Professional development (PD) can take many forms. Often it appears as a workshop or short-term course. The process often ends there, leaving teachers and other school leaders to their own discretion as to how to implement what they have learned. This untethered process rarely translates to student achievement.

Effective professional development demands more than simple information. In order to create real and effective results at the district, campus, and the level of an individual teacher, a plan that goes beyond the event is required. That plan should be designed to deliver student outcomes through creating a stable learning environment for teachers and administrators, to be targeted to specific points which engage teacher experiences, and to be implemented in such a way that continuous follow-up can occur over a three-to-five year period in order to ensure a lasting change in instruction and organization.

**WHAT IS EFFECTIVE PROFESSIONAL DEVELOPMENT?**

**Supportive**
- Supports motivation and commitment
- Combines needs of individuals with school and district goals
- Engages learners of all levels, including teachers, paraprofessionals, and administrators
- Designed to address the learning needs of specific schools, classrooms, grade levels, and teachers
- Accommodates varying teaching assignments, career stages, and teacher responses to educational innovation
- Integrates teacher input in pace and direction

**Job-embedded**
- Connects a learning experience to the daily experience of teachers
- Requires follow-up activities for teachers to apply their learning
- Allows teachers learn through daily activities and responsibilities, consider new ideas, analyze their experience, and reflect in writing
- Focuses on content area knowledge, not just instructional strategies, so that teachers can contextualize what they learn

**Instructionally Focused**
- Helps teachers to anticipate student misconceptions
- Emphasizes improving student learning outcomes
- Addresses subject area content as well as strategies for teaching
- Equips teachers with a wide range of instructional strategies

**Collaborative**
- Engages teachers physically, cognitively, and emotionally
- Encourages teachers to share problems, ideas, viewpoints, and expertise while working toward a common goal
- Builds an environment for peer support and feedback

**Ongoing**
- Extends professional learning by increasing both duration and frequency of

---

development

- Provides teachers with many opportunities over time to interact with ideas and procedures or practice new skills
- Builds on or relates to other professional development experiences which teachers are required to engage

The professional development plan for a campus or district should be modeled according to Benchmark 4 of the T-STEM Blueprint:

| 4.2A | Develops a PD plan for a sustained professional development model of continuous learning based on student results, teacher development, and the short- and long-term goals of the Academy. |
| 4.2B | Adopts a systemic professional development model of continuous learning that addresses prioritized needs as informed and evaluated by multiple sets of quantitative and qualitative data (student assessment data, instructional/classroom evaluations, technological developments, workforce demands, demographic changes, and community/societal expectations and needs). |
| 4.2C | Sustains a PLC by instituting job-embedded ongoing opportunities for continuous learning, peer coaching/mentoring, STEM-externships, and participation in STEM teacher and leader cadres for teachers and administrators (research-based practices, content competence, new instructional strategies, technology integration, reflective inquiry, and student artifact analysis). |
| 4.2D | Provides ongoing professional development for counselors, teachers, staff, and parents on strategies that support students to ensure success in a rigorous course of study, such as: IGP, interventions, and interpersonal and academic success strategies. |
| 4.2E | Ensures that school-based, integrative STEM coaches are available and accessible to support both teachers and students in research-based practices, content competence, interdisciplinary STEM teaching and learning, reflective inquiry, college readiness standards, and state standards integrated with STEM industry expectations. |
| 4.2F | Builds teacher and administrator expertise in developing, teaching, learning, and assessing STEM cross-content curriculum. |

WHAT ARE THE COMPONENTS OF A PROFESSIONAL DEVELOPMENT PLAN?

Developing a Needs Assessment
A professional development plan begins with a needs assessment and an analysis of the data. This can be administered via a survey given to students, parents, teachers, administrators, or key stakeholders in order to examine the gaps between the goals of a district or school and its current state.

Key Questions:

- What are our goals?
- What do we know? What do we need to know? What do we want to know?
- What are our students’ needs?
- What areas of focus support or align with current initiatives?
- What are the district requirements for professional development?
Selecting Professional Development Initiatives

The second step is to select the PD topics and themes based on the data collected in the needs assessment. This requires deep discernment. Consider focusing on only a few topics in order to ensure that they will be implemented well and integrated into the changing campus or district. Make sure that the content provided will engage your participants actively and that it will align to the activities and situations that teachers encounter daily. The use of modeling and of mentor-teacher relationships have been found highly effective at improving instruction.

Key Questions:

- What needs were identified in the needs assessment?
- As an administrator, what areas of need have I witnessed in my walk-throughs?
- What styles of learning and what concepts will make the biggest difference in instruction? Bear in mind that the ultimate goal of this process is concrete student outcomes.
- How can we ensure that this plan will make a lasting impact?

Choosing the Delivery Method

The next step is to decide the delivery method for the PD. Begin by examining the resources at your disposal that can meet those needs. One option is to facilitate professional development in-house using resources that are free or can be purchased. An example of this is The Teaching Channel. The advantage of facilitating a PD session in-house is that the presenter knows the teachers and can easily adapt the resources to meet their needs without having to create the PD session from scratch. Using pre-published resources, if they tightly align to the learning that is needed, is a simple and cost-effective way of providing professional development.

A second option is to facilitate the professional development in-house again, but to run the PD through professional learning communities (PLCs)² with the facilitator using personal research into the areas of need. This is an inexpensive option that can be quite effective. A disadvantage is that the PD will only be as good as the research done by the facilitator.

Another option is to hire an outside presenter who has content expertise to do the session. While this option is easier, the outside presenter does not know the specific campus and its needs as well as someone who works there. Additionally, sustaining the learning after the event can be problematic, because the presenter will not be around to field questions or manage implementation following the event. When using either of the options, be sure to meet with the presenter prior to the PD session. Discuss why you are engaging that person on that particular topic, what the negotiables and non-negotiables for implementation of the new learning are. Be sure to find a way to preserve that learning for new or reassigned teachers entering your school or district. This can happen through recording the training, which is highly encouraged, as well as through implementation within PLCs. Finally the administrator should introduce the speaker to the participants in the training, deliver the negotiables and non-negotiables for implementation of the new learning and participate in it.

Key Questions:

---

² A professional learning community is a team that meets regularly (multiple times a week) to plan lessons together, share viewpoints, and solve problems. PLCs should share a mission and vision and be supported by administrators. Stable, accountable learning communities are an extremely important part of integrating the lessons of professional development and building a culture of learning on a campus or in a district.
• Is there someone on the campus or in the district who has expertise in the area where we need professional development?
• If not, where can I find the resources?
• What PD resources exist that tightly align to the initiative?
• Can training be done in-house or is an outside presenter needed?

**Sustaining the Learning**
Perhaps the most important component of a professional development plan is making sure that it lasts. Often it happens that no plan is created for follow-up after a presentation or training. Teachers often take their lessons to heart, but, over time, lose their knowledge or diminish in its application, because the framework which would help them integrate their learning does not exist. A plan which organizes teachers into professional learning communities that can work and plan together in order to turn their learning into concrete results is much more effective than a plan which leaves teachers to apply their learning without support. Meetings between and among teacher groups that share a common content area or grade level allow for the sharing of knowledge across a larger group. Administrators should also recognize that the process of integrating professional development is long and slow. It can take up to 3–5 years to make a change in a campus that will last. During that period, learning communities need to be allowed to meet and plan multiple times a week during school hours. Administrator support is absolutely critical. Administrators should also plan for a system of assessment in order to track the implementation of the campus’s or district’s plan.

**Key Questions:**
• How do we follow-up on our plan in order to make sure our learning is implemented?
• How can we organize our plan such that its goals and its progress can be tracked over so long a time?
• How can we allocate the proper time for a learning community to plan and develop their learning?

Professional development at its core is not about giving teachers a bag of tricks, but about instilling permanent habits that optimize the way that they relate to students and convey information. Discernible student outcomes are the point of optimizing professional development. Teachers and administrators and the school- and district-level must align their efforts in a measurable, traceable way, in order to make sure that actual steps are being taken toward a goal of raising student achievement at all levels.

**Resources:**

[Why Professional Development Matters](#)

[Creating Effective District Professional Development Plans](#)

[Seven Standards for Effective Professional Development](#)

[Characteristics of Effective Professional Development: A Checklist](#)

[Teaching the Teachers: Effective Professional Development in an Era of High-Stakes Accountability](#)

[What Works in Professional Development?](#)