal for your PD event proposal to your PLT State Coordinator (if required). [See sample event proposal form](https://docs.google.com/document/d/19oKElanqOW_eeMJNdLvb-sR-RVwLS31R/edit)

- Market PD event via websites and other appropriate channels and platforms. Post PD event on website and review posting to ensure that event information and description are accurate.

* 2-4 months before event

- Open registration and collect needed information from

participants.

- Apply for continuing education credit if it will be offered.

- Use participant data to refine your agenda.

- Contact potential presenters.

- Confirm with participants.

* 2 weeks before event

- Send a reminder to participants. Include a draft agenda,

materials they should bring with them, and any updates.

### Coordinate PD Event Promotion and Marketing

Effective promotion piques the interest of potential participants and tells them what to expect. While the PLT State Coordinator may do the primary marketing, it is important for you to participate in promoting and marketing your PD event at the local level. Coordinate with your PLT State Coordinator to ensure that you are reaching your intended audience.

Promotion and marketing materials could include:

* A brief description of PLT
* The outcomes of the PD event and key concepts to be covered
* Who will be conducting the event
* The sponsors
* The date, time, and location (including a map and directions, if necessary)
* The registration fee, if any
* Whether continuing education or licensing credit are available
* What participants will receive, such as a PLT activity guide (the materials they receive are correlated to state academic standards and nonformal standards, and you should choose those that are most relevant to your audience)
* Contact person, including email address and phone number for further information
* Appropriate clothing (for example, dress for the outdoors)
* Registration deadline or cutoff date
* PLT and hosting organization logo

#### Customize messaging and PD event description to engage your intended audience. Create a flyer, poster, or announcement that conveys this information, using a program such as Publisher or PowerPoint. [Review a sample flyer](https://docs.google.com/document/d/17ZCIxW3cR6ytITNhmmojZn3o3Ce9wQuw8uHJC4g5IFo/edit). Check with your PLT State Coordinator for flyers and other marketing material templates.

#### Market the PD event broadly. Whenever possible, make use of existing communication channels within your PLT State program, your organization, and partnering organizations. [Review the PLT PD Marketing Checklist.](https://docs.google.com/document/d/1kHcsE98l9fFdmSaadty5vPFAZphDQ7lQf0SAV7R04eE/edit) Work with your PLT State Coordinator and consider the following:

* Post in PLT State program newsletters as well as partner organization newsletters and websites. Consider your state environmental education organization, nature centers, school district newsletters, educational associations (e.g., science teacher associations, social studies associations), forestry associations, community calendars, University Extension newsletters, etc.
* Use social media such as Facebook, Twitter, Instagram, and Snapchat. Ask your PLT State Coordinator for existing templates created by PLT National Staff.
* Share flyers and other materials with school district PD coordinators, science supervisors, and others for district-wide marketing.
* Promote your event on the state Departments of Education PD calendar, if possible.

#### [Review the Marketing to Schools and Districts Checklist](https://drive.google.com/open?id=0B5nR1uBuXMgAS1lFdlB5N2Z4ZXM).

#### Make sure to take advantage of word-of-mouth advertising, too. 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, lead teachers, and nonformal educators are willing to forward PD announcements, especially if they clearly help educators meet their goals, such as teaching to academic standards.

#### Use best practices for PD event marketing (accessibility, usability, and culturally appropriate language). Whether you are using print or electronic media, it is important to enable access by all, make your materials usable, and use culturally appropriate language and visuals. The messaging you create should resonate with people from all backgrounds, regardless of their race, ethnicity, gender identity, age, religion, ability, sexual orientation, or other characteristics. As you develop your marketing, consider the following guidelines.

#### Accessibility and usability. Ensure that people with different abilities can access and experience your materials. [Learn about usability and web accessibility](https://usability.yale.edu/web-accessibility/articles/links#disabilities).

#### Language. Language includes the words, phrases, symbols, or metaphors used to describe something. Consider every word, symbol, or phrase.

#### Representation. Consider whether the images of people that you use reflect the diversity within the communities you are serving.

* Context. Context can refer to the historical or cultural influences and to the order and hierarchy of the subjects. Consider historical context such as repression and dominance. An example might be an image of a Caucasian male standing over a person of color while instructing.
* Appropriation. Using an image or idea from a minority culture without honoring the meaning behind it can be offensive. People’s cultures, traditions, and personal experiences can be sensitive topics.
* Stereotype. Avoid using a standardized image that represents an oversimplified representation of a person's work, culture, opinions, and attitudes.

Learn more about marketing PLT to a diverse audience by [reviewing the session proceeding from Marketing Nature to Diverse Audiences](https://securisync.intermedia.net/us2/s/W5aN0Kc6sB9CJs9GHg9jFX001026ce) (presented by AdCouncil during the 2019 PLT International Coordinators’ Conference).

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| **Tips for Coordinating PD Event Promotion and Marketing**  * Gear the promotional outreach to your intended audience. * Keep the message simple. Give your audience just the information they need and avoid distractions. * Format your information to be easy to read. Use graphics, white space, and an easy-to-read typeface such as Arial. |

## Delve Deeper: Supporting Articles and Research

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](https://docs.google.com/document/d/1N_SHmBV4JZLn2KylrclG2BBInfgNHst9kIN4bi2sYpM/edit#heading=h.9lb3zcgfbqpu)[*Expanded Details*](https://docs.google.com/document/d/1N_SHmBV4JZLn2KylrclG2BBInfgNHst9kIN4bi2sYpM/edit#heading=h.uofptg5rcs3j)

Ambrosini, K. (2014). Accessible Outdoors: Kids with Social, Emotional and Physical Disabilities Go Outside! Retrieved December 26, 2019 from <https://www.childrenandnature.org/2014/12/27/accessible-outdoors-kids-with-social-emotional-and-physical-disabilities-go-outside/>

Includes six steps for taking kids with social, emotional, and physical disabilities outside.

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Core State Standards. Retrieved October 16, 2016 from <http://www.corestandards.org/>.

Information for parents and for educators, including:

* What parents should know
* Myths vs. facts
* Explore the Common Core
* Understand how the standards were created

De Brey, C., Musu, L., McFarland, J., Wilkinson-Flicker, S., Diliberti, M., Zhang, A., Branstetter, C., and Wang, X. (2019). Status and Trends in the Education of Racial and Ethnic Groups 2018 (NCES 2019-038). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved November 15, 2019, from <https://nces.ed.gov/pubsearch/>.

# Examines the educational progress and challenges students face in the United States by race/ethnicity. Through indicators and spotlights—which examine selected topics in greater detail—this report shows that over time, increasing numbers of students have completed high school and continued their education in college. However, the rate of progress has varied among racial/ethnic groups, and differences by race/ethnicity persist in terms of progress on key indicators of educational performance.

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# Hodgkinson, H. (2000). Educational Demographics: What Teachers Should Know. Educational Leadership. Retrieved October 16, 2019, from <http://www.ascd.org/publications/educational-leadership/dec00/vol58/num04/Educational-Demographics@-What-Teachers-Should-Know.aspx>.

# 

# Addresses shifting demographics in the United States and their effect on educational policy; what teachers need to know to enhance their daily practice; and changes related to poverty, race, and age that are occurring in various segments of the population.

# Kailes, J. (2015). Accessible Meetings, Events & Conferences Guide | ADA Hospitality. Retrieved October 14, 2019, from <https://www.adahospitality.org/accessible-meetings-events-conferences-guide>

ADA is referenced often throughout this document and technical experts have reviewed the content. The information presented is what is required under the law as understood by subject matter experts. The guide provides practices to make events fully inclusive.

The National Association for the Education of Young Children (NAEYC) <https://www.naeyc.org/about-us>

NAEYC is a professional membership organization that works to promote high-quality early learning for all young children, birth through age 8, by connecting early childhood practice, policy, and research. Their vision is for all young children to thrive and learn in a society dedicated to ensuring they reach their full potential. NAEYC has set 10 standards for early childhood programs.<https://www.naeyc.org/our-work/families/10-naeyc-program-standards>

National Science Teaching Association. About the Next Generation Science Standards. <https://ngss.nsta.org/About.aspx>

Contains information and news about NGSS, curriculum planning, classroom resources, and professional learning.

National Social Studies Standards. National Council for Social Studies. Retrieved October 16, 2019, from <https://www.socialstudies.org/standards/introduction>.

In addition to the Social Studies Standards, this site contains information on resources, professional learning opportunities, and conferences.

Next Generation Science Standards. Retrieved October 16, 2019, from <https://www.nextgenscience.org/>.

This site contains the NGSS standards and guidance on reading and understanding the standards, information on instruction and assessment, and planning and communication.

Winkler, M., and Fyffe, S. ( 2016). Strategies for Cultivating an Organizational Learning Culture. Retrieved November 19, 2019 from <https://www.urban.org/sites/default/files/publication/86191/strategies_for_cultivating_an_organizational_learning_culture_0.pdf>

**Becoming a PLT Facilitator**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Expanded Details*](#kix.6vsoq62onx0)[*Delve Deeper: Supporting Articles/Research*](#kix.cp6ob8aalajx)

## Quick Reference Checklist

* [**Align PLT PD Outcome, Specific PD Event Outcome, and Learning Objectives**](#_m7d0va3qpsv3)
* [**Use the PLT Outcome-based PD Facilitator Agenda Template**](#_3otzx27600ff)
* [Get ready](#_ha59oe7a9prm)
* [PD event start-up](#_jo1hka5wfy8x)
* [Establish context](#_tsvno1puuck6)
* [Select activities](#_3z3ft08ix5g0)
* [Incorporate PLT PD strategies and methods](#_sqbdghedaxs3)
* [PD event closure](#_qdrt0mgu3irc)
* [Facilitation team: close out the PD event](#_m2lgwxe9i8yy)
* [**Solicit Review and Feedback of Facilitator Agenda**](#_cunjinhlz2b8)
* [**Plan for PD Event Logistics**](#_h9hr1w1z394k)
* [Inclusive environment](#_69tj5r80wag1)
* [Facility](#_xhho2v2dy4ye)
* [Materials, equipment, technology](#_9bnesocxd55q)
* [Safety](#_44lrd0xqie5s)
* [Refreshments](#_amuhgxvyzcxx)
* [**Send Detailed Confirmation to Participants and Presenter/Speakers**](#_5ns5h2uovj9x)
* [Site location and characteristics (event location, directions/map, description of site)](#_86jgnlqi0bao)
* [Event information](#_fypsmsgqp57b)

## Expanded Details

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.y5dqtjokyxal)[*Delve Deeper: Supporting Articles/Research*](#kix.cp6ob8aalajx)

In this chapter, you will focus on the design and development of your PD event. You will incorporate what you learned from the Analysis element (Chapter IV) and use it to design and develop a detailed plan for implementation. In addition to introducing the PLT materials, your PD event will model effective teaching [strategies](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) and encourage educators to explore new ways of teaching.

Remember to check in with your PLT State Coordinator for information, resources, and assistance during this phase.

### Align PLT PD Outcome, Specific PD Event Outcome, and Learning Objectives

The first step in the design and develop phase is to draft and refine the outcomes and objectives. **Outcomes define what participants will be able to *do as a result of the PD event*** in which they are participating. **Objectives define what participants will do *during the PD event*** that help them meet the outcome. Outcomes may have short-term and long-term elements and are the expected results of a PD event. Objectives can be assessed during and at the end of a PD event.

#### As discussed in Chapter IV, PLT has four PD Outcomes that apply to all State PLT programs:

**PD Outcome 1:** Educators use PLT activities in their teaching and seek additional opportunities to engage with PLT.

**PD Outcome 2**: Educators use PLT activities to engage students in active learning about the environment inside and outside the classroom.

**PD Outcome 3:** Educators use PLT activities, along with other resources and strategies, to engage students in action-oriented projects.

**PD Outcome 4:** Educators use PLT activities, along with other resources and strategies, to facilitate student-led investigations, planning, and implementation of action-oriented projects.

#### Learn more about [PLT PD outcomes and their characteristics](https://drive.google.com/open?id=1b4LJWmQE64Y8hlDi2W1nUjnXfAKKMjG5).

Aligning your PD event to one of the PLT PD Outcomes allows National PLT and your State PLT program to standardize measurements and data collection so that they can compare “apples-to-apples” when they examine the impact of the PLT program. This collective impact provides measurable evidence of a program’s success and provides valuable information for growing partnerships, soliciting funding, and contributing to the knowledge base on effective environmental education PD.

#### The PD event outcome(s). Consider what you want your participants to know and be able to do after your PD event(s). Then write one or more outcomes specific to your event that supports your chosen PLT PD Outcome. As you develop your outcome(s), consider what can actually be accomplished in the allotted event timeframe.

#### For example, in a four-hour session you might not have time to give participants the knowledge and skills to lead a full field session with their students. However, you might have time to focus on a specific aspect of a field investigation, such as observation or journalling.

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| **PLT PD Outcome 2:** *Educators use PLT activities to engage students in active learning about the environment inside and outside the classroom.*  **Sample PD Event Outcome:** *Within three months of the PD event, participants will engage their students in a field session to explore ecosystems in their schoolyard or local park, using at least two PLT activities that address relevant grade-specific academic standards.* |

As outcomes address what your participants will do after your PD event, you will not be able to measure them yourself. At the end of your PD event you can measure the *intended* results. Then, after participants have returned to their educational/work setting and had an opportunity to take action, the actual results can be measured by the National or State PLT program.

#### Learning objectives. The learning objectives will be determined by the outcome(s) for your PD event. Ask yourself, “What do I need to provide in this PD event that will allow participants to accomplish the outcome(s)? What knowledge, skills, and experiences will the participants need to achieve this outcome?” These will be your objectives.

#### Consider the following sample outcome:

Within three months of the PD event, participants will engage their students in a field session to explore ecosystems in their schoolyard or local park, using at least two PLT activities that address relevant grade-specific academic standards.

What knowledge, skills, and experiences do participants need to accomplish the outcome?

* Tips on classroom management outdoors or safety considerations?
* Experience with field tools?
* Practice using PLT activities in the field?
* Knowledge about PLT alignment to academic standards?

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| **PLT PD Outcome 2:** *Educators use PLT activities to engage students in active learning about the environment inside and outside the classroom.*  **Sample PD Event Outcome:** *Within three months of the PD event, participants will engage their students in a field session to explore ecosystems in their schoolyard or local park, using at least two PLT activities that address relevant grade-specific academic standards.*  **Sample PD Event Objectives:** Participants will:   1. Identify outdoor safety procedures and share concerns, ideas, and tips and tools for managing students outdoors. 2. Explain the interrelationship between living organisms. 3. Discuss how PLT activities can be used during a field session. 4. Identify academic standards related to the PLT activities that can be used during field sessions. 5. Write a plan for implementing a field session using two PLT activities within the next three months.   [Practice with outcomes and objectives](https://docs.google.com/document/d/1JSREP5h9wXOwJCeWDhlZbHUxAeZ9iqiG-5Vzt3lcaGg/edit). |

It is helpful to make a list of the knowledge, skills, and experiences your participants will need to accomplish the outcome(s) before you write your objectives.

#### Writing your PD event outcomes and objectives. The mechanics of writing good outcomes and objectives are the same. The difference is that the outcome will describe what participants will do *after and as a result of the PD event*, and the objectives describe what participants will do *during the PD event* that will enable them to meet the outcome(s). You can assess participants throughout the PD event to ensure that the objectives are being met.

#### Note that the objectives are not the activities you’ll facilitate during the PD event, but the affective, behavioral, or cognitive processes in which participants will engage during the PD event.

##### **How to write outcomes and objectives:**

#### Use active verbs that show measurable affective, behavioral, and cognitive performance.

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| **Affective (attitudes, feelings)** | **Behavioral (skills, performance)** | **Cognitive (knowledge, concepts)** |
| * Supports an action * Shares feelings * Recognizes benefits * Explains roles * Relates feelings * Accepts differences * Shows awareness of others’ feelings | * Demonstrate * Compare * Contrast * Apply * Design * Create * Organize * Develop | * Explain * Write * Identify * Generalize * Define * Analyze * Question * Summarize |

#### Consider your participants when writing your outcomes and objectives. Outcomes and objectives should be specific, measurable, attainable, relevant, and time-specific. The following guidelines, which follow the acronym SMART, can guide you in writing effective outcomes and objectives.

**Specific.** Answer the question “What work will be done?” Describe the work so that it is observable or measurable. Each outcome or objective should address only one behavior, action, skill, or area of knowledge.

**Measurable.** Answer the question "How will you know the participant has achieved the outcome or objective?" Use measurable terms such as *quantity*, *quality*, and *frequency*. An outcome/objective with a quantity measurement uses terms of amounts, percentages, and so on. A frequency measurement could be how many times or how often. A quality measurement would describe a requirement in terms of accuracy. Avoid verbs that are difficult to measure, such as *enjoy*, *appreciate*, *understand*, *like*, *know*, or *learn*.

**Attainable.** Answer the questions “Can the measurable outcome/objective be achieved by the participant?" "Can I provide the participant with the experience, knowledge, or capability of fulfilling the expectation?" and "Can it be done according to the conditions and degree specified by the outcome/objective?”

**Relevant.** Answer the questions "Why is this being done?" and “What will the impact be?"

**Time-specific.** Answer the question “When will it be done?” Each outcome has an end-point.

#### Assessing learning objectives. It is important to assess the development of your participants’ knowledge, skills, and experiences and to track their progress toward meeting the learning objectives throughout the event. Assessment is the systematic, learner-focused process of measuring knowledge, skills, and attitudes during learning. By assessing the progress of learning throughout the PD event, you can be flexible and adjust, providing scaffolding as needed to ensure that the PD event objectives are being met.

#### Assessment can be both formative or summative. Formative assessments take place throughout the PD event and may include products created, reflections, journalling, or responses to questions and discussions. Summative assessments take place toward the end of a PD event. For example, one summative assessment might be participants developing a unit plan. Learn more in [Chapter VII: Wrapping Up the PD event: Evaluation, Assessment, and Follow-up](https://drive.google.com/open?id=1Vhj61ABPrKnz1YeXrJvyrNffCENY7WDIXXudxJ2BnPQ).

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| **Tips for Aligning PLT Outcomes, Specific PD Event Outcomes, and PD Event Objectives**  * You may have more than one outcome for a PD event, particularly if it is a multiple-day event. * As you write your outcomes, place each objective under the corresponding outcome. * Using the assessments in the PLT guide not only models their use for participants but can help you assess your participants’ learning. |

### Use the PLT Outcome-Based PD Facilitator Agenda Template

Once you have determined your PD event outcomes and objectives, it is time to design your PD event and build your facilitator agenda. The facilitator agenda is a tool for organizing your PD event. It provides details on times, materials, activities, and scripting important points. It is the tool you will use to [sequence](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) strategies and [activities](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) throughout the day.

To start this process, make a list of potential strategies and activities for each of your objectives. The next step is to sequence and [scaffold](https://docs.google.com/document/d/1LNEyus-bvr11B9E7FSuAF8a_gVW_AbQx1mNHrbUE5xg/edit) the instruction. [Learn more about the Facilitator Agenda Template](https://docs.google.com/document/d/16V60T1etvWam5WzfJRzuLpxnJHtS0CdqQReX0moMYcA/edit).

**Sequencing refers to designing your PD event by introducing concepts and knowledge, and building on them throughout the PD event**. The event should move from conceptual knowledge to progressively more complex knowledge and skills. Many PLT activities use the Awareness, Knowledge, Challenge, Action model (AKCA) to lead students from awareness to knowledge, challenge and consensus, and finally to action. [Learn more about the AKCA model.](https://drive.google.com/open?id=11r04bLfcyymHKEKmGmjb-jujj5xoIcaw) The important piece to keep in mind when sequencing is to **change the pace about every 20 minutes** to support participants’ attention and engagement. Learn more on the [Designing a Teaching & Learning Sequence](https://www.youtube.com/watch?v=GPfgjKPZz_A) video.

* Awareness - Introduce PLT to participants.
* Knowledge - Build their content knowledge on focus concepts.
* Challenge - Engage them in experiences that challenge their thinking and application to real-life situations.
* Action - Provide them with time to make a plan for using PLT activities.

### Scaffolding is an instructional process related to the degree of support provided by the facilitator to the participant throughout the PD event. The support is temporary and adjustable. As the participant masters the information, the facilitator gradually removes support. Consider a six-hour PLT PD event. Early in the day, the facilitator leads PLT activities and engages participants in exploring the guide and making connections to academic standards. At the end of the event, participants make a plan to use the materials with their students with less direction by the facilitator. By the end of a multi-day PD event, participants may be choosing and leading activities. Learn more about scaffolding, [Teaching Matters: Scaffolding Video.](https://www.youtube.com/watch?v=9gNjGD_W3dM)

As you start to build your facilitator agenda, you will determine activities, strategies, and methods to use for the PD event and fill in the details for each. The facilitator agenda provides extensive details about each item, whereas the agenda you provide to participants is a more general outline of the schedule. Every PD event should include the following components:

#### Get ready. It is important for your facilitator team to be well prepared with everything they need for the PD event and a plan for what they need to do when they arrive on site. It is helpful to include all of these details on your agenda. Being well prepared before you arrive will ensure that you get essential things done and that you are ready to welcome participants as they arrive. It reassures participants that the facilitator team is organized, professional, and respectful of their time. Plan the following elements in advance:

#### How and when during the PD event will participants complete the Participant Information Form? [The Participant Information Form](#kix.8zw0k675xujb) provides important information to the National PLT Program, and participants in PLT PD events are expected to complete it.

#### What PLT guides, literature, and local resources will you have available to the participants during PD event as part of your display?

#### What activities (if any) will you ask participants to do as part of the registration or while they are waiting for the event to begin?

Example:

|  |  |
| --- | --- |
| **Time: x:xx - x:xx (XX min.)**  Consider how much time you will need before participants arrive. Remember that some will arrive as much as 30 minutes before the session.  **Who:**  If there is more than one facilitator, consider assigning tasks in advance.  **Materials needed:**  This list should include everything needed in the session**.**   * 2 easels * Computer * Projector * Microphones * 2 chart pads * Pre-made charts * Markers * Participant Agenda * Handouts (list) * Activity supplies (list) | **Getting Ready**   * Set up the sign-in table with registration or check-in list, photo release, and name tags. * Make sample name tag and include pronoun option. * Arrange tables and chairs. * Put table numbers 1-5 on the respective tables. * Set up computers, projectors ,and sound equipment and test them. * Set up refreshment table. * Check the outdoor spaces for outdoor activities. * Check the indoor spaces in case of inclement weather. * Organize session materials. * Put participant supplies on tables. * Post session start-up charts (outcome, objectives, agenda, group agreements). * Set up learning stations. |
| **Time: x:xx - x:xx (XX min.)**  **Who:**  **Materials needed:**   * Registration sheet * Photo release forms * Name tags * Markers * Pens | **Registration**  Set-up: This should be completed prior to participant arrival.  Greet participants and guide them through the process.   * Check information on check-in or registration form. * Give them the Participant Information form (if not using the online form). * Have them complete the photo release form. * Have them make a name tag. |

#### 

#### PD event start-up. A strong start is important. It answers the questions “Why are we here?” and “How will I be involved?” You are setting the stage for learning and building engagement and anticipation for what will happen in the PD event. It is important to plan the following elements in advance:

##### **Gain the attention of participants (using a “hook” or “icebreaker” activity).** Starting with a PLT activity can be a great way to raise the energy level, set an expectation for an interactive session, and get participants’ ready for the learning process. An activity related to the topic of your PD event establishes the focus and prepares participants for what they will be doing. Consider having participants introduce themselves as they are engaged in the activity or immediately after. [Learn about PLT activities for gaining attention](https://drive.google.com/open?id=1z2p8up1TsD6kUJ86RI9n1rel82NrFaAX).

##### **Welcome and introductions.** Plan how you will have participants introduce themselves. They are coming together as learners and you will enhance the learning environment by creating a friendly atmosphere at the beginning of the event. You and your co-facilitator(s) should provide a brief welcome and introduction, establishing a pattern for how you would like participants to introduce themselves. Consider the number of participants you will have, the amount of time you will allot for introductions, and how you will manage the time. Be specific about what you want people to share and then model it. Introductions can take a long time if you have a large group or people who have a lot to say. Consider the following:

* Have participants write their name, organization or school, and five words about learning (or something else). Have them read it aloud.
* Have people introduce themselves just to the others at their table.
* Have participants stand and organize themselves by group (e.g., all those who teach third grade) and have each person in the group introduce themselves by name only.
* Have participants say their name each time they speak.

##### **Establish expectations.** No matter how clearly you have stated the purpose and timeframe in your event publicity, restate them when you begin the event. The following components let your participants know where they are going, how they will get there, and what protocols to follow for participating. People feel more comfortable if they know what to expect and when. A strong beginning will cover the following:

* + Outcome(s), objective(s), and participant agenda. Going over these components will reinforce that the learning will be applicable, let people know how they will be involved throughout the session, and lay out how the day will progress.
  + Group agreements. These keep the group focused, promote an open and respectful environment, and provide a safe space for sharing ideas and opinions. It is acceptable to create these in advance, but always leave space for participants to add additional agreements. Learn about [group agreements](https://docs.google.com/document/d/17K-rXK546iDoaEVuoFwRZ5KA2vd4HlUDZUtybm5Htuk/edit).
  + Parking lot (or “bike rack”). This is simply a chart where both you and the participants can post questions or comments to address at a different time or near the end of the PD event.
  + Group records. This refers to any process you are implementing throughout the session. For example, you might have a vocabulary “word wall” where terminology used throughout the PD event is posted, or a chart where you will record academic standards addressed throughout the PD event.

#### In addition to including a segment in your agenda for reviewing these expectations, you will want to post them on charts so you and participants can refer to them during the entire PD event.

Example of session start-up:

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| --- | --- |
| **Objective #2:**  Explore the interrelationship between living organisms    **Time: x:xx - x:xx (XX min.)**  **Who:** [facilitator]  **Materials needed:**   * 30 habitat cards with long loops of cord/yarn (various plants and animals that live in one habitat such as oak savannah or Douglas Fir forest) * Printed instructions * Chart listing instructions     **Facilitator Notes:**    **\*Strategies(S) and \*Methods(M)**  Modeling(S)  *Instructions and debriefing activities(M)*  Debriefing(S)  OFIS Questioning with Discussion  \**These will be explained later in this chapter.* | **Who Am I? (Hook/Icebreaker Activity)**  Set-up:   1. Use laminated habitat cards, each of which lists a different species in a given habitat (for example, oak savannah or Douglas Fir). 2. Stick a card on each person’s back without letting the person see the card beforehand.   Who Am I? Activity Instructions (15 min.)  Facilitator: You have a label on your back with the name of a living organism. It is your job to find out who you are—*without looking at the label on your back!* You will do this by asking other participants closed questions (those in which the answer is only yes, no, or I don’t know).  If the person you ask does not know the answer to your question, they can look at the information on the back of the card.  Procedure:   1. Don’t tell anyone else what is on their back. 2. You will have until 10 to complete this activity. 3. Move around the room asking other participants questions that will help you determine what type of forest user you are. Please introduce yourselves to one another as you do this. 4. You may only ask/answer questions that can be answered with a yes, no, or I don’t know. 5. Introduce yourself and then ask your question. You may only ask one question per person until you have asked everyone a question. 6. When you have figured out what is on your tag, take it off and put it on your front and continue to answer questions from other participants.   **\***Debrief:  **Open Question**: What happened as you tried to find out what your living organism was?  **Focus Question(s)**: What questions helped you to discover your organism? What things confused you either as a listener or a questioner?  **Interpretive Question(s)**: In what ways could you use this activity in your classroom? What concepts could this activity lead into?  **Summary Question**: What is the value of an activity like this in engaging your learners?  *\*Transition: Today you will participate in activities and strategies that will help you engage your students in field investigations. Let’s look at how the day will progress and what we will accomplish.* |

|  |  |
| --- | --- |
| **Time: x:xx - x:xx (XX min.)**  **Who:** [facilitator]  **Materials:**   * Credit information and forms   Charts:   * Outcome * Objective * Agenda * Group Agreements * Parking Lot * Group Records | **Welcome and Introductions**  Welcome:   * Welcome participants to the session by stating something you are excited about for the day. * Honoring of Tribal Lands * Introductions of facilitators, participants, and guests   Introduction Instructions   * On the paper in the center of each table, each person is to write their name, their organization or school, and three adjectives about forests. * Be prepared to share   Facilitators introduce themselves, modeling the introduction.  Review the Day:   * Review the objectives and the intended outcome(s) of the objectives. * Ask if anyone has any questions or clarifications. * Review Agenda.   + Session is hands-on and interactive   + We will be working in small groups, large groups, and individually throughout the day.   + Point out field sessions, guest speakers, etc.   + If anyone needs a special accommodation to participate in an activity, invite them to ask a facilitator for help..   + Start and end on time. * Review the posted group agreements and ask for additional agreements from the group. * Explain the parking lot and any session records you will be posting.   Administrivia:   * Personal care logistics: location of bathrooms, exits, refreshments * Credit registration |

#### Establish context. Establishing the credibility, value, and relevancy of PLT provides a framework for the session. Building this context will increase the likelihood that participants will not only remember but also be able to apply the strategies, concepts, and skills they learn in the PD event. The following topics provide context and relevance for the participants. Place the background segment early in the PD event to build awareness about PLT and its benefits.

##### **Background on PLT and environmental education (EE).** This information can be found in [Chapter I. Welcome and Introduction](https://drive.google.com/open?id=1TyGm48dqepXe53HGwpBAa1LJ558h3i4kgophNxHxsdM) of this Facilitator Handbook. You will want to focus on the points that are most important to your participants and provide enough background to establish that PLT exemplifies high-quality environmental education. Consider including the following:

* Definition of EE
* PLT’s connection to EE
* Brief history of PLT
* How the PLT guides are developed and evaluated
* PLT’s reach in the United States and other countries
* PLT's national network and partners
* Awards PLT has received
* PLT’s history and sponsors in your state
* PLT’s offerings and supporting materials

##### **Hike Through the Guide.** Plan how you will help participants become familiar with the contents and layout of the activity guide(s). There are many ways to conduct a hike through the guide. You may choose to use a scavenger hunt type handout. Or, you might prefer to lead the whole group through the guide, pointing out important elements along the way. Schedule a hike through the guide early in the day so that participants are familiar with the comprehensive components that make PLT a high-quality resource. Learn about [PLT’s Hike Through the Guide activities.](https://drive.google.com/drive/folders/1Co7EpaM0zxFVpsvb_aLk7NMIcT7DuCeO)

##### **Alignment of PLT to academic standards**. It is essential for PD events that engage educators to include information on PLT’s alignment to academic standards. You do not need to be an expert, but you will want to be familiar with the national and state academic standards that are relevant to your state and your participants. The [alignments to standards](https://coordinators.plt.org/curriculum/correlations-to-standards/) are available on the PLT website. The following are some ways to engage participants in learning about the alignment of PLT activities to standards.

* Introduce a framework for tracking standards within the PD event. Post a chart with a list of activities in the left column. Across the top row, list skills/knowledge and subject standards. You can pre-fill some of them, but leave room for your participants to add more after each activity. Provide a handout of the framework for participants to track individually.
* As you introduce PLT and again in the planning segment of your PD event, show participants where to find the alignments on the PLT website.
* List the scheduled PLT activities on the general agenda and leave space to identify standards as the day progresses.

Example of establishing context:

|  |  |
| --- | --- |
| **Objective #6**  Investigate the value of PLT for your educational setting.  **Time: x:xx - x:xx (XX min.)**  **Who:** [facilitator]  **Materials needed:**   * Projector * Computer * Access to wireless network   **Other notes;**  As a backup in case your access to the network fails, take screenshots of key web pages and save them on your computer. | **PLT Background**  Set-up  Projector and computer (queue PLT website: plt.org)  Show PLT website  Key Points to Cover  PLT and Environmental Education   * Began in the 1970s with the environmental movement. Environmental education, also known as EE, is a process that increases the learner’s awareness and knowledge about the environment and related issues. It allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. * EE does not advocate a particular viewpoint or course of action, nor does PLT. * Since its inception in 1976, PLT has been recognized as a leader in environmental education. PLT’s programming, curriculum, and resources promote critical thinking, problem-solving, and effective decision-making skills. * PLT curricula are aligned to academic standards and their website provides additional resources, support, and opportunities for additional professional development. * PLT is an initiative of the Sustainable Forestry Initiative (SFI) that collaborates on forest-based conservation, research, and community initiatives that enhance our quality of life and demonstrate the life-sustaining value of forests. SFI connects youth to forests through education by fostering an appreciation and understanding of the natural world. * PLT is a robust organization committed to reaching high standards of excellence in curricula, resources, and the professional development of educators. * PLT is committed to teaching young people “HOW to think, not WHAT to think” and using trees and forests as windows on the world to increase students’ understanding of the environment and actions they can take to conserve it. * PLT is available in all 50 states, the District of Columbia; several U.S. territories; and five other countries. The PLT curriculum has been translated into seven languages. |
| **Objective #6:**  Investigate the value of PLT for your educational setting.  **Time: x:xx - x:xx (XX min.)**  **Who:** [facilitator]  **Materials needed:**   * Projector * Computer * # PLT PreK-8 guides * [Hike through the Guide Handout](https://docs.google.com/document/d/1hnKiIhdkOQiAwoaWzLUQuT2fMsC_io2gX3T5I77bwLs/edit)   **Charts:**   * Chart or PPT with Instructions * Chart with assignments * 1’s - Questions 1-3 * 2’s - Questions 4-6 * 3’s - Questions 7-9 * 4’s - Questions 10-12 * 5’s - Questions 13-15   **Other notes:**  As a backup in case your access to the network fails, take screenshots of key web pages and save them on your computer. | **Hike Through the Guide**  Set- up  PLT PreK-8 Guide. Show as you discuss points.  Handout PLT PreK-8 Guide. Direct participants to examples in the book as you discuss key points.  Introduction to the strength of curricula (9 min.)  PLT materials reflect the National Standards of Excellence for Environmental Education Materials.   1. Fair and accurate representation of content 2. Depth 3. Emphasis on skills building 4. Action orientation 5. Instructional soundness 6. Usability   Hike Through the Guide Activity (total time 30 min.)  Set-up: Arrange participants into groups of five. If possible, put them into grade-level groups or grade-band groups.  ***Instructions - Display or post (20 min.)***   * + In your small groups, count off by 5.   + Explore PLT guide to find answers to assigned questions. (facilitator refers to the chart with assigned questions)   + When you finish, share what you found with the rest of your small group. Be prepared to show them where you found the information in the PLT guide.   ***Share out*** (10 min.)   * + Share what you found with the rest of the small group. You have about two min./person to share answers.   Debrief   * What do you want to explore a bit further? * What did you find most useful? * What did you find that you would use in your classroom?   *Transition:**One of the strong points of these guides that you observed while exploring them, and that we mentioned earlier, is that they build skills across the curriculum. Let’s look at how these activities can actually meet standards in several subject areas.* |
| **Objective #4**  Identify academic standards related to the PLT activities that can be used with field sessions.    **Time: x:xx - x:xx ((XX min.)**  **Who:** [facilitator]  **Materials needed:**   * # PLT PreK-8 guides   Charts:   * Activity Standards Chart (See example chart in the example agenda with reference materials.)   **Other notes:**  **Facilitator Note:** Not looking for specific standard numbers or exact standard language. | **What about Standards?**  Set-up:Post standards alignment chart with activities listed and some standards identified and recorded on the chart.  Introduction:   * PLT activities are aligned to academic standards. * During this segment, we will identify academic standards that we are addressing using a chart. * This morning, we did the XXXX. * Review standards on the chart. * Ask participants if they know of other academic standards addressed by the activity.   Large Group Activity Instructions:   * Go to the PLT activity XXXX**.** * Review the entire lesson. * Share with your group additional standards addressed in the activity. * Post additional standards on the chart.   Debrief   * What Common Core and/or Science standards are addressed? * What is comparable in this activity? * How can standards support the classroom and outside learning? |

#### Select activities. Throughout your PD event, you will engage your participants in a variety of activities that will help them develop the knowledge and skills to fulfill the established outcome(s). PLT activities, field sessions, learning stations, and presentations by guest speakers are activities that support participant learning. The activities you choose will depend on the outcome of your PD event, your intended audience, the topic or theme of the PD event, and the amount of time you have. For example, if you know that your intended audience has a special area of interest, your facilitator team should select activities to meet their needs. If the session focuses on a particular theme, grade level, or set of academic standards, the facilitator team should choose activities that tie to that theme. Select activities that involve a variety of learning strategies, such as creative writing, simulation activities, drawing, outdoor investigations, presentations, and applied mathematics.

##### **PLT activities.** Give participants an opportunity to participate in a variety of activities, some that include physical movement and some that don’t. By providing variety, you give participants a nice sampling of the activities in the guides and create a more enjoyable and well-rounded session. Also include a mix of indoor and outdoor activities, weather permitting. That way, educators can see firsthand how flexible PLT is and get a chance to enjoy the outdoors.

In general, plan to include activities relevant to your intended audience that *you* find engaging—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 firsthand how the activity works; you may develop interesting extensions or variations on the activity or locate valuable resource materials that you can share; and you can bring in student work to demonstrate the activity’s effectiveness. That said, don’t be afraid to reach beyond the PLT activities you know and discover new ones.

Feel free to modify any of the PLT activities with your own ideas and adaptations. Through your variations, you will be emphasizing an important concept: PLT activities are usable as written, and they can also serve as points of departure for new explorations. Clearly convey this flexibility during your presentations.

Activities can also be participant-led, which is a great way to scaffold participant learning. After two or more activities have been led and modeled by the facilitator(s), participants can work in groups to lead a PLT activity. This works particularly well when the PD event spans an entire day or is blocked into two days. [See an example of a participant-led activity](https://drive.google.com/open?id=1rLaLHdJeZV_FBHGZJBi7Ku4dzTj48WVp).

##### **Presenters/Speakers.** Providing a guest speaker to address the content of your PD event provides interest and depth, especially if the person complements your own expertise. For example, natural resource professionals may choose speakers with expertise in forestry, wildlife, air quality, or watersheds. In addition to doing classroom presentations, you might ask them to assist with an activity, lend technical assistance in hands-on activities, or assist with a field session. If you are doing a field session that requires specific materials or equipment, the presenter may be able to supply it. If you are a nonformal educator or natural resource professional, you might want to invite a formal educator who can speak to academic standards, provide tips to incorporating PLT activities into their curriculum, and so on.

Once you have identified a professional to invite and they have accepted the invitation:

* Clarify your expectations for their involvement in the PD event.
* Send them a copy of the confirmation letter, the PD event outcomes, the objectives, and the agenda.
* Provide a specific time for their presentation and key points you would like them to cover.
* Inquire what equipment and materials they need.
* If they are familiar with the PLT guide, ask them to share one or two of their favorite activities with the group.
* Check in again five to seven days in advance of the PD event to confirm the presentation content and materials and equipment needs.

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##### **Field sessions.** Some PD event themes and activities lend themselves to being outside, either at the PD event venue or off-site. Taking participants to a site where they can observe and experience the concepts covered in your PD event can extend and deepen participant learning. However, it can limit the audience you reach, especially if you are not able to provide transportation. Plan to actively engage your participants while they are in the field session. Many PLT activities are well suited to field sessions.

Before scheduling a field session, ask whether it:

* Directly supports the PD event outcome and objectives?
* Provides value to the PD event?
* Fits within the PD timeframe?

As you are planning for the field session, determine:

* What are the requirements and expectations of the field site land owner?
* Does the facilitator team have time to plan the session?
* How will participants get to and from the site? (Remember to provide maps if participants are driving themselves.)
* How much travel time will you need? (Remember to consider the time it will take participants to get ready to go.)
* What facilities are at the site? (Restrooms, covered space, trails?)
* What will you do in the event of inclement weather?
* How will you engage participants? What activities will you do?
* Will you have a natural resource expert or formal educator join you?
* What are safety considerations?
* Will participants need any special clothing or equipment?
* Do you need to add anything to your safety kit?

##### **Learning stations.** Learning stations provide an opportunity for participants to check out more activities that are not facilitator-led. At a learning station, you display the objectives of the activity, any necessary props, and any student pages. If you happen to have done the activity, you can share photographs or completed student pages as well. This is a great time to share literature and local resources that augment specific activities.

### Incorporate PLT PD strategies and methods. PLT has identified five strategies that reflect best practices in professional development. These strategies should be incorporated throughout your PD event using a variety of methods (ways to implement the strategy). The strategies are often used together. For example, you will model PLT activities throughout the session. The activity modeling may include providing content knowledge, and as you debrief the activity you may include reflection with a specific method such as journaling. It is important to consider these strategies as you design your agenda. Learn about[strategies and methods by PLT PD outcome](https://drive.google.com/open?id=1MgRkQMQFwrD_gCiCYFXyLacA75-Xow61).

##### **Building content knowledge.** Content knowledge refers to facts, concepts, and information needed to accomplish the PD event outcomes and objectives. Content knowledge uses the learner’s existing knowledge and bridges it with new knowledge and concepts. It is easier for learners to store information in their long-term memory when new knowledge is linked to existing knowledge or experience. Building content knowledge includes the development of topic-specific content and pedagogical knowledge. Examples of methods for building content knowledge:

* Presentations
* Video
* Peer-to-peer reading and sharing 

##### **Reflection.** Reflection provides learners with an opportunity to consider what they learned and how it applies to their lives. It helps them make meaning of their experiences. This takes place when those experiences can be reviewed and analyzed retrospectively. Reflection should be embedded throughout the PD event as well as at the end. Examples of reflective methods:

* Journaling
* Thinking quietly, pairing with partner(s), sharing
* Diagramming

***Modeling*.** Modeling provides an opportunity for learners to observe and evaluate a new concept or skill. Every aspect of the PD event you conduct is an opportunity to model exemplary practices, including creating a safe and inclusive environment and using a variety of activities, strategies, and methods. Deconstructing a PLT activity while you are modeling it opens the door for participants to evaluate the benefits or challenges of the activity and allows them to consider and share how they would conduct a similar activity with their students. Examples of modeling methods:

* Deconstructing activities with participants
* Thinking out loud
* Peer teaching

##### **Debriefing.** Debriefing is used to make explicit connections among content, activities, and/or experiences for the participants. It is a process that utilizes higher order thinking skills (analyzing, evaluating, creating), encourages critical thinking skills (interpretation, explanation, inference), and makes connections from the present experience to prior knowledge. It is often paired with reflection. The intention of debriefing is to engage participants in examining and analyzing the activity and make connections to their experiences and learning. During a PD event, you will debrief the actual content of the activity as it relates to the participants and also debrief the activity for its application with youth. Learn more about [debriefing](https://docs.google.com/document/d/1mCcvut1EMQEHLJomyojudFs9Y2Ph2gsgI1oPAgsGur0/edit#heading=h.liggi4jhn8ca). Examples of debriefing methods:

* Asking open-ended questions
* Engaging in discussion and dialogue
* Diagramming what you just learned

##### **Planning.** During planning, participants prepare lessons and instructional strategies for use in their educational setting. Providing time for planning increases the chance that participants will apply what they have learned and use the PLT activities with their students. Planning should be embedded throughout the PD event, even if you have to shorten something else, as well as occurring at the end. Don’t offer it only at the end when participants are mentally drained and ready to leave. Once your participants have become familiar with PLT and an activity, they need time to directly connect these new materials to their educational goals and the needs of their students. This is a great time to introduce additional PLT resources and local resources. After experiencing PLT throughout the day and discussing its applications to their educational setting, participants will be ready to examine additional resources and build them into their implementation plan. Learn about [lesson planning worksheets](https://drive.google.com/open?id=1skjJraMF9KmbdVr9QcBoJfUaGF8EFpAT). Examples of planning methods:

##### Having a brainstorming session

##### Making an implementation plan (ask participants to bring lesson planning books to the PD event or create a plan for another participant)

##### Engaging in peer-to-peer sharing and feedback

Example of activities, strategies, and methods:

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| --- | --- |
| **Objectives #2 and #3:**  Explore the interrelationship between living organisms.  Discuss how PLT activities can be used with a field session.  **Time: x:xx - x:xx (XX min.)**  **Who:** [facilitator]  **Materials:**   * Outdoor box * Tarp * Bell * Flags * Scarves (one per group) * Bags * Pencils * Paper * Magnifying glasses * Drawing paper * Pens * Crayons or colored markers   **Handouts:**   * Student page from PLT guide   **Charts:**  **Strategies and Methods**  Content Knowledge (S)  Presentation and exploring the PLT guide (M)  Modeling (S)  Outdoor safety, procedures  Debriefing (S)  OFIS Questioning with Discussion  **Facilitator Note:** Not using digital or video recordings | **Schoolyard Safari** (40 min) (PLT #46 - page 197)  Introduction (10 min.)  Exploring habitats and the interrelationship of organisms can happen right outside your classroom. Taking students outside and engaging them in hands-on explorations, investigations, and actions provides a real-world application of classroom lessons. Using activities like the ones we engaged in this morning can prepare students for their time outside, ensure that all students have the same background information before going outside, and reinforce focus concepts and knowledge.  The field investigation today will focus on observation skills.  Before we go outside, it is important to:   * Describe the site we will be using and its boundaries. * Explain that we will be working in teams and each team will have a unique identifier. * Share signals to be used, including nonverbal and sound. * Review your task as a team to ensure that you have everything you need.   When we are outside:   * When teams gather outside, explain the purpose of the tarp and go over the sound signal for coming back to the tarp. * Give each team their colored scarf and go over the scarf signal, which will indicate to the facilitator that their team is in need of assistance. * Ask each team to identify a timekeeper. Have the timekeeper record the time the team is to return to the tarp on their clipboard before the team goes out on their schoolyard safari.   [Do Schoolyard Safari] - Give groups about 20 minutes and then gather them back with the predetermined sound signal.  Debrief:  **Open Question**: What did you find or observe doing this activity?  **Focus Question:** How can this activity be used to augment a field session?  **Interpretive Questions:** Why are observation skills important? How does observing an item differ from reading about the item? Why is it important to observe using different techniques?  **Summary Question**: How does learning about our ecosystems impact our lives? Our community?  *Transition: As we go inside, let's continue to practice our observation skills by taking a closer look along our path.* |
| **Objective #5**  **Time:** 2:35 – 3:30  **Who:** [facilitator]  **Materials:**  PLT and local resources such as  other guides, children’s literature,  local content information, etc.  **Handouts:**  Lesson/unit planning sheet  **Charts:**  Instructions for group  List of supplies needed for group    **Strategies and Methods**  Modeling (S)  Peer-to-Peer Lesson development  **Planning**  Creation of a lesson unit  **Facilitator Note:** Participants do not need to give you the standard number or exact wording. The goal is to have them think together about how this activity meets the knowledge and skills they are trying to develop in their students. | **Participant Planning Session**  **Set-Up:** During break, put grade-level tents on each table. When participants finish break, have them sit in grade-level groups. If they span more than one grade, have them choose one.  **Introduction**:  You will have about 30 minutes to build a lesson unit that you can use with your students. You are developing an individual plan but are sitting in grade-level groups so you can share and assist one another. It is ok if you create the same lesson unit.  Earlier today, we reviewed the benefits of PLT and had a chance to examine the K-8 guide. Before we begin planning, let’s look at a few more resources that will support your teaching and add depth to your instruction.   * PLT online resources and training * Additional PLT curricula * *The Branch* newsletter * Local resources   Some of these materials are located on the resource table for you to explore as you are developing your plan.  As you explore possible activities in the PLT guide, use the post-its in the center of your table to mark the pages.  At 3:15, you will post your unit plan on the wall to share with others.  **Sharing**  Instruct participants to take their PLT guides and post-its as they review the lesson units posted. As they see ideas they like, they can make a note (or take a photo). |

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#### PD event closure. Bringing your PD event to closure is important. You want to reinforce what was learned throughout the PD event, recognize the participants’ contribution, promote application of PLT with youth, and provide an opportunity for them to give feedback on the event. One of the trickiest parts of closure is to end strong. If the evaluation is left for the end, participants may leave as soon as they finish the evaluation. While it is often time-efficient to let participants leave at this point, it does not make for a very memorable ending. The session closure is made up of four components.

##### **Review and reflection.** At the beginning of the PD event, you shared the objectives for the day. Now is the time to review those objectives and reflect on what was learned. Choose a reflection activity that allows participants to consider what they experienced in the PD event and what they want to take away.

* + Think-pair-share: Post a question and have participants think about it, pair with another participant, and share their thoughts.
  + Participants write a postcard to themselves making a commitment related to how they will use the PD event learning.

***Evaluation*.** Plan time for each participant to complete a PLT Evaluation Form at the end of the PD event. As you build this into your agenda, consider how you will allow adequate time for thoughtful responses. Consider including time for verbal feedback and suggestions for improving future PD events. Doing this before you have participants fill out the written evaluation often creates some energy at the end of the PD event and provides substantive comments on the written or online PLT Evaluation Form. During the event wrap-up, participants must complete this (or a similar) form. Ask your PLT State Coordinator for the form they would like you to use and return the completed forms to the PLT State Coordinator as soon after the PD event as possible. [Sample PLT Evaluation Form](https://docs.google.com/document/d/1OWjWjisbaHbViuWgH7RDfLoZgGFDNrstuOo8dij36ys/edit)

##### **Certificates.** Once participants have turned in their forms, you may want to give them a certificate of completion. This is an opportunity to make another important connection with your participants. Handing certificates out to each person with a sincere thank you for attending can leave a lasting impression. Ask your PLT State Coordinator if they have a certificate template they would like you to use. [Sample PLT Certificate](https://docs.google.com/document/d/1eN3ZHZOMKV3WTtCOCxrPCK-U826ei4xcANHHDsbapQI/edit)

##### **Closing remarks.** Thank participants for coming and encourage them to contact you or the PLT State Coordinator if they have questions. Formal educators have a particular need to receive ongoing support and mentoring. In addition, by checking off the appropriate box on the evaluation form, educators can stay in touch with PLT by receiving The Branch, PLT’s online newsletter. The Branch provides information on PLT’s new curriculum projects, educator tips, EE resources, and more.

Example: PD event closure:

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| **Objective #5:**  Investigate the value of PLT for your educational setting.  **Time: x:xx - x:xx (XX min.)**  **Who:** [facilitator]  **Materials:**  **Handouts:**  **Charts:**  Outcomes and Objectives  **Strategies and Methods:**  Reflection  Think-pair-share  Sharing oOut loud | **PD Event Closure**  Review the posted parking and address anything listed.  Review the PD event outcome and objectives and ask participants to reflect on the following questions.   * What was most useful to you? * What are you still wondering?   Think-Pair-Share (8 min.)  Think about the questions. Write down your answers if you would like (3 min.).  Pair with someone near you (1 min.).  Share (2 min. each for a total of 4 min.).  Out Loud (5 min.)  Ask volunteers to share their answers to each of the questions.  Evaluations (10 min.)  Explain the importance of the PLT evaluations:   * They offer a chance for continued PLT improvement. * They are important to funders. * The comments are particularly helpful for facilitators – comments help them make adjustments and improvements in future PD events.   Pass out evaluations and ask people to remain after they finish.  Thank participants for their time and pass out certificates. (5 min.) |

#### Facilitation Team: Close Out the PD event. Don’t forget to schedule adequate time at the end of your session for you and your facilitator team to review the PD event details, gather participant feedback, and fill out the facilitator evaluation form.

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| **Time:** 4:00 – 4:30  **Who:** All facilitators | **Facilitator Team Close-out**   * Clean up session space. * Review evaluations. * Complete facilitator feedback form. * Provide feedback to one another. |

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| [**Example of a completed outcome-based PD agenda**](https://docs.google.com/document/d/1OOOfh1mdLWpYy616VX3HwpNsUYc2c0pY/edit) |

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| **Tips for Completing a PLT Outcome-based Facilitator Agenda**  * List and number the objectives at the top of your agenda. In the left column of each agenda segment, place the number of the relevant objective. If you cannot match an activity you are doing with an objective, either you are missing an objective or the activity will not help you meet the intended outcome. |

### Solicit Review and Feedback on Agenda

Once the facilitator team has drafted an agenda, consider having a colleague review the agenda and provide feedback. Some PLT State Coordinators also like to review and provide feedback on the agenda, so make sure to ask your PLT State Coordinator before finalizing it. Soliciting a review and feedback benefits both the reviewer and the facilitator team. It is a reciprocal learning process, providing the reviewing facilitator with an opportunity to learn from your work and contribute their own thoughts and ideas. The review and feedback also ensures that the facilitator team has not missed anything and provides an opportunity to strengthen the PD event through a fresh perspective. Consider asking for the following types of feedback:

* Could the reviewer use the agenda to lead the event in the absence of the facilitator team? If not, what is missing? The agenda should have enough detail that another facilitator could lead the event successfully in your absence.
* Are the outcomes and objectives specific, measurable, attainable, relevant, and time-specific?
* Are there any missing objectives?
* Do the methods, strategies, and activities support the objectives?
* Do the methods and activities engage participants in multiple ways of learning?
* Are the methods and activities sequenced to build knowledge and increases in complexity and depth?
* Is adequate time allowed for each segment of the agenda?
* Are debriefing questions included in the agenda?
* Do transition statements connect content, learning, and agenda segments?

### Plan for PD Event Logistics

#### Inclusive environment: As you design and develop your PD event consider and include strategies and methods that value and support all learners.

#### Facility. Once you have finalized your agenda, consider whether your site will still meet your PD event needs. If at all possible, visit the site.

#### Is there enough indoor and outdoor space?

* Will all participants be able to see, move about the room, and participate in all aspects of the PD event?

#### Does it support the types of equipment and technology you will be using?

#### Is it ADA-compliant?

#### Can you set up early?

#### Is there adequate time to close out the PD event and pack up after the session?

* Is there an available and reliable wireless network? Does it have the capacity for the number of participants who will be accessing it?
* Is there a projector and screen?
* Is the equipment compatible? (e.g., does your computer work with the projector provided by the site?)

#### Materials, equipment, and technology. Well before the event date, review the materials and equipment you have listed on your facilitator agenda. Determine whether you have the needed equipment and support for managing the equipment. Make arrangements for bringing any equipment that is not provided.

#### Make sure to communicate with your PLT State Coordinator well in advance of the PD event date. Determine how much advance notice they need to ensure that you receive the following materials on time.

* **The Participant Information Form** provides important information to the National PLT Program and should be completed by each participant attending a PLT PD event. Completing the participant information form online is the preferred and most accurate way. When it is an option and internet is available, you should ask participants to complete the form at the beginning of the event. However, if this is not an option due to the timing and the location of the event, you may use an electronic fillable PDF or print out copies of the form and have participants use pens or pencils. [View the Participant Information Form online.](https://drive.google.com/open?id=14kL0r6KoDx5RYZvhtcL-BpIEzh30tBLg)

For more details, [view How to Complete the Online Participant Information F](https://drive.google.com/open?id=1cenBTf4tVDAoJYL0gs_9v3hOaGJ70AHd)orm. (Pro Tip: Have participants share a screenshot of their confirmation page during the event as proof that they completed it. In exchange, participants will then receive their certificate.) Please contact your PLT State Coordinator for forms in Spanish.

* The **Facilitator Cover Sheet** is used to provide details on the PLT PD event to the National and State PLT programs and to provide feedback on the event from the facilitators’ perspective. [View the Facilitator Cover Sheet](https://drive.google.com/open?id=1qNqVu3h9KzYKATbhlbVh6fB33FkpEgsC).
* A **Certificate of Completion** is provided to participants who attend your PLT PD event. Some educators can use the certificate as proof of the hours they have spent on professional development in order to gain professional advancement. [PLT Certificate](https://docs.google.com/document/d/1Z97uyIXqYUleKurAvM43Xc1I2nOc3AkKevgd7m6ebG8/edit).
* The **PLT Professional Development Evaluation Form** should also be completed by each participant at the end of the PLT PD event. [PLT “Professional Development Evaluation” form](https://docs.google.com/document/d/1OWjWjisbaHbViuWgH7RDfLoZgGFDNrstuOo8dij36ys/edit).

#### PLT activity guides are ordered once a year by the PLT State Coordinator. In order to ensure that guides will be available for the PLT PD event you will conduct, communicate with your coordinator before you begin planning and discuss the options for receiving your guides.

* **Other supplementary materials** may be available to support the topic or theme of the PLT PD event you will conduct.

In addition to the materials from the PLT State Coordinator, you will want to bring supplies, handouts, and props for specific activities you are planning. If you conduct PD events often, you may wish to keep a facilitator supply box. Learn about the [sample facilitator supply list.](https://docs.google.com/document/d/1bd8N_XN0PD-tfbD-jdnCOtfgaK9vrPXOeGqfmTcamtY/edit)

#### Safety. Medical emergencies may occur at any time. As a PLT facilitator, you will want to plan in advance for the safety of your participants. To be prepared, consider the following:

* Bring a first-aid kit or check to see that one is available on site.
* Visit the site in advance to be familiar with exits, hazards, and sources of water.
* Ask about any emergency procedures or special details on location that you might need if you have to communicate with emergency personnel.
* Know the emergency numbers for the area.
* If you are doing a remote field session or a multi-day PD event, consider having a list of participant medical emergency information.
* Consider the physical safety of your participants. Encourage them to participate in activities within their physical capabilities and “comfort zone.”
* Check the weather for any possible severe weather advisories that may be predicted for the day of the PD event.

#### Refreshments. Snacks and beverages will help participants feel comfortable and welcome. If you or the sponsoring organization will provide refreshments, be sure to include a choice of beverages and food to accommodate different dietary requirements. Also find out whether the PD event 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 PD event is an all-day event, determine how lunch will be handled. Will the participants bring lunch or go out for lunch, or will lunch be provided? Consider and allow adequate time in your agenda for the lunch break. If there are restaurants nearby, you will need to allow enough time for participants to get there and back. (It is helpful to provide a list of nearby restaurants with directions and menus.) If there are no restaurants nearby, ask participants to bring a bag lunch or consider providing a simple lunch. Remember, participants will need to know what to expect *ahead of time. You may consider including this information in the PD event detailed confirmation letter.*

### Send Detailed Confirmation to Participants and Presenter/Speakers

#### You can send a confirmation to your participants and speakers electronically or via mail. It should provide all the information they need to arrive on time and be prepared to participate comfortably. The following is a list of information to include.

#### Site location and characteristics. Provide the location of the PD event and a map; specific information about where the PD event will take place, such as building name and room number; and other characteristics of the site that might be useful to participants.

#### Event information. Provide all the details about the PD event so that participants come prepared, including the PD event title, date, beginning and ending time, registration and check-in time, cost and payment information, what to wear, what to bring, what will be provided, information on field sessions, credit, cancellation and no-show policy, and a statement on ADA accommodations. Do not forget to include a contact number that participants can use to reach you on the day of the PD event. You might also want to include a copy of the agenda and ask them to bring it with them.

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#### [Sample Confirmation Letter](https://drive.google.com/open?id=1_rZNc1j_wyRLn_B1MD_PMnC7_0mwLEul)

#### [Sample Confirmation Template](https://drive.google.com/open?id=1J9qad4OQTYeAviVeXKGmcaYx0ZSybGUC)

#### [Sample Participant Agenda](https://drive.google.com/open?id=1trsVq-icFsNCusEIdO4ccD1tXwvi5x9Y)

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## Delve Deeper: Supporting Articles and Research

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.y5dqtjokyxal)[*Expanded Details*](#kix.6vsoq62onx0)[*Forms*](https://drive.google.com/drive/folders/1imQ-AqnekS_-3ypik2UFS1t5qQBidejl)

Daehler, K.R., Wong, N., and Heller, J.I. (2015). Supporting Growth of Pedagogical Content Knowledge in Science. In A. Berry, P. Friedrichsen and J. Loughran (eds.), Re-examining Pedagogical Content Knowledge in Science Education (pp. 45–59). New York/London: Routledge Press.

Darling-Hammond, L., Hyler, M.E., and Gardner, M. (2017). Effective Teacher Professional Development (research brief). Palo Alto, CA: Learning Policy Institute.

# Driel, J., & Berry, A. (2012). Teacher Professional Development Focusing on Pedagogical Content Knowledge. Educational Researcher, 41: 26-28. 10.3102/0013189X11431010.

Hoffman-Kipp, P., Artiles, A., and López-Torres, L. (2003). Beyond Reflection: Teacher Learning as Praxis, Theory Into Practice, 42 (3): 248-254, DOI: [10.1207/s15430421tip4203\_12](https://doi.org/10.1207/s15430421tip4203_12)

Reflection is increasingly used as a means to support teacher professional development, and ultimately to support teachers' efforts to improve the persistent underachievement of minority students. In this article, we identify the limits of the traditional view of reflection, argue that reflection is an artifact and a practice embedded in a larger process, namely teacher learning, and outline basic notions of a cultural-historical vision of learning as praxis in which reflection is embedded. Further, we argue that a new vision of critical, situated reflection must include both technical and political content and be based on a dialogic approach.

Marvel, A. (2018). The Place of Reflection in PD. Retrieved December 29, 2019, from Edutopia.

Reflection is crucial in professional development, giving new teachers and veterans a means to deeply understand new practices.

Shulman, L. (1986). Those Who Understand: Knowledge Growth in Teaching. Educational Researcher, 15 (2): 4-14. American Educational Research Association. Retrieved from http://www.jstor.org/stable/1175860 on 12/30/2019

Lee Shulman is an educational psychologist who coined the term Pedagogical Content Knowledge. In this paper, he discusses different types of teacher knowledge ("content," "pedagogical content," and "strategic") and forms of knowledge ("propositional," "case," and "strategic").

Windsschitl, M. (2004). Rethinking the Continuum of Preparation and Professional Development for Secondary Science Educators. A paper commissioned by the National Academy of Sciences.

**Website Resources**

Culatta, R. (2020). Sequencing of Instruction. InstructionalDesign.org. <https://www.instructionaldesign.org/concepts/sequence-instruction/>

Iowa State University. Revised Blooms Taxonomy. <http://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/>

Kathirveloo, P., Puteh, M., and Matematik, S. (2014). Effective Teaching: Pedagogical Content Knowledge. Retrieved January 3, 2020, from <https://www.researchgate.net/publication/303940850_Effective_Teaching_Pedagogical_Content_Knowledge>

Pedagogical Content Knowledge (PCK) plays an important role in classroom instruction. In the teaching and learning process, a PCK involves teachers' competence in delivering the conceptual approach, relational understanding, and adaptive reasoning of the subject matter. The aim of this study is to explore the PCK of mathematics teachers in teaching fractions. Students are facing difficulties in the conceptual understanding of fractions due to teachers' ignorance and lack of PCK in teaching fractions. Evidence provided in this paper is based on past literature. Without a full grasp of PCK, teachers may not teach the subject effectively.

Learner Centered Teaching. 50 Ways to Assess Learning. <https://learnercenteredteaching.wordpress.com/teaching-resources/fifty-ways-to-assess-learning/>

Oregon Educator Network (OEN). Strategies. <https://www.oregonednet.org/strategies>

The OEN is a vehicle for educators who want to connect with others who are working on the same content, trying to develop solutions, or interested in finding and sharing resources. Anyone can access the resources on this site. The strategies listed on this site are what PLT has defined as methods.

University of Arkansas. Using Bloom’s Taxonomy to Write Effective Learning Objectives. <https://tips.uark.edu/using-blooms-taxonomy/>

**Becoming a PLT Facilitator**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Expanded Details*](#kix.7qbv32o11fek)[*Delve Deeper: Supporting Articles/Research*](#kix.dynqdecqir39)

## Quick Reference ChecklistElementary age student standing in a hollowed out tree

* [**Set-Up for the PD Event**](#_x949f8cz8u42)
  + [Check-in with facilitation team](#_hyiwu9hopao2)
  + [Location](#_teggkdim94gs)
  + [Meeting space and activity space](#_dwixc056utkt)
  + [Equipment, materials, charts, and supplies](#_l3ykf1k483p8)
  + [Welcoming environment](#_8f0sk1igk7cf)
* [**Get Started**](#_v7dqncbyavhx)
* [Agenda, outcomes, and objectives](https://docs.google.com/document/d/10-whj2ERkIu6DUnJEm8eDflGe_0YvbL7W6gBU1QT4Vo/edit#heading=h.70zvb2c7252o)
* [Group agreements and parking lot](#_i5n5cb7fvaef)
* [Logistical details and safety](#_gnq0h3kdut6y)
* [Expectations and prior knowledge](#_tnycu9vkcqe9)
* [**Facilitation: Maintaining Engagement, Focus, and Motivation**](#_bfrw3co2wfd7)
* [Timing, pace, and flexi](#_37comzwb3vjx)bility
* [Giving instructions](#_s1m5sw4bx3ro)
* [Transitions](#_8qr7wkhpckgw)
* [Facilitative skills for group interaction](#_x97z49ka2x53)
* [Working with visuals](#_qcgh0h66v086)
* [**Establish Connections and Application**](#_9tfq5nhbzjpc)
  + [PLT activities and resources](#_9tfq5nhbzjpc)
  + [Alignment of PLT activities to standards](#_9tfq5nhbzjpc) (national and state academic standards and nonformal standards)
  + [Lesson/application planning](#_6a6n8u9w9kym)
* [**Reflection and Closure (Participants and Facilitator)**](#_r7brrktxkkn8)

## Expanded Details

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.lyqbvk7ud9o)[*Delve Deeper: Supporting Articles/Research*](#kix.dynqdecqir39)

### 

### Set-up for PD Event

The work you put in to set up the room before the participants arrive shows professionalism and helps make a good impression and create a positive rapport with participants. A well-organized space and a facilitator team ready to greet participants demonstrate respect for their time and commitment.

Be sure to **allow yourself at least 60 to 90 minutes to set up** the PD event space. If possible, set up the night before. Remember, there are always a few people who arrive 20-30 minutes before the PD event and often want to help or to talk. By giving yourself 60-90 minutes or setting up the night before, you will be more at ease and able to greet your participants.

#### Check-in with your facilitator team. Include time for a facilitator team check-in before the event if possible. In the best-case scenario, you and your facilitator team will have met prior to the day of your PD event to go over all the details regarding responsibilities and expectations. The [co-facilitating handout](https://docs.google.com/document/d/1JMuM_MoojsnPfIm7aVoKllNR5DpInzZ-qeOHvndkROw/edit) can help you structure this discussion.

#### Location. Familiarize yourself with the PD event site. To be prepared, consider the following:

#### Medical and other emergencies may occur at any time. Know the PD event location address and the emergency numbers for the area. Plug important numbers, including contacts for site staff, into your phone.

#### Locate light and projection screen switches and plugs for audio-visual presentations.

#### Locate restrooms, space for activities, exits for accessing outdoor activities, hazards, sources of water, and a backup plan if you are out of cellphone range.

* Make sure to have water and shelter available at outdoor activity sites.

#### Meeting space and activity space. Set up tables and chairs for participants, a registration table, display items, presenter materials, and refreshments. Ensure that there is adequate room for participants with accessibility aids to move so that they can participate in activities and have good visibility. [Learn about room arrangements](https://docs.google.com/document/d/1rVTfrA64rchYvkHjegfJZrVixCjKvmohAiuQUqFnYwY/edit). Make sure that all the spaces you will be using are set up in advance. Identify locations suitable for each activity and ensure that you have allowed enough time for participants to move from one activity to the next.

#### Equipment, charts, materials, and supplies. Check all the equipment that will be used to ensure that it is working properly. Make sure the projector does not block the view of participants, check that microphones are set at the correct sound level to be heard throughout the room, and identify the best location to hang charts. Microphones should be used whenever possible to ensure that all participants can hear each other. Using a microphone takes the onus off participants to tell you they cannot hear.

* Make charts in advance when possible. [Learn about charts](https://docs.google.com/document/d/1IXCbjv5AC8FnPY4Ghqi2VYu5rba3N2vo1FE5ipZIhMs/edit).
* Arrange the materials and supplies that you will use during the PD event so that they will be easily accessible when you need them.
* Arrange supplies that participants will need during the event in an easily accessible place.
* Post the PD agenda, outcomes, objectives, and group agreements in an accessible location or have copies for each participant on the sign-in table. The posted charts are a tool for your facilitator team to refer to in order to remind the group of the topic at hand and what will come next.
* If you are providing beverages or snacks, set up a convenient—but separate—snack area.

#### Welcoming environment. The most important part of creating a welcoming and supportive environment is to be ready and available to greet participants as they arrive and register. Greet participants as they enter, introduce yourself, appear relaxed and positive, and call participants by name and preferred pronoun (name badges will help with this). Some participants may arrive 30 minutes before the start time. Have the registration table ready with the following:

* Welcome sign and instructions for checking in.
* Blank name tags for participants to fill in. Set out an example that includes name, pronouns, and school or agency.
* Check-in form (Participant Information Form) and photo release form.

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| **Tips for Setting Up the PD Event**  * Try it out! As you arrange the room, sit in chairs located in different areas of the room to ensure that everyone can see the facilitator, charts, and presentations. Move chairs out from under tables so they will be in the same places as when participants sit in them. Is there room to move around behind the chairs? * Early bird arrivals? No problem! Have a few self-learning stations, a display of the PLT curriculum, resources, or children’s literature. * Get a jump start on planning! Post a chart and instructions at the registration table. Have participants write the grade-level they teach and one standard or skill they are working on with their class. During the PD event, point out standards or skills you are addressing. When participants are planning lessons or units, refer them to this chart. |

### 

### Getting Started

As you begin the day, you are demonstrating respect for participants’ time and a commitment to their learning, as well as setting the expectations for their participation. Beginning your PD event on time, letting participants know what to expect, and establishing meaning and context for the day’s activities are all part of setting the stage for success. Your attitude establishes a high degree of interest and motivation from the moment the participants walk in the door. As you start your PD event, share your enthusiasm about the day you have planned, why you are a facilitator, and why you believe that PLT curriculum and resources are great. As you implement your “hook” or “icebreaker” activity, remember that the intent is to raise the energy in the room, get participants talking, and demonstrate the interactive nature of PLT.

* Share the outcome(s) so participants understand that there is an anticipated intended action following the PD event. The objectives and agenda should demonstrate that the PD event will provide the knowledge, skills, and resources they need to realize the outcome(s).
* The outcomes, objectives, and agenda show that the PD event has been well thought out and sequenced for learning. You will have developed these materials during the design and development of the PD event (Chapter V).
* As you review the agenda, let participants know how they will be involved (e.g., small groups, large groups, in pairs, and individually) and how each agenda item builds on the previous one. Reinforce that there will be an opportunity for planning in which they will think about how to implement PLT in their setting.

#### Group agreements and parking lot. Group agreements (otherwise known as ground rules or group norms) fulfill the same function as traffic rules do out on the highway. They establish expectations for the orderly, efficient, and safe progression of the PD event. Once you have reviewed or created these with participants, let them know that you will use these to hold the group accountable and to keep the group focused and on track. Let participants know that they can also use these as they work in small groups to keep their group on track. Learn about [sample group agreements](https://docs.google.com/document/d/17K-rXK546iDoaEVuoFwRZ5KA2vd4HlUDZUtybm5Htuk/edit).

#### Sometimes a topic or subject surfaces that does not quite fit with the topic you are discussing. At the start of the PD event, post a chart in the front of the meeting room labeled “Parking Lot” or “Bike Rack.” Explain that the chart is a place to “park” topics or ideas that are unrelated to the current conversation and that they will be dealt with later in the day, or in a follow-up e-mail. If you use this tool, you must take the important step of reviewing this list near the end of the PD event. That keeps the integrity of this particular process intact.

#### Logistical details and safety. Take a few minutes at the beginning of the PD event to review logistical details, including the location of restrooms, exits, and information about safety procedures.

#### Expectations and prior knowledge. Soliciting the participants’ expectations and prior knowledge will allow you to incorporate them into your PD event. As a facilitator, you can use this information to reinforce how content is meeting expectations. You can also use the information as a springboard for facilitating discussions and drawing on participant expertise. For example, if a participant shared that they knew about or had used PLT, you might solicit their experiences using the activities as you are sharing the PLT curriculum. If they indicated that they attended a PLT PD event five years ago, this is an opportunity for you to discuss the great changes that have taken place since then. If you have done your homework during the planning phase and have provided adequate information as you marketed the PD event, chances are the participants’ expectations will be in line with what you are planning to deliver.

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| **Tips for Getting Started**  * Post a picture of a tree. Have participants record their expectation(s) on post-its and place them on the crown of the tree poster as leaves. Ask participants to move their expectations (leaves) to the ground once they have been met. |

### Facilitation: Maintaining Engagement, Focus, and Motivation

You have designed and developed your PD event and gotten off to a great start. So what’s next? Facilitating! A facilitator is different than a leader. Although many leaders can (and should) be effective facilitators, leaders are often considered directors of learning, while facilitators guide learning. Facilitators encourage, promote, and support participants in the learning process. [Learn about facilitation](https://docs.google.com/document/d/12gsjZN6FBzZt1It-GZaCh_8TZb-nUxTa/edit).

Facilitation is an art and a science. The art is your personal style, and the science is the facilitative skills and behaviors that you can learn and practice.

#### Timing, pace, and flexibility. We constantly receive both verbal and nonverbal feedback from people. By paying attention to this feedback, we can flex and adjust our agenda, strategies, and activities to meet the needs of the participants. As facilitators, we do our best to assess our audience; choose the appropriate content, strategies, and activities; and allow enough time for each activity. However, sometimes the timing is off. As you are facilitating, monitor the progress of the group. Activities or tasks may be moving faster or more slowly than anticipated. It is up to you to assess the situation, diagnose the issue, and flex accordingly. Consider having some back-up activities, energizers, or self-learning stations to fill the time if things are going quickly. It’s tempting when time gets tight to reduce or eliminate the debrief and discussion time. Don’t do it! The debrief and discussion are critical to participants learning from one another and applying the information. Instead, consider in advance where you can cut an activity or reduce the amount of time the group spends on something. Having participants share within their table group or in other small groups allows group interaction and discussion to occur and can save time compared with a whole-group discussion.

Look for feedback in participants’ expressions and body language that may indicate confusion, boredom, anxiety, and so on. There are a number of reasons that people may be having these reactions: insufficient time for sharing, new complex content, or an unfamiliar process. Your job is to diagnose the situation and be prepared to flex. Remember to check in with your facilitator team.

Learn about [feedback indicators](https://docs.google.com/document/d/1Q_3lxnaMglZhfkRduKqboB3xTrGatO0J/edit).

#### Giving instructions. While this task sounds easy, it often causes confusion for participants. As a facilitator, you want to eliminate confusion so that participants stay focused on the learning elements of the PD event.

#### A rule of thumb is to put instructions for tasks or activities on a chart or a ppt slide and read the instructions as written. If you don’t, you run the risk of stating the instructions differently each time you repeat them, thus causing confusion. Leave the instructions posted and visible during the entire activity so that your participants can refer back to them.

#### Consider using some subtle but effective techniques for giving instructions and getting the groups’ attention:

* Don’t say: “Do it in 10 minutes.” Say, “Let’s take about 10 minutes…”
* Have a timer displayed so groups can see how much time is left.
* Give groups a three- to five-minute warning by going to each table and quietly letting them know how much time they have left.
* Rather than shouting “is everyone done?” check in with each group or individual to inquire how much more time they need.
* Give a warning: “Please wrap up; we will go on in a couple of minutes…” rather than saying abruptly, “OK, the next task is…”

These techniques give dignity to your participants’ learning and allow them to bring their work and thoughts to closure. Signaling a change by whistling, clapping, or making other loud noises brings an abrupt halt to the learning and can be abrasive.

#### Transitions. Transition statements act as learning connectors and extenders. They tie ideas, concepts, and content that has just been covered to what is coming next. It is helpful to write these into your agenda between each segment. See agenda samples in Chapter V for examples of transition statements.

#### Facilitative skills for group interaction. Throughout the PD event, you will be interacting with your participants in numerous ways. In [Chapter V, Developing Your PD Event: Design and Develop](https://drive.google.com/open?id=1xS1jK3Y5TLaPCb-jFnkf2-Et9fgvAjCkdu_sljjLm9Q), you identified the strategies and activities for your PD event, including key points to cover and questions to ask the participants. Whether you are leading a PLT activity, debriefing an activity, brainstorming ideas, or leading a discussion, you have an opportunity to enrich learning by using some simple facilitative skills. Learn [how to promote group interaction and involvement](https://docs.google.com/document/d/16LIzEGKKt-vwlTqxvxh3L8F8oaPJdeyF_JyzFoOm7hA/edit).

Just as some facilitative behaviors support participant interactions, others do not. It is helpful to review these before your PD event so you can practice changing negative behaviors you may exhibit. [Learn about facilitative behaviors that hinder or restrict participation](https://docs.google.com/document/d/1WHiWbgKWf2y7zTs8L39-_V54Y7CL7NSRMDL0BZkccdg/edit).

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#### Working with visuals. TMany different types of visuals can be used throughout your PD event. Consider when and how to use each of the following visuals.

##### **Charts**. These are tools to direct the group’s focus to where they are, where they’ve been, and where they are going - a group memory and a tool to build connections. Charts are **used for information that you want to stay visible and usable by the facilitator team and participants throughout the PD event**. They are a resource for facilitators and participants. Recording information during a PD event encourages participation, ensures that all ideas are respected and captured, minimizes repetition, and depersonalizes ideas. [Learn about charts](https://docs.google.com/document/d/1IXCbjv5AC8FnPY4Ghqi2VYu5rba3N2vo1FE5ipZIhMs/edit).

##### Charts can assist in:

##### Focusing or refocusing on the activity or task at hand

* Helping latecomers catch up
* Establishing a group record. Facilitators and participants can refer to and build off the information recorded.

##### **Handouts.** Make these in advance of the PD event to support the information you are delivering. A handout should contain complete and stand-alone information. Handouts are **useful references during the PD event and can serve after the event as a job-aid**.

##### 

##### **PowerPoint presentations.** PowerPoint is a good tool for presenting information that participants will not need to access throughout the PD event, such as instructions for activities or tasks. If you present content information by PowerPoint, it is helpful to give participants a note-taking copy or version before showing the presentation.

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| **Tips for Facilitation: Maintaining Engagement, Focus, and Motivation**  * If you do not know how long a segment will take, practice it in advance. * Have an additional PLT activity ready in case you have extra time. * Consider setting up 2-3 self-learning stations. When participants finish an assignment before the allotted time, ask them to check out one of the self-learning stations. * Do not use yellow, orange, red, or light colors to write on charts, as they are difficult to see from a distance. * It is okay to look at your detailed agenda while facilitating, but don’t read from it. Just pause, look at your notes, then go back to facilitating. * Ask a member of your facilitator team to give you feedback on your facilitative skills. Then pick one or two that you would like to improve. * Print the [*Hindering and Restricting Participation and Discussion*](https://docs.google.com/document/d/1WHiWbgKWf2y7zTs8L39-_V54Y7CL7NSRMDL0BZkccdg/edit)handout and ask a member of your facilitator team to help you identify any negative facilitator methods that you are using. * When sharing visuals, check to ensure that they can be seen from everywhere in the room. * Use a variety of visuals during the PD event (e.g., charts, slides, videos, handouts), and make sure to consider accessibility when selecting each visual. |

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### Establish Connections and Application

#### Establishing connections and applications to participants’ educational or work settings should happen throughout the PD event. While you have spent considerable time designing and developing your PD event to sequence participants’ learning, you can reinforce and model the sequencing by continually making connections to information you have already covered and information that you are moving toward.

#### PLT activities and resources. PD event planning includes selecting PLT activities and pre-determined debriefing questions related to participants’ learning and how they will apply the knowledge and skills. Watch for opportunities to make connections between the activities, participant discussions, and local resources. Involve your participants in making these connections and applications.

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#### For example:

#### “Jim, earlier in the day you mentioned that your students were struggling with graphing. How might this activity help your students?”

#### “The speaker today was talking about black-tailed deer populations in the Pacific Northwest. How could we use that information with the activity we just did?”

#### Alignment of PLT activities to national/state academic standards. While it is important to be familiar with national and state standards, especially those relevant to your PD event participants, you do not need to be an expert. However, you do need to know enough to provide direction and support to the participants.

“Jane mentioned this connection to the NGSS standards. Does anyone see a connection to math standards for the grade-level they teach?”

#### Lesson/application planning. Planning time is a critical element of the PD event. Educators are much more likely to put the PLT guides to use in their educational setting if they have adequate time during the PD event to make a plan of action. Your job is to support and help the educators through this planning process. You can assist them in finding resources, connect them to local natural resource professionals, lead them to relevant PLT activities, identify standards, or connect them with other educators at the PD event who have similar interests or needs.

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| **Tips for Establishing Connection and Applications**  * Provide access to state or national academic standards for educators to use during planning time. The standards can be digital or hard copies. Consider asking educators to bring their grade-level academic standards with them. * Provide sample lesson plans, unit plans, and/or planning templates, but remain flexible and allow participants to use their own formats. * Have participants share and post their plans for others to take photos. * If you are creating plans using computers, consider putting a template in Google Docs and encouraging participants to create and share their plans in the folder. |

### Reflection and Closure with Participants

While participant reflection is a reiterative process in the PD event, it is also a strong way to bring closure to your PD event. The culminating reflection activity you have planned acts as a review of the day but also an opportunity to reinforce the discussions and applications that came up during the activities. As you guide participants through the end of the PD event reflection activity, consider the following:

* Establish the purpose of the reflection and any guidelines for the reflection.
* Let participants know if their reflection will be shared and how.
* Decide whether participants can provide input or comments on reflections that get shared.

Suggested guidelines:

* Reflection is personal.
* The person sharing can ask for feedback or additional ideas.
* Ideas and feedback should add value.

Reflection is also an important aspect of growth and development for you as a facilitator. Consider letting your participants know this and participate in the reflection activity with them.

See [Chapter V, Developing Your PD Event: Design and Develop](https://drive.google.com/open?id=1xS1jK3Y5TLaPCb-jFnkf2-Et9fgvAjCkdu_sljjLm9Q) for more on reflection.

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| **Tips for Reflection and Closure**   * Ensure that participants know that continuing education certificates will be passed out at the end of the session. * Share your own observations of the learning you saw during the day. * Consider an end-of-the-day raffle for a children’s book related to the PD event topic. * Download photos you took during the day while participants were planning and then play a slideshow of them working. |

### Facilitator Team Reflection and Closure

Once participants have departed, you have three more things to do.

##### **Review, Reflect, and Give Feedback.** Take a few minutes at the end of the PD event to review the participant evaluation forms with your facilitator team. You will also want to reflect on what you and your facilitator team thought were the strengths and challenges of the PD event and what you would do differently. Consider making notes on your agenda for future reference. If you and your facilitator team have an agreement to give one another feedback, this is a good time to do so. [Learn how to give good feedback](https://docs.google.com/document/d/1nPx4Pc827kgCtOcBHSMuMVzeLrZBPJrLhPZknkOENoM/edit).

##### **Complete the “end of PD event” forms.** Complete the facilitator feedback form and determine who will send the feedback form and evaluations to the PLT State Coordinator. If your PLT State Coordinator wants information submitted online, this is a good time to complete it. Consider writing thank-you notes to presenters and/or event sponsors while you and your facilitator team are together.

##### **Clean-up.** It is important to leave the event location clean and the way you found it (unless instructed otherwise), and to lock up as instructed. As you clean up, determine which charts need to be saved for future PD events and which can be recycled. Make a note of any supplies that you will need to replenish for future PD events.

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| **Tips for Facilitation Team Reflection and Closure**   * Choose a skill you would like to work on as a facilitator and ask one of your facilitator team members to give you feedback on it. * If you have a supply box that you use for every PD event, keep a list of the contents so it is easier to see what needs to be replenished. |

## 

## Delve Deeper: Supporting Articles and Research

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](#kix.lyqbvk7ud9o)[*Expanded Details*](#kix.7qbv32o11fek)

# Brown University, adapted from Handelsman et al. (2006). Tips on Facilitating Effective Group Discussions. Retrieved October 20, 2019, from <https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/classroom-practices/learning-contexts/discussions/tips>

Addresses effective facilitation in discussion as a way to create an inclusive environment and addresses the conditions that promote small-group interaction and engagement.

Bureau of Land Management National Teaching Center. Meeting Facilitation Basics Videos: [*What Facilitators Do*](https://www.ntc.blm.gov/krc/uploads/1011/WhatFacilitatorsDoEdit3.html)*,* [*The Facilitator's Toolbox*](https://www.ntc.blm.gov/krc/uploads/1011/FacilitatingtheMeetingEdit3.2.16.18.html)*,* [*Setting the Stage*](https://www.ntc.blm.gov/krc/uploads/1011/SettingTheStage508Compliant.html)*,* and [*Facilitating the Meeting*](https://www.ntc.blm.gov/krc/uploads/1011/FacilitatingAMeeting508Compliant.html)*.* Retrieved October 23, 2019, from <https://www.ntc.blm.gov/krc/viewresource.php?courseID=1011>

The videos are intended as an overview for those who are new to meeting facilitation. They are also helpful for those facilitating PD events. The curriculum presented in the video was developed cooperatively with the Cispus Institute, the BLM National Training Center, the Washington Department of Natural Resources, the Oregon State University Extension Service, and the U.S. Forest Service.

McBrown, J. (2018). What are facilitation skills and how do you facilitate? Retrieved October 20, 2019, from <https://www.roffeypark.com/learning-and-facilitation/what-are-facilitation-skills-and-how-do-you-facilitate/>

Defines facilitation and seven steps to effective facilitation. The article focuses on organizations and meetings, but the steps apply to any type of facilitating.

Varatta, K. (2017). Teacher-Centered Versus Learner-Centered Learning. Retrieved October 20, 2019 from <https://knowledgeworks.org/resources/learner-centered-learning/>

This article includes a side-by-side comparison of a teacher-centered vs. learner-centered teaching environment.

**Becoming a PLT Facilitator**

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Expanded Details*](https://docs.google.com/document/d/1A5Ne0EdNJkUlOpf_aQa1sXV-1pvpMbiYJa07GPmIiqI/edit#heading=h.uofptg5rcs3j)[*Delve Deeper: Supporting Articles/Research*](#_70t5uvrqkh8k)

## Quick Reference ChecklistElementary age student standing in a hollowed out tree

* [**Assess Participant Learning Throughout the PD Event**](#_xe02zqfxb0rh)
* [Formative assessments](#_t4ufsjw60y0)
* [Summative assessment](#_xv42hy5raa9)
* [**Perform** **End-of-Event Evaluations**](#_cq1p8i5fay8l)

#### [Return all completed forms to PLT State Coordinator](#_cq1p8i5fay8l)

* [**Follow Up** **with PD Event Participants**](#_qdpjakmt5dyl)
* [Thank-yous](#_uuht6rna5xzk)
* [Progress on participant outcome](#_xvbiczt39bji)
* [Offer support and resources](#_k6l7g79o6dkp)

## Expanded Details

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](https://docs.google.com/document/d/1nvBQVd3Bg7Js1U-Hf5Ymbr_9LI38I3uGr-6nSt4SnX0/edit#heading=h.9lb3zcgfbqpu)[*Delve Deeper: Supporting Articles/Research*](#_70t5uvrqkh8k) *Forms*

In this chapter, you will focus on the assessment, evaluation, and follow-up of three parts of the PD event.

1. What happens during the PD event
2. What happens at the culmination of the PD event
3. What participants do after the PD event

While assessment and evaluation are sometimes used interchangeably, there are distinct differences between them.

### Assessment

### Assessment is the systematic, learner-focused process of measuring knowledge, skills, and attitudes during learning. By assessing the progress of learning throughout the PD event, the facilitator can flex and adjust, providing scaffolding as needed to ensure that the PD event objectives are being met. Assessment can be both formative and summative. Formative assessments take place throughout the PD event. Summative assessments take place toward the end of a PD event. Participants developing a unit plan is an example of a summative assessment.

## Evaluation

**Evaluation focuses on components other than content and participant learning, such as the quality of instruction or the effectiveness of the PD event.** It is product-oriented and generates a judgment. The participant survey given at the end of the session is an evaluation rather than an assessment, as it does not assess participant learning.

### Assess Participant Learning Throughout the PD Event

The design of your PD event is based on specific outcomes and objectives. The activities, strategies, and methods support the objectives and outcomes and are sequenced to move participants to deeper levels of understanding using the **AKCA model (Awareness, Knowledge, Challenge, and Action).** The assessment will allow you to measure the achievement of the specific objectives for the event PD.

#### Formative assessments. There are many opportunities to assess the learning of your participants throughout the PD event. You can gauge participants’ learning through observations, discussions, and the artifacts they create. The assessments built into each PLT activity are useful tools and can provide options for formative assessment.

##### **Concepts and content.** It is critical that educators understand the concepts and content being delivered in order to successfully use them later with youth. The debrief segment of each activity should include questions and discussions related to concepts and content, as well as explanations of how they will use the activities with their students. Artifacts such as drawings, journals, graphs, and so on are also formative assessments and can be useful tools for facilitators to quickly assess content and concept understanding and application.

##### **Interest and excitement.** Watch and listen to participants during activities, debriefing, and reflection to determine their interest and excitement. The goal is to flex and adjust to encourage learning. Make sure you are engaging participants in multiple ways of learning, addressing differentiated learning, allowing for peer-to-peer sharing, and modeling the activities. Don’t assume that because someone is quiet that they are not interested; be sure to check in to directly assess interest.

##### **Connections to teaching environment.** Throughout the PD event, assess how participants are expressing their interest in using the activities in their own educational/work setting.

##### **Participants express ideas and demonstrate their competence.** Observe how they are thinking about and processing the information in the PD event. One way to do this is by reviewing the artifacts they created such as scientific posters, graphs, skits, and diagrams.

#### Summative assessment. In a PD event, the summative assessment takes place toward the end of the session. It could be a unit plan or a plan for how to augment an existing unit with PLT activities. One of the best ways to conduct a summative assessment of the PD event is to include time for participants to create an action plan or teaching unit for themselves or another participant. This activity reflects the participants’ ability to put the information from the PD event together into an action plan. You can also assess a participant’s *intent* to meet the PD event outcome by including questions related to the outcome on the back of the PLT Participant Evaluation Form.

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| **Tips for Assessing Participant Learning**  * Provide opportunities for non-verbal communication, such as writing, developing graphic organizers, or drawing. * Provide ample opportunities for participants to contribute to the conversation through different methods (large group, small group, partners, or media methods such as charts, post-its, and so on). * Allow time to sufficiently discuss topics. * Take photos of the participant action plans or unit plans. |

### Perform End-of-Event Evaluation

Once you wrap the PD event, you will need to conclude the PD event evaluation, return materials to your PLT State Coordinator, and follow up with participants.

#### Return all completed forms to PLT State Coordinator. Each state has unique post-PD event requirements and may also have its own evaluation form. Please check with your PLT State Coordinator to determine what forms to use, what needs to be done following the completion of a PD event, and what the deadlines are for completing the work. The following is an example of forms to be completed.

#### 

#### Within a week of the PD event, submit:

#### [PLT Participant Evaluation Forms](https://docs.google.com/document/d/1ylAd8C_XlAPiASCebH9Ws3Kd1i_x-4pZyvOIjldINbY/edit)

#### [Participant Information Forms](https://drive.google.com/open?id=1OfJKh0AwPWgl3Z2oIjGvFaGFbegsNwEUO6CqeHQduQs) (if you have participants fill out hard copies with pen or pencil rather than online)

* [Facilitator Cover Sheet](https://docs.google.com/document/d/1bK3LXlUMZ5tQ393E_1WFjbulG4UQGiyeiNbp-dWoeM8/edit)

As soon as possible, submit:

* Photo release forms and copies of photos
* Extra supplies and PLT guides

### Follow-up with Event Participants

### Following up with participants, guests, and resource professionals after the PD event provides a valuable opportunity to build relationships and keep them engaged.

#### Thank-you notes. Send a postcard or note to participants one or two weeks after the PD event and include your State PLT program website and the National PLT website. When you thank guest speakers, resource professionals, or event sponsors, add a note about the value of their participation or the value of the event to attendees. You may include photos of the PD event, as many people like to share it with their networks.

#### Progress on participant outcome. At the end of the PD event, you can assess the participants’ intent to meet the outcomes. In order to assess whether participants actually met the outcomes, you must follow up with participants after they have had time to implement the outcomes. For example, if your outcome stated that participants would do two PLT activities with their students within three months, you will want to follow up after three months to give them the full time to meet this outcome. Although assessment is time intensive, it provides valuable data. Check with your PLT State Coordinator to determine what, if any, follow-up they are doing. If you decide to conduct this follow-up assessment, consider creating an online survey, and be sure to send the link with a personal note to the participant.

#### Offer support and resources. Send an email or note reminding participants of upcoming national and state PD opportunities, conferences, newsletters, and other resources.

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| **Tips for Following Up with Participants**  * Use PLT postcards to send notes to participants after the event reminding them about the great resources on the PLT website. * Send email about an upcoming event, such as Earth Day, and suggest a PLT activity related to this event that educators can do with their students. |

## Delve Deeper: Supporting Articles and Research

###### *Quick Links:* [*Table of Contents*](https://docs.google.com/document/d/1gCcNU1PPnUl6vjUv6HAS81_bDH87IwswfKcdBLREA7o/edit)[*Quick Reference Checklist*](https://docs.google.com/document/d/1nvBQVd3Bg7Js1U-Hf5Ymbr_9LI38I3uGr-6nSt4SnX0/edit#heading=h.9lb3zcgfbqpu)[*Expanded Details*](https://docs.google.com/document/d/1nvBQVd3Bg7Js1U-Hf5Ymbr_9LI38I3uGr-6nSt4SnX0/edit#heading=h.uofptg5rcs3j) *Forms*

### Rossett, Allison (2002) Training Needs Assessment. Englewood Cliffs, NJ: Educational Technology Publications

# Assessment vs Evaluation: what's the difference? EasyLMS website. Retrieved 12/2019 from

<https://www.onlineassessmenttool.com/knowledge-center/assessment-knowledge-center/assessment-vs-evaluation/item10642>

[The Authentic Assessment Toolbox](http://jfmueller.faculty.noctrl.edu/toolbox/index.htm)(date unknown), Retrieved on June 19, 2019. National Education Association, <http://www.nea.org/tools/lessons/57730.htm>

This resource is designed to give **K-12 teachers**, especially **new teachers**, create authentic tasks, rubrics, and standards for measuring and improving student learning.