



# Using Outcomes to Design Professional Development Events

## June 2014

### Background

In the spring of 2013, *PLT's 5+ Guiding Principles for Professional Development* were adopted as research-based guidance for improving our professional development. In the fall of 2013, PLT asked Susan Sahnou (OR PLT State Coordinator) and Norie Dimeo Ediger (OR Forest Resources Institute) to translate the guiding principles into practical, on-the-ground strategies for designing PD. They focused on Guiding Principle #2, which addresses the importance of clarifying and prioritizing our PD outcomes for effective practice. The corresponding documents are designed to help PLT state coordinators examine the objectives and/or outcomes that their PD offerings are designed to meet and consider the most appropriate strategies and techniques for each PD model.

### A Continuum Approach to PLT's Professional Development

An insight gained from this project is a need to reframe the way PLT designs and describes its PD in terms of outcomes (rather than time). PLT tends to talk about its PD models in terms of hours or days, i.e. a two-hour session, a six-hour traditional workshop, or a weeklong teacher tour. While time is an extremely important factor in designing PD, determining how to use that time to create an effective PD experience needs to be defined by the desired outcomes of the PD event.

### A Progression of PD Outcomes

Four PD Outcome Statements are offered to frame PLT PD events that progress from building understanding through exploration, to increased content and pedagogical knowledge, to increased experimentation and implementation. These PD models are as follows:

- **PD Outcome 1:** Educators use the PLT activities in their teaching and seek additional opportunities to engage with PLT.
- **PD Outcome 2:** Educators use PLT activities to engage students in actively 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.

## Definition of Terms

**Action-Oriented Project:** An activity that gets students involved in tackling an environmental issue or problem with the goal of improving their classroom, school, home, or larger community.

**Best Practices:** An approach or action that has consistently shown superior results above and beyond other means.

**Content Knowledge:** The body of information, such as facts, concepts, theories, and principles that someone is expected to know to teach specific subjects.

**Duration:** Refers to both the amount of time spent in a PD event, as well as the span of time covered from the beginning to the end of a PD event.

**Goals:** Broad statements about intention that provide a framework for determining outcomes and objectives.

**Method:** The way you implement a strategy. For example, using OFIS (open, focus, interpretive, and summary) questions is a method used for a discussion strategy.

**Outcomes:** Define what participants will be able to do in “real life” as a result of the program in which they are participating.

**Objectives:** Define what participants actually do at a PD event that prepares them to meet the outcomes.

**PD Event:** This is a “catch-all” term that refers to any professional development event, such as a workshop, institute, conference session, school program, etc.

**PD Outcomes:** A way of describing PD events based on their intended outcomes (rather than time).

**Pedagogical Knowledge:** The methods and practices of teaching and learning involving all aspects of student learning, classroom management, lesson plan development and implementation, and student evaluation. (Adapted from TPACK, Michigan State University)

**Principles:** The general themes from the research that are foundational to effective professional development. Refer to *PLT’s 5+ Guiding Principles for Professional Development* for more details.

**Professional Development:** Structured learning experiences that help professionals (particularly educators) improve their professional knowledge, competence, skill, and effectiveness.

**Skills:** The ability to carry out a task. The acquisition of skills is closely related to developing content knowledge.

**Strategy:** An approach used during professional development to achieve outcomes. (Strategies are implemented using different methods. For example, reflection is a strategy and there are many methods to engage participants in reflection.)

## More on Goals, Outcomes and Objectives

(Adapted from The Cispus Institute)

**Goals** are broad statements about intention that provide a framework for determining outcomes and objectives. The goal statement provides the “big picture” about what the program intends to accomplish. It has a longer timeframe for measuring results, while objectives are immediately measurable. A goal often has many objectives.

**Outcomes** define what participants will be able to do in “real life” as a result of the program in which they are participating. Outcomes may have short-term or long-term elements. They are the achieved results of a program. Determining your outcomes prior to developing a program will drive the knowledge, skills, and abilities you will include in your program. Ask yourself, “What do I need to provide in this program that will allow participants to accomplish this outcome?” Initial measurement of this outcome at the end of a program will depend on observation or self assessment. To assess if an outcome has been met usually requires follow-up at a later date.

**Objectives** define what participants actually do at a PD event that prepares them to meet the outcomes. They let participants know what is expected and establish a reason for their participation. Objectives are action and task oriented, specific and measurable. PD content should be tied to the objectives.

### An Example

#### **Goal**

Students become environmentally literate.

#### **Outcome**

Teachers engage their students in authentic outdoor field investigations as an integrated part of their teaching.

#### **Objectives**

- Teachers will participate in a field investigation.
- Teachers will analyze the steps in preparing students for field investigations.
- Teachers will identify potential field investigations in their schoolyard or community.
- Teachers will create a lesson that includes field investigations.

### Writing Outcomes and Objectives

Make it clear to participants what they will accomplish by the end of the PD event.

- Simple
- Clear
- Concise
- Relevant
- Measurable or observable

### Use Action Verbs

#### Affective (attitudes, feelings)

- Support an action
- Share your feelings
- Recognize the benefit
- Explain your role
- Relate your feelings

#### Behavioral (skills, performance)

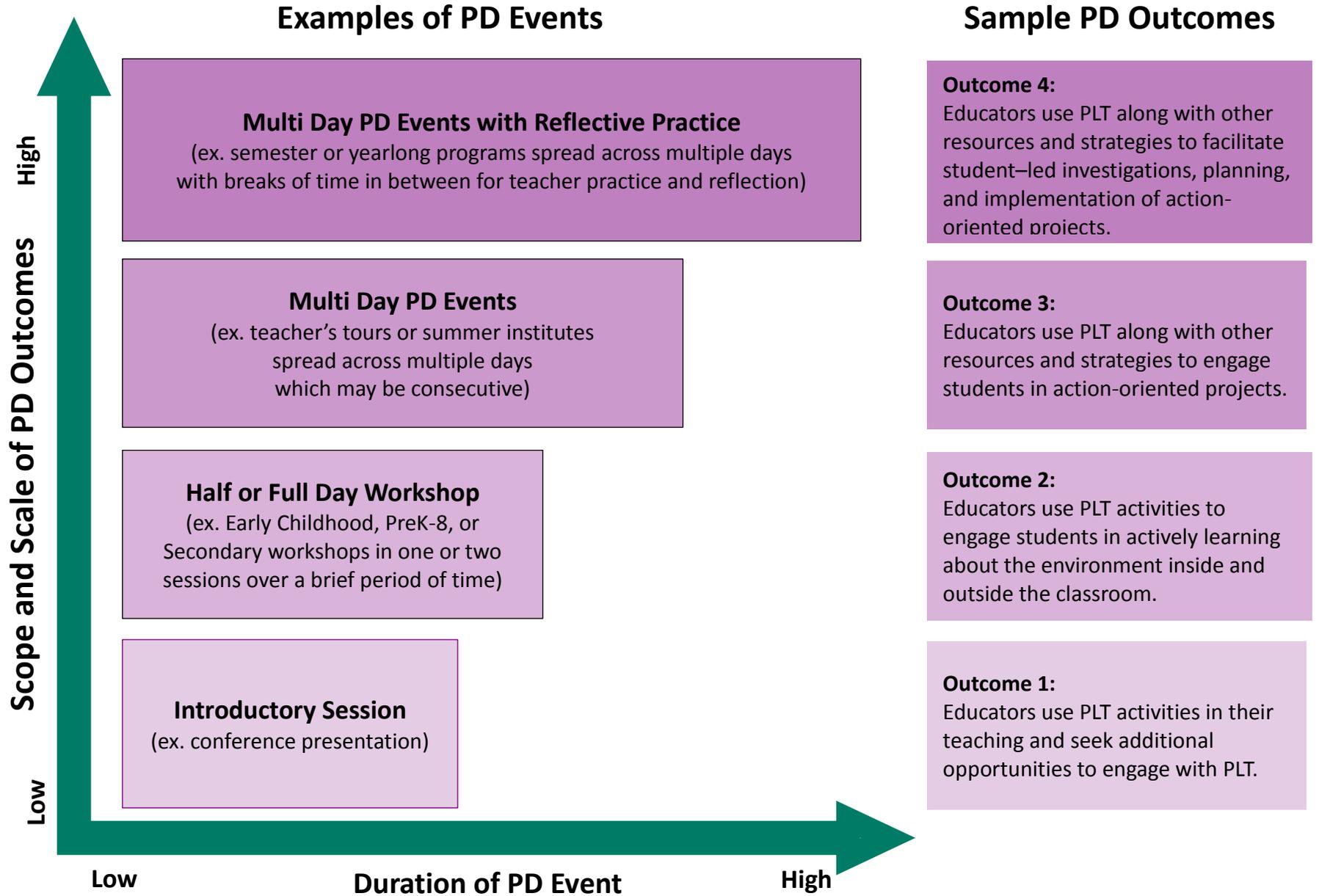
- Demonstrate
- Compare
- Contrast
- Apply
- Design
- Create
- Organize
- Develop

#### Cognitive (new information/concepts)

- Explain
- Write
- Generalize
- Define
- Analyze
- Question

Avoid verbs that are difficult to measure, such as enjoy, appreciate, understand, like, know, or learn.

# A Continuum Approach to PLT's Professional Development



# Key Characteristics of Outcome-Based PD Events

## Outcome 1

Educators will use PLT activities in their teaching and seek additional opportunities to engage with PLT.

- Foster interest in or understanding about PLT.
- Provide access to PLT resources and new opportunities.
- Introduce new or expand prior content knowledge and skills.

## Outcome 2

Educators will use PLT activities to engage students in actively learning about the environment inside and outside the classroom.

- *OUTCOME 1 CHARACTERISTICS PLUS...*
- Solicit prior knowledge and introduce new content knowledge, skills, and pedagogical knowledge.
- Provide multiple experiences for using PLT activities to develop a concept within a content area.
- Provide experience using PLT to extend classroom learning to outdoor learning.
- Provide time to plan for how to use PLT in work or school setting.

## Outcome 3

Educators will use PLT along with other resources and strategies to engage students in action-oriented projects.

- *OUTCOME 1 AND 2 CHARACTERISTICS PLUS...*
- Expand and enhance prior content knowledge, skills, and pedagogical knowledge.
- Practice applying and refining new content knowledge, skills, and pedagogical knowledge.
- Provide time to plan lessons or units incorporating PLT and /or to integrate PLT into work or school setting.
- Focus on educator as a learner and examine implications for educator practice.
- Model how educator leads students through action-oriented projects.

## Outcome 4

Educators will use PLT along with other resources and strategies to facilitate student-led investigations, planning, and implementation of action-oriented projects.

- *OUTCOME 1, 2 AND 3 CHARACTERISTICS PLUS...*
- Experiment with and critique application of knowledge and skills.
- Reflect on practice.
- Facilitate learning rather than leading.
- Focus on educator assessing learning and practice as a educator (versus learner).
- Model how educator facilitates process for students to lead action-oriented projects.

**Building Content Knowledge** activates a 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.

### Outcome 1

- This strategy provides participants with an overview or framework of PLT.
- Facilitator solicits prior knowledge through discussion, brainstorming, art, or other activity.
- Facilitator or expert provides content that supports concept or skill development using PLT activities.
- Participants build new PLT knowledge using PLT online resources.

### Outcome 2

- This strategy provides participants experience using PLT to develop conceptual or skill based learning.
- Facilitator engages participants to identify KWL: What do I Know? What do I Want to know? What have I Learned?.
- Facilitator or expert provides content that supports concept or skill development.
- Facilitator helps participants use PLT activities to extend, connect and scaffold knowledge around a concept or skill.
- Participants build new PLT knowledge with walk through the guide and/or online resources.

### Outcome 3

- This strategy provides participants knowledge and practice using PLT and other resources related to student action.
- Facilitator uses PLT and other materials to develop concepts, skills and/or pedagogical knowledge.
- Facilitator or expert provides participants with multiple opportunities to practice and apply skills and content knowledge.
- Facilitator provides supporting resources that demonstrate development of content knowledge across the curriculum.
- Facilitator provides multiple experiences working with content and skills outdoors.

### Outcome 4

- This strategy provides participants knowledge, practice, and reflection related to student-led investigations.
- Facilitator uses PLT and other materials to develop concepts, skills and/or pedagogical knowledge.
- Facilitator or expert provides participants with multiple opportunities to practice and apply skills and content knowledge, including outdoors.
- Participants analyze case studies, lesson plans, and/or videos of student-led investigations.
- Participants write and self-assess in a journal after doing lessons with students.
- Participants find related resources and share with the group.
- Participants help determine gaps in additional needs or interests in content knowledge.

## Modeling demonstrates a new concept or skill and learners learn by observing.

### Outcome 1

- This strategy provides participants the opportunity to observe the delivery of a PLT activity.
- Facilitator models PLT activity including alignment to standards.

### Outcome 2

- This strategy provides participants the opportunity to observe how to effectively use PLT across grade levels, in multiple content areas, and outdoors.
- Facilitator models PLT activities, responding with accuracy to potential content-related student questions.
- Facilitator models how to use PLT across grade levels, content areas, and outdoors.

### Outcome 3

- This strategy provides participants with the opportunity to observe how PLT activities are designed to lead to student action.
- Participants model PLT activities for each other, focusing on activities that lead to student action.

### Outcome 4

- This strategy provides participants who have mastered specific concepts or learning outcomes the opportunity to “teach” their peers and to facilitate student-led investigations.
- Participants model a lesson with an extension they have developed.
- Participants view a lesson study conversation (i.e. modeling professional conversation).
- Participants analyze a student work sample.
- Participants direct the modeling of expertise through teaching or co-teaching a lesson.

**Planning** provides time and facilitates a process for teachers to develop plans and instructional strategies for use in their classrooms.

### Outcome 1

- This strategy provides participants time to discuss how to use PLT in their classrooms, schools, or programs.
- Participants discuss how PLT materials help them meet classroom, school, or program needs.

### Outcome 2

- This strategy provides participants time to outline how to effectively use PLT at their grade level, in different content areas, and outdoor settings.
- Participants develop lesson plans for cross-disciplinary instruction.
- Participants meet in grade-level groups to outline orally how to use PLT activities.

### Outcome 3

- This strategy provides participants time to plan how to effectively use PLT to lead student action.
- Participants write up lesson plans that focus on connecting content and outdoor study skills (e.g. data collection).
- Participants schedule and plan student action projects.

### Outcome 4

- This strategy provides participants time to review lessons they have taught and reflect with colleagues on ways to fine tune or refine them for greater effectiveness.
- Participants collaboratively plan guidelines for student-led investigations.
- Participants refine their instructional applications of PLT activities based on feedback or data interpretation.
- Participants engage in peer to peer review and feedback on implementation plans.

**Debriefing** uses interaction to make explicit connections between content, activities, and/or experiences for the learner. It is a process that stimulates higher order thinking skills, encourages critical thinking, and makes connections. It is often paired with reflection.

### Outcome 1

- This strategy provides participants the opportunity to discuss what they experience in PLT activities and how activities might be used in the classroom or program.
- Facilitator reviews activity or experience and solicits participants' experiences and understanding related to PLT and its use in their classroom or program.
- Techniques should include open-ended questions, OFIS questioning strategy related to PLT activities, the guide and PLT resources, as well as how they would use with them in the classroom.
- OFIS refers to Open, Focus, Interpretive, and Summary.

### Outcome 2

- This strategy provides participants the opportunity to discuss content of each PLT activity, related concepts, and application to indoor and outdoor learning.
- Facilitator solicits participant engagement related to context, activity or experience, use in classroom, and anticipated student/classroom/program application.
- Facilitator leads several debriefing sessions, each connecting and incorporating previous information.
- Techniques should include OFIS questioning that solicits discussions or dialogue.

### Outcome 3

- This strategy provides participants the opportunity to debrief and assess their experiences and their application to student-led projects.
- Facilitator engages participants in assessing their learning experiences and their capacity to translate them into their practice.
- Facilitator or participants lead several debriefing sessions, each connecting and incorporating previous information.
- Facilitator deconstructs what was modeled and participants analyze how they would implement with students.
- Techniques should include questioning that solicits discussions or dialogue and facilitation that encourages and promotes higher order thinking.

### Outcome 4

- This strategy provides participants the opportunity to debrief and assess their practice within the PD event, as well as classroom or program application.
- Facilitator deconstructs what was modeled and participants analyze how they would implement with students.
- Facilitator engages participants in cycle of analyzing their experiences as "students," setting goals for implementation, examining application, and reflecting on their practice as educators.
- Participants debrief outside of PD event formally and informally.
- Techniques should include questioning that solicits discussions or dialogue and facilitation that encourages and promotes higher order thinking.

**Note:** PLT activities embed debriefing questions about the content of the activity for use with students. This debriefing strategy differs by focusing on three key areas: the content/knowledge lesson and its relevancy to place, the classroom application and its relevancy for their students, and the skills and techniques needed for replicating and extending an activity.

**Reflection** helps learners making meaning of their experiences. "Knowledge is continuously derived from and tested out in the experiences of the learner" (Kolb, 1984). This can only take place where those experiences can be reviewed and analyzed retrospectively.

## Outcome 1

- This strategy provides participants with the opportunity to connect PLT activity to prior experiences and current practices.
- Participants discuss how they might incorporate PLT in their classroom, school, or program.

## Outcome 2

- This strategy provides participants with the opportunity to assess pros and cons of using cross-curricular approaches.
- Participants create mind maps/schemata of PLT activities across grades, content areas, and settings.
- Participants brainstorm ways to use PLT across grades, content areas, and settings.

## Outcome 3

- This strategy provides participants with the opportunity to anticipate student learning challenges within the PLT activity (i.e. student misconceptions).
- Participants identify personal concerns and/or assess their learning trajectory (how was I thinking? how am I thinking now?) using journals or discussion.
- Participants engage in process (service learning or field study) as "students" and then debrief how they would teach students.

## Outcome 4

- This strategy promotes and supports continual self-assessment and evaluation of learning and practice through personal and group interactions.
- Participants assess their teaching intent and translation into practice based on student performance and assessment.
- Participants are given readings with assigned questions to respond to online.
- Participants respond to such questions as, what would I do differently?, how would I deliver the lesson differently?.

# Strategies and Methods for PLT PD Outcome 1

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

## Building Content Knowledge

Use this strategy to provide participants with an overview or framework of PLT.

- Facilitator solicits prior knowledge through discussion, brainstorming, art, or other activity.
- Facilitator or expert provides content that supports concept or skill development using PLT activities.
- Participants build new PLT knowledge using PLT online resources.

## Modeling

Use this strategy to provide participants the opportunity to observe the delivery of a PLT activity.

- Facilitator models PLT activity including alignment to standards.

## Planning

Use this strategy to provide participants time to discuss how to use PLT in their classrooms, schools, or programs.

- Participants discuss how PLT materials help them meet classroom, school, or program needs.

## Debriefing

Use this strategy to provide participants the opportunity to discuss what they experience in PLT activities and how activities might be used in their classroom or program.

- Facilitator reviews activity or experience and solicits participants' experiences and understanding related to PLT and its use in their classroom or program.
- Techniques should include open-ended questions, OFIS questioning strategy related to PLT activities, the guide and PLT resources, as well as how they would use with them in the classroom. (OFIS refers to Open, Focus, Interpretive, and Summary.)

## Reflection

Use this strategy to provide participants with the opportunity to connect PLT activity to prior experiences and current practices.

- Participants discuss how they might incorporate PLT in their classroom, school, or program.

## Strategies and Methods for PLT PD Outcome 2

*Educators will use PLT activities to engage students in actively learning about the environment inside and outside the classroom.*

### Building Content Knowledge

Use this strategy to provide participants experience using PLT to develop conceptual or skill based learning.

- Facilitators engages participants to identify KWL: What do I Know? What do I Want to know? What have I Learned?.
- Facilitator or expert provides content that supports concept or skill development.
- Facilitator helps participants use PLT activities to extend, connect and scaffold knowledge around a concept or skill.
- Participants build new PLT knowledge with walk through the guide and/or online resources.

### Modeling

Use this strategy to provide participants the opportunity to observe how to effectively use PLT across grade levels, in multiple content areas, and outdoors.

- Facilitator models PLT activities, responding with accuracy to potential content-related student questions.
- Facilitator models how to use PLT across grade levels, content areas, and outdoors.

### Planning

Use this strategy to provide participants time to outline how to effectively use PLT at their grade level, in different content areas, and outdoor settings.

- Participants develop lesson plans for cross-disciplinary instruction.
- Participants meet in grade-level groups to outline orally how to use PLT activities.

### Debriefing

Use this strategy to provide participants the opportunity to discuss content of each PLT activity, related concepts, and application to indoor and outdoor learning.

- Facilitator solicits participant engagement related to context, activity or experience, use in classroom, and anticipated student/classroom/program application.
- Facilitator leads several debriefing sessions, each connecting and incorporating previous information.
- Techniques should include OFIS questioning that solicits discussions or dialogue. (OFIS refers to Open, Focus, Interpretive, and Summary.)

### Reflection

Use this strategy to provide participants with the opportunity to assess pros and cons of using cross-curricular approaches.

- Participants create mind maps/schemata of PLT activities across grades, content areas, and settings.
- Participants brainstorm ways to use PLT across grades, content areas, and settings.

## Strategies and Methods for PLT PD Outcome 3

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

### Building Content Knowledge

Use this strategy to provide participants knowledge and practice using PLT and other resources related to student action.

- Facilitator uses PLT and other materials to develop concepts, skills, and/or pedagogical knowledge.
- Facilitator or expert provides participants with multiple opportunities to practice and apply skills and content knowledge.
- Facilitator provides supporting resources that demonstrate development of content knowledge across the curriculum.
- Facilitator provides multiple experiences working with content and skills outdoors.

### Modeling

Use this strategy to provide participants with the opportunity to observe how PLT activities are designed to lead to student action.

- Participants model PLT activities for each other, focusing on activities that lead to student action.

### Planning

Use this strategy to provide participants time to plan how to effectively use PLT to lead student action.

- Participants write up lesson plans that focus on connecting content and outdoor study skills (e.g. data collection).
- Participants schedule and plan student action projects.

### Debriefing

Use this strategy to provide participants the opportunity to debrief and assess their experiences and their application to student-led projects.

- Facilitator engages participants in assessing their learning experiences and their capacity to translate them into practice.
- Facilitator or participants lead several debriefing sessions, each connecting and incorporating previous information.
- Facilitator deconstructs what was modeled and participants analyze how they would implement with students.
- Techniques should include questioning that solicits discussions or dialogue and facilitation that encourages and promotes higher order thinking.

### Reflection

Use this strategy to provide participants with the opportunity to anticipate student learning challenges within the PLT activity (i.e. student misconceptions).

- Participants identify personal concerns and/or assess their learning trajectory (how was I thinking? how am I thinking now?) using journals or discussion.
- Participants engage in process (service learning or field study) as “students” and then debrief how they would teach students.

## Strategies and Methods for PLT 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.*

### Building Content Knowledge

Use this strategy to provide participants knowledge, practice, and reflection related to student-led investigations.

- Facilitator uses PLT and other materials to develop concepts, skills, and/or pedagogical knowledge.
- Facilitator or expert provides participants with multiple opportunities to practice and apply skills and content knowledge, including outdoors.
- Participants analyze case studies, lesson plans, and/or videos of student-led investigations.
- Participants write and self-assess in a journal after doing lessons with students.
- Participants find related resources and share with the group.
- Participants help determine gaps in additional needs or interests in content knowledge.

### Modeling

Use this strategy to provide participants who have mastered specific concepts or learning outcomes the opportunity to “teach” their peers and to facilitate student-led investigations.

- Participants model a lesson with an extension they have developed.
- Participants view a lesson study conversation (i.e. modeling professional conversation).
- Participants analyze a student work sample.
- Participants direct the modeling of expertise through teaching or co-teaching a lesson.

### Planning

Use this strategy to provide participants time to review lessons they have taught and reflect with colleagues on ways to fine tune or refine them for greater effectiveness.

- Participants collaboratively plan guidelines for student-led investigations.
- Participants refine their instructional applications of PLT activities based on feedback or data interpretation.
- Participants engage in peer to peer review and feedback on implementation plans.

### Debriefing

Use this strategy to provide participants the opportunity to debrief and assess their practice within the PD event, as well as classroom or program application.

- Facilitator deconstructs what was modeled and participants analyze how they would implement with students.
- Facilitator engages participants in cycle of analyzing their experiences as “students,” setting goals for implementation, examining application, and reflecting on their practice as educators.
- Participants debrief outside of PD event formally and informally.
- Techniques should include questioning that solicits discussions or dialogue and facilitation that encourages and promotes higher order thinking.

### Reflection

Use this strategy to promote and support continual self-assessment and evaluation of learning and practice through personal and group interactions.

- Participants assess their teaching intent and translation into practice based on student performance and assessment.
- Participants are given readings with assigned questions to respond to online.
- Participants respond to such questions as, what would I do differently?, how would I deliver the lesson differently?.