

A Guide for

Increasing the Effectiveness of

**Professional Development**

in Schools and Districts

Vermont Department of Education  
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# A Guide for Increasing the Effectiveness of Professional Development In Schools and Districts

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## Introduction and Purpose of This Guide

This guide is for superintendents, principals, staff developers, teachers and professional development providers-in short for anyone who has a stake in ensuring that professional learning has greater impact on improving practice and increasing student learning. The purpose of this guide is to help schools, districts, and SU/LEAs put in place processes and supports needed to make professional development more effective to meet key student learning and school improvement goals. The guide defines effective professional development and provides tools to self-assess current professional development programs and processes and plan, implement, and evaluate professional learning. Work sheets are available in MSWord in a separate document.

Effective professional development depends upon the quality of planning, implementation and evaluation. Within this guide, planning, implementation and evaluation are presented in steps with research-based information and tools and worksheets that can be used to develop a professional development plan, ensure implementation, and evaluate results.

The information and processes in this guide are based upon current research about educator learning, change, and organizational development as well as the National Staff Development Council/Learning Forward definition and standards for staff development which are in the Appendices. To be user friendly, information is condensed. The last section includes excellent references used in creating this guide that will provide much greater detail and depth.

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# **Part I:**

## **The System**

### **Setting the Stage for Professional Development that Improves Teaching and Student Learning**

## Effective Professional Development

In this guide, the term “professional development” does not refer to an event or events, but rather to ongoing, sustained, inquiry-based learning that occurs at least weekly throughout the school year. This type of professional learning provides focused, deep learning that builds upon prior learning resulting in positive changes in practice and increased student learning.

Research shows that effective leaders and teachers increase student success and that the primary contributor to making educators effective is high-quality, continuous professional learning. High-quality professional learning is different than professional development many educators have grown accustomed to. Research has identified key elements required for professional learning that will change professional practice and that can result in increased student learning. National Staff Development Council/Learning Forward has divided those elements into Context, Process, and Content. Often, professional development content is given most consideration but without a context that supports professional learning and an appropriate research-based learning process, there will be little change in educator practice. The National Staff Development Council/Learning Forward Standards for Staff Development are in the Appendices of this guide. Detailed explanations of each standard and the definition are available at [www.learningforward.org](http://www.learningforward.org).

### Making the Most Out of Professional Development

From	To
Professional development as an event	Professional development as a learning process
Focus on planning, attending and evaluating a professional development event	Focus on planning, implementing and evaluating learning and change in educator practice
Adult need centered	Student need centered
Professional development through inservice day presentations	Schools plan a continuum of learning throughout the year focused on student learning goals
Focus on individual development	Focus on collaborative learning with a focus on team, school and system improvement
Presenter transmits knowledge, skills and strategies	Facilitator leads inquiry into teaching and learning
Pull out training, workshop or course	Job-embedded learning featuring teacher collaboration and use of coaches
Fragmented, piece-meal, one-shot	Driven by clear, coherent, long-term strategic plan
The latest popular program	Research based and standards based

## Why Should We Use This Guide? *(The answer may lie below)*

### Questionnaire: How Effective Has Your School's Professional Development Been?

***“...the primary purpose of staff development should be to help educators develop the insights, knowledge, and skills they need to become effective classroom and school leaders, better able to increase student learning.”***

(Hayes Mizell, Foreword National Staff Development Council's Standards for Staff Development Revised, 2001)

Answering the following questions will give you an idea about how effective your school's professional development has been in meeting the primary purpose of professional development.

- What student learning goals was the professional development designed to address?
- What specific changes in educator practice did you want to see?
- How has implementation of new practices been supported and monitored?
- Do teachers believe that the professional development improved their teaching and if so, how?
- Do teachers believe that the professional development improved the learning of their students and if so, how?
- What evidence do we have that our school's past professional development has been effective in changing educator practice and improving student learning?
- Have the practices spread?
- Was the cost of the professional development worth the results?
- Would you provide this professional development again?

***If you are not satisfied with your responses, this guide can help improve the results you get from your school's professional development!***

## Introduction to the School Self-Assessment: Components of Research-Based School Professional Development System

**Here's a tool that will help you** learn the strengths of your school's professional development program and areas needing improvement to increase effectiveness.

The School Professional Development System Self-Assessment takes an **in-depth** look at the following components that research has found are necessary to make professional development effective.

Components include:

- Focus on Student Learning and School Improvement Goals
- A Systemic Approach
- Supportive Leadership
- Data-Based Planning
- Research-Based Content
- Collaborative Learning
- Follow-up to Facilitate Implementation
- Evaluation

If your school staff is small, ask everyone to complete it. In a large school, if having the entire staff complete the assessment is too unwieldy, take a sampling representing all roles, grades, and subjects. This can begin a conversation about:

- what constitutes effective professional learning
- areas in which your current professional development system is effective
- areas in which your current professional development system could be improved
- how to improve your school's professional learning for greater effectiveness.

The School Professional Development System Self-Assessment is a beginning step toward more effective and productive professional development. The following sections of this Guide provide specific steps to help schools meet the Components of a Research-Based School Professional Development System.

**Components of Research-Based School Professional Development System: School Self-Assessment**

Major Components	Indicators				
	Circle Rating: 0= Pre-Emergent, 1=Emerging, 2=Developing, 3=Sustaining				
<b>System of Ongoing Professional Learning</b> The school's professional development system is defined in a plan and is an integral part of the system of school improvement.	0	1	2	3	The school and district have a professional development plan which may be part of the School Improvement Plan.
					Rate to what extent professional development
	0	1	2	3	<ul style="list-style-type: none"> <li>is designed collaboratively by teachers and leaders</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>is aligned with academic standards and school improvement goals</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>is based on student learning needs as well as educator needs identified through evaluation and staff input.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>contains a combination of long-term and short-term goals with specific measures of success</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>creates an ongoing cycle of continuous learning for educators that builds upon prior learning.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Is supported by resources, including grants and budget allocations, aligned to support plan goals</li> </ul>
				<ul style="list-style-type: none"> <li>is known and understood by school board, parents and community.</li> </ul>	



<b>Distributed and Supportive Leadership</b> Leadership creates an expectation of continuous learning for all staff and provides crucial supports for successful learning.	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• A leadership team that includes teachers is in place.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders expect all staff to participate in ongoing professional development</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders apply knowledge of adult learning and the change process to support staff growth.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders develop organizational structures and provide resources, including time, funding, technology, and access to data and research to support staff collaborative learning.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders organize staff into learning communities to:                             <ul style="list-style-type: none"> <li>○ focus upon student learning and school improvement goals, and</li> <li>○ develop collective responsibility for all students.</li> </ul> </li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Learning communities meet regularly within the school day.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders regularly observe and support staff implementation of new learning</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders evaluate staff regularly and require individual professional development to address specific individual needs.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Leaders participate in professional development with staff to improve their skills as instructional leaders.</li> </ul>
<b>Data-based Goals</b> Goals for professional development and school improvement are based upon student data and identified learning needs.	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Staff analyzes disaggregated student data from multiple sources to identify patterns and trends.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Staff uses community demographic information to increase understanding of their students.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• The staff discusses discrepancies and implications from the data</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Staff determines specific areas of instruction that need improvement to increase student achievement</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Staff develops measureable student improvement goals aligned with the specific areas of need</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>• Professional development goals are designed to achieve the measureable student achievement goals.</li> </ul>

<b>Research-Based PD Content</b> Professional development content is research-based and has proven to be effective in raising achievement of students of similar characteristics.	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>The PD planning process identifies specific knowledge and/or research-based teaching strategies that will address the goals to increase student learning.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Professional learning focuses on understanding what and how students are learning and on how to address students' learning needs.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Staff participates in in-depth learning about their content areas, research-based instructional strategies and classroom assessments to assist students in meeting rigorous academic standards</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Professional learning develops the attitudes, beliefs, knowledge and skills to help all students succeed.</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Educators learn how to understand and appreciate all students, create safe, orderly and supportive learning environments and hold high expectations for their academic achievement</li> </ul>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<ul style="list-style-type: none"> <li>Staff learns how to involve families and other stakeholders appropriately.</li> </ul>

<p><b>Purposeful and Collaborative Process</b> Professional learning process is purposeful, focused, ongoing, sustained, collaborative, and job embedded</p>	0	1	2	3	<ul style="list-style-type: none"> <li>The learning process incorporates adult learning theory, the change process and stages of educator development</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Professional development content and delivery are differentiated according to individual personal experience and expertise.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>A variety of professional development models are used but most learning occurs in a collaborative, school-based context</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Strategies may include collaboratively reviewing student work and achievement data, planning curriculum, instruction and assessments, and observing peers.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Staff has been trained in collaboration, group processes, conflict management, and facilitation</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Collaborative groups employ protocols to facilitate their work and keep an ongoing record of agendas and meeting notes</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Professional learning is often facilitated by staff experts and occasionally by outside experts</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Teacher leaders or coaches support staff in implementing new learning with expert modeling, observation, feedback, and coaching until the new practice is mastered</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>A research-based induction system provides new teachers and leaders with trained mentors to increase their potential to meet students learning needs.</li> </ul>
<p><b>Evaluation System</b> Professional development is evaluated in terms of changes in educator practice and improved student learning.</p>	0	1	2	3	<ul style="list-style-type: none"> <li>New practices are implemented with fidelity and reviewed for effectiveness.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Changes in educator practice and student learning are evaluated against the measures set during PD planning.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>There is regular formative assessment of the goals and implementation of the professional development plan and adjustments are made as needed.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Multiple sources of information are used for summative evaluation of the impact of professional development.</li> </ul>
	0	1	2	3	<ul style="list-style-type: none"> <li>Evaluation results are used to inform future professional development planning</li> </ul>

Drawn from:

- *Professional Learning in the Learning Profession. A Status Report on Teacher Development in the U.S. and Abroad.* School Redesign Network at Stanford University and National Staff Development Council, 2009.
- *National Staff Development Council's Standards for Staff Development (Revised 2001)*, NSDC 2001.
- National Staff Development Council's Definition of Professional Development
- *Achieving Your Vision of Professional Development, How to Assess Your Needs and Get What You Want-SERVE.* 2000.
- *Handbook on Effective Implementation of School Improvement Grants.* Center on Innovation & Improvement, 2010.
- *Student Achievement Through Staff Development.* Bruce Joyce and Beverly Showers, 2002.
- *Iowa Professional Development Model District/Building Profile*, IOWA DEPARTMENT OF EDUCATION
- *GUIDANCE ON SCHOOL IMPROVEMENT GRANTS UNDER SECTION 1003(g) OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965*, US DOE, 2010.
- *Assessing Impact, Evaluating Staff Development*, NSDC, 2002.
- *Professional Development Learning From the Best, A Toolkit for Schools and Districts Based on Model Professional Development Award Winners.* North Central Regional Educational, 1999.
- *Toolkit for Implementing the School Improvement Grant Transformation Model*, Center on Innovation & Improvement, April 9, 2010.

## Integrating Professional Development Planning into School Improvement Planning

The ongoing business of **all** schools is to continuously improve the learning of **all** their students. School improvement is a careful process of examining student data, selecting areas in need of improvement and establishing goals to realize improvement. Determining strategies to meet those goals should be based upon careful research. Interventions should be implemented carefully and studied for impact and progress toward meeting goals. Professional development requires the same careful study of data, determination of needs and causes as to why those needs exist and studying options to provide focused, specific, research-based professional learning.

Both school improvement and professional learning is about educator change. A useful tool in implementing school change and new practices is The Concerns-Based Adoption Model (CBAM). Developed by Shirley Hord and others at the Southwest Educational Development Laboratory, CBAM describes the reactions and concerns of educators during change.

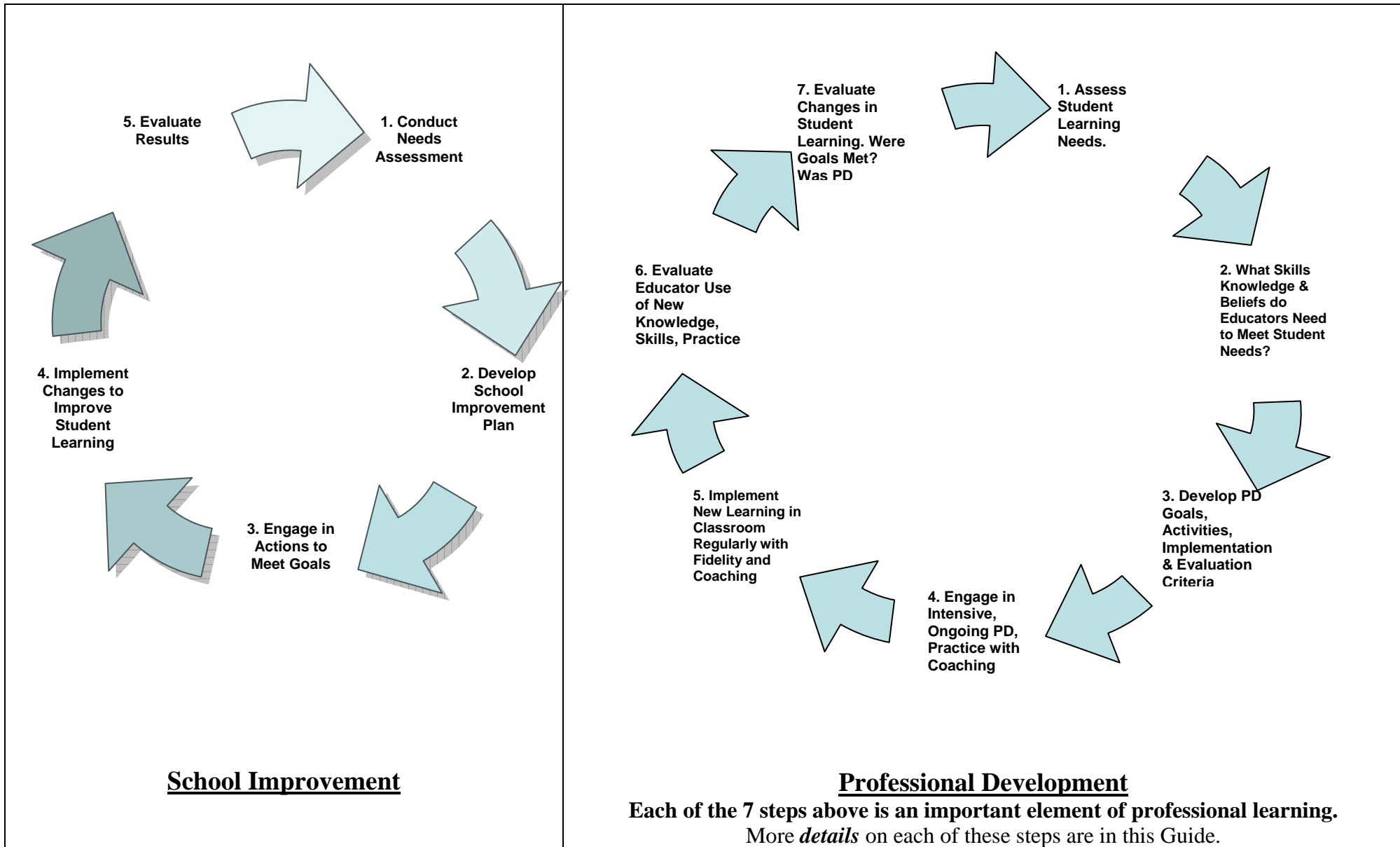
“...because the CBAM model is client-centered, it can identify the special needs of individual users and enable the change facilitator to provide vital assistance through appropriate actions. This approach helps to maximize the prospects for successful school improvement projects while minimizing the innovation-related frustrations of individuals.” Hord, S. M., Rutherford, W., Huling-Austin, L., Hall, G.E. (1987). *Taking charge of change*. For more information about CBAM and how to assist and support educators during school improvement changes, please see Hord, S. M., Rutherford, W., Huling-Austin, L., Hall, G.E. (1987). *Taking charge of change*. Austin, TX: Southwest Educational Development Laboratory or, for a quicker read go to <http://www.nationalacademies.org/rise/backg4a.htm>.

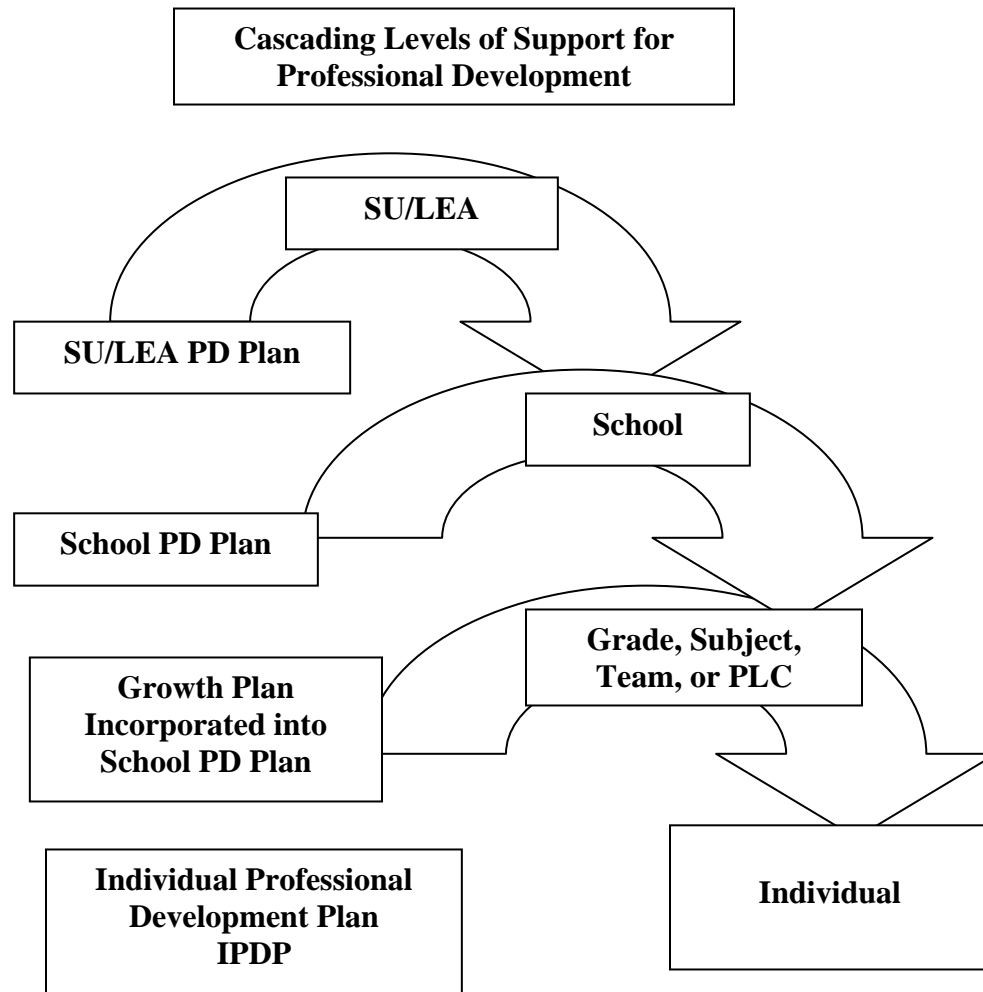
Grounded in the belief that all students can learn, effective professional development improves the school’s leadership, culture and instruction to attain high levels of learning for all students. The school and SU/LEA contexts need to support individual and group improvement by providing a clear vision for student learning with the leadership, attitudes, beliefs, time and resources to strengthen professional learning. While individual professional development is important and can improve educator practice, a significant body of research shows that collaborative learning has far greater impact upon school improvement and student learning.

“When viewed systemically, professional development is seen not just in terms of individual improvement, but also in terms of improvements in the capacity of the organization to solve problems and renew itself. Unless individual learning and organizational changes are addressed simultaneously and support one another, the gains made in one area may be canceled by continuing problems in the other.” Sparks and Hirsh, 1997, quoted in Guskey, T.R. (2000). *Evaluating professional development*.

“True professional development is a systemic process that considers change over an extended period of time and takes into account all levels of the organization.” Guskey, T.R. (2000). *Evaluating professional development*.

## The Professional Development Cycle Aligns with the Continuous School Improvement Cycle





**Levels of Need for Professional Development**

**SU/LEA Level:** based on data from all schools’ assessment scores, new curriculum or initiatives, state or federal initiatives, etc.

**School Level:** based on aggregated classroom data, perceptions of students and families, school-wide data, issues, or whole school initiatives

**Grade, Subject, Team or PLC Level:** based on data indicating needs of a specific subgroup of students or in a specific content area

**Individual Level:** based on classroom data, student perceptions, supervision/evaluation, teaching standards, or induction for new teachers or for new assignments, etc.

**The Interdependence of Professional Learning at All Levels.** To support an individual in learning and changing practice, the entire school must be learning and providing systems to support change. Likewise, the district/Su must lead and support learning and change.

## The Role of Leadership and a Professional Development Team

Whether at the supervisory union or school level, leaders build capacity of individuals, teams, schools and districts to improve schools and student learning through effective professional development. School leaders demonstrate their understanding of the importance of professional learning by setting high expectations and providing support for ongoing, job embedded, collaborative learning focused upon increasing student learning. School leaders participate with staff and hold staff accountable for improved student results.

To ensure a professional learning that is systemic and cohesive to meet student achievement goals, school leaders may want to create a professional development team.

School Leaders should:

- Choose members for the team who demonstrate a commitment to improving teaching and learning for all students.
- Choose members who have high credibility with staff members to ensure buy-in.
- Ensure team members are aware of the research on what constitutes high-quality professional development and understand the important components of an effective program.
- Make clear to all staff who will have input into professional development design, what type of input that will be and the decision-making process and how final decisions will be made.
- Provide enthusiastic support and resources, including time and organizational structure, necessary for professional learning.

A Professional Development Team:

- Ensures coherence and that professional learning supports student learning and school improvement.
- Brings a variety of perspectives, assists with staff buy-in, and spreads the work
- Oversees the entire professional development process including needs identification, planning, implementation and evaluation.
- Works closely with school leadership and the school improvement team
- Develops and/or revises the school's vision for professional development to direct the planning, implementing and evaluating new professional learning.
- Elicits staff input at critical stages
- Informs leadership and staff regularly
- Links with SU/LEA professional development teams and work



# **Part II:**

# **Making**

# **Professional Development**

# **Have More Impact**

## Step 1: Conduct a Needs Assessment

You must know your needs in order to plan how to meet them. For professional development to improve student learning, professional learning needs must be based upon student learning (or factors that affect learning) needs.

A needs assessment:

- Helps you build on your existing strengths.
- Helps develop a vision and imperative for improvement and/or reform .
- Helps you determine what kind of help you need.
- Helps you determine whether you need outside help.
- Lays the foundation for a strong relationship with an external provider. Hassel, B. and Steiner. L. (2004). *Guide to working with external providers*.

A good needs assessment should:

- Include input from a *variety* of data sources.
- Provide *specific details* about student learning needs.
- Provide information about the effectiveness and needs of the organizational systems.
- Help you *prioritize needs* allowing you to focus on a few most strategic areas.

A needs assessment can be conducted on a whole school/SU level, or by grade, subject, team, PLC or individual levels. It should be reviewed regularly and updated to reflect staff learning and changes in student data.

### Steps in Conducting a Needs Assessment:

1. **Review Goals for Student Learning:** Goals should be specific to the district or school, reflecting the applicable state standards and grade expectations. These are what students will know and be able to do as a result of instruction and should be stated in terms of actions students can do to demonstrate their learning. (e.g. Students will be able to solve problems. Students will be able to work constructively in groups. Students will identify similarities and differences.)
2. **Analyze Student Data:** Use multiple indicators of student success including student achievement data disaggregated by subgroups (NECAP, formative and benchmark assessments), student demographic data that may reveal important factors for subgroups that influence achievement, and other sources. Other important information to study includes student, parent, community satisfaction/perception surveys, discipline referrals, absenteeism, special education referrals, graduation and dropout rates as well as post-graduation activities. For more information on using different types of data go to <http://eff.csuchico.edu/downloads/MMeasure.pdf>
3. **Conduct a Gap Analysis** to show the gaps between where students are supposed to be achieving and where assessments indicate they are actually achieving. Look for gaps between leadership and staff perceptions of school success and perceptions of students, parents, and community.
  - a. What are the specific areas in which students are not meeting learning goals? Instead of stating that student reading scores are low, state the specific areas such as word identification and vocabulary. This will lead to the development of a specific professional development goal.

- b. Which students need to improve their learning? All students or specific subgroups?
  - c. Develop a student learning goal stating what specific group of students will improve which specific area of knowledge or skill by what percent, by when.
- 4. Consider the Context and Possible Barriers to Student Success**
- a. Does the written curriculum include this content?
  - b. Is it being taught in all classrooms prior to testing?
  - c. Are students in those subgroups meeting these goals in some teachers' classes? If so, look carefully at successful teacher practices, attitudes and beliefs to determine what is different in their classes?
    - i. Do these teachers spend more time on this content?
    - ii. Do these teachers ensure students have mastered pre-requisite knowledge and skills before beginning this content?
    - iii. What differences exist in instructional materials?
    - iv. What differences are there in instructional approaches?
    - v. What knowledge and skills do the successful teachers have that less successful teachers lack?
    - vi. Do successful teachers demonstrate different beliefs, attitudes, and behaviors toward students and the subject area?
- 5. Find the Root Cause.** What is the major barrier preventing some students from achieving? To know if you have uncovered the root cause, ask these questions:
- a. Would the problem have occurred if the cause had not been present?
  - b. Would the problem reoccur if the cause was corrected?
  - c. For more information on finding root cause go to <http://rpd.net/adm/uploads/admin/1242RootCauseAnalysisToolkit.pdf>
- 6. Determine Educator Learning Needs**
- a. Based on the specific student learning goal developed in # 3c above and the answers to #4 above what *specific* knowledge, skills, attitudes, and beliefs do teachers need to meet the needs of students who are not succeeding? ***This is a very important step.*** Careful identification of specific knowledge, beliefs or teaching practices that enable non-achieving subgroups to be successful is key to planning professional learning that will lead to student success.
  - b. Conduct gap analysis
    - i. Assess teachers' current levels of knowledge of the content and effective teaching practices. Assess teachers' beliefs and attitudes about the subgroups that are not successful and how that might influence their behavior toward and expectations for those students.
    - ii. Identify teachers whose students are succeeding in these areas.
    - iii. Which teachers do not have the necessary specific knowledge, skills, and beliefs to ensure all students learn this content?
    - iv. It is important to differentiate which teachers need which professional development in specific areas to avoid frustration. Recognize individuals' knowledge and skills by asking them to provide professional learning experiences for other less successful teachers. They will be excellent resources to help all students improve their achievement and the experience of collaborating with other adults will foster a culture in which all teachers are responsible for the learning of all students.

***A needs assessment form follows.***

**Needs Assessment Worksheet**

Using the prompts in Step 1, fill in the information below.

Student Learning Goal:

Current Student Achievement Data:

Is there a Gap?

On which specific content?	For which sub-groups of students?	What is the root cause?	What specific group of students will increase achievement in what knowledge or skill by what percent by when?	What knowledge, skills, and beliefs do teachers need to close the learning gap?

## Step 2: Be Clear About Results You Need from Professional Development and How You Will Know if They Have Been Achieved?

### **Setting Professional Learning Goals and Planning to Evaluate Impact of Professional Learning**

In completing the Needs Assessment in Step 1, you determined:

- Specific areas in which students were not achieving and developed a goal to increase the numbers of students achieving.
- The knowledge, skills and beliefs teacher need to close student achievement gaps.

1. **Next**, reflecting on the knowledge, skills and beliefs teacher need to close the gaps, **develop Desired Outcomes and Specific Measures of Success.**

- Desired Outcomes of Professional Learning should be stated in terms of what the educators will know and be able to do as a result of professional learning and should be very specific in order to close the gaps between the required teacher knowledge, skills, and beliefs and their current practice. Desired outcomes will be evaluated in the summative evaluation to determine to what the extent once the new knowledge and skills have been fully integrated into routine practice.
- Measures of Success: How will you know if the professional development was successful? What changes will you see in teacher practice? How often will teachers implement their new learning in the classroom and how will they know if they are implementing correctly? How will information on teacher implementation be collected? What changes will there be in student learning and what will the indicators be? Measures of Success should include benchmarks to be checked regularly (formative evaluation) to determine if the program is succeeding or needs any changes. An evaluation plan should include a description of how and when progress monitoring will occur and who will be involved in both formative and summative evaluations.

2. **Determine who needs to participate in the learning.** Student goals will help determine who needs to participate. Is this a whole school initiative in which all teachers need to participate? (e.g. a new student behavior program to be implemented school wide.) Is this appropriate only for specific grades or content areas? It's important to target professional learning as much as possible, including only those teachers identified in the needs assessment.

3. **Limit Learning Initiatives:** Focus on a few areas of professional learning to ensure deep implementation to achieve results. Many initiatives with superficial implementation of professional learning will not improve student results. Sometimes schools pursue too many initiatives at once, leaving many teachers feeling overwhelmed and spread so thin they cannot engage in the depth of learning required for change. Determine how many initiatives educators are involved in and then eliminate those that are least effective in achieving improvement goals

4. *A Worksheet on Setting Professional Learning Goals follows.*

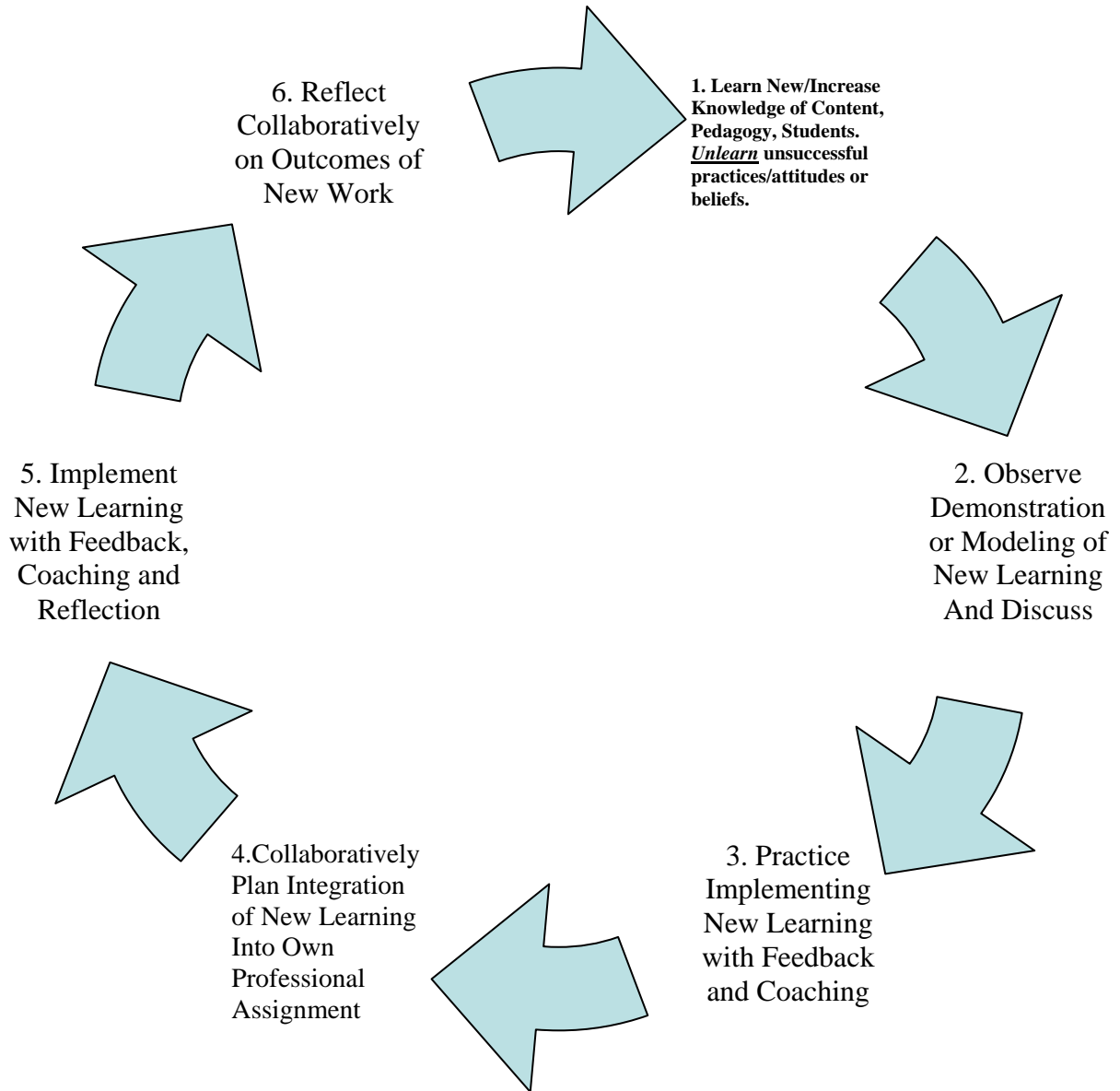
**Setting Professional Learning Goals: Worksheet**

Using the prompts in Step 2, fill in the appropriate information below

What knowledge, skills, and beliefs do teachers need to close the learning gap?	What will educators know and be able to do as a result of PD? (desired outcomes)	Who needs to learn this? (Individuals? Teams? Entire Staff?)	What observable changes will occur in classroom practice?	Measures of Success: Improved Student Achievement

## Step 3: Plan How Professional Learning Will Occur

### Theory of Change: Essential Steps in Changing Educator Practice Through Effective Professional Learning



Adapted from Killion, *Assessing the Impact*

The research of Bruce Joyce and Beverly Showers makes clear that just learning theory will not result in change in practice. To transfer new learning into routine practice requires not only study of theory but modeling, practice and coaching. Only when the study of theory, modeling, and practice are supported with coaching, will there be a significant transfer of the new knowledge into routine use.

According to their research:

- After studying theory, only 10% of participants would have a thorough knowledge and only 5% would gain strong skill. None would be able to apply the new learning into classroom practice.
- When demonstrations were added into the professional development, the percent of participants with a thorough knowledge increased to 30% and 20% gained strong skill. Again, however, none would be able to apply the new learning into classroom practice.
- By having participants practice applying the new learning after studying theory and seeing demonstrations, 60% gained a thorough knowledge and 60% also gained strong skill. As a result of these combined learning experiences, 5% would be able to apply the new learning into classroom practice.
- Once coaching of participants was added, 95 % gained a thorough knowledge and 95% also gained strong skill. **95% were able to apply the new learning into classroom practice.** Joyce, B. and Showers, B. (2002). *Student achievement through staff development.*

### **Planning to Support Educators in Implementing Their New Learning**

“One of the most common and serious mistakes made by both the administrators and leaders of a change process is to presume that once an innovation has been introduced and initial training has been completed the intended users will put the innovation into practice. A second serious mistake is to assume that all users ... will react in similar ways.” Marcia Kalb Knoll in Forward to Hord, S. M., Rutherford, W., Huling-Austin, L., Hall, G.E. (1987). *Taking Charge of Change.*

Expectations for implementation expectations need to be made clear at the outset of a professional learning experience. Leadership should establish their expectations that the new learning will become regular classroom practice and that teachers will be monitored on implementation of new knowledge, skills and practices. The support of leadership is essential to encourage teachers to implement new practices and to provide teachers time to observe each others classes and meet to discuss their practice.

Research also shows that educators learn best within their own context which also can support classroom demonstrations, practice and coaching. In addition to coaching, educators can be supported in implementation by peers through teams or Professional Learning Communities. The term “Professional Learning Communities” has many interpretations. To be successful, PLCs need to be carefully purposed, structured, facilitated and evaluated. Two excellent guides for implementing PLCs are *A Facilitator’s Guide to Professional Learning Teams*, written by Ann Jolly and *Learning by Doing, A Handbook for Professional Learning Communities at Work* by Richard DuFour, Rebecca DuFour, Robert Eaker, and Thomas Many. An article which discusses characteristics and advantages of PLCs can be found at: <http://teachingtoday.glencoe.com/howtoarticles/professional-learning-communities-hold-promise-for-schools>.



**Developing a Theory of Change**

Improving/changing educator practice requires a common understanding of the desired results and a well-designed and articulated process, almost a roadmap, of what will be done to reach the desired results. “A program’s theory of change specifies the goals, the inputs, the resources required to implement the activities, and the activities – a series of actions that are likely to lead to the attainment of both the short-term outcomes and the long-term goals (the results).” Killion, J. (2002). *Assessing Impact, Evaluating Staff Development*. The activities described in the theory of change must be grounded in what research has shown are the most effective adult learning strategies.

The theory of change shows the big picture of how different inputs and activities relate to each other and build on each other leading to the intermediate changes in educator knowledge, skills and practice needed to reach the desired outcome of improved student learning.

**Sample Theory of Change/Logic Model**

**Goal: All students will score proficient or higher on common assessments of math numbers and operations**

<b>Inputs</b> (resources, personnel, facilities, equipment)	<b>Activities/Processes</b>	<b>Initial Outcomes</b>	<b>Intermediate Outcomes</b>	<b>Intended Results</b>
Data team formed	Data team trained in analyzing student achievement data	Team determines specific areas and specific students needing greater support	Teachers are grouped according to their levels of knowledge and skills for differentiated professional learning	All students receive strong initial instruction in numbers and operations with re-teaching as needed
Math Teacher Leader trains teachers	Teachers trained in a variety of strategies for sound first instruction and re-teaching -See demonstrations -Practice strategies	Teachers have increased knowledge and good skills for consistent instruction of numbers and operations	Teachers implement the new strategies in their classroom with coaching support	

Special educator	Works with teachers and math teacher leader to develop strategies for specific students	Math teacher and special educator co-teach the unit	All students receive more attention and differentiated instruction to meet individual needs	Achievement gap between subgroups of students decreases
Form math team	-Develop common assessments -Regularly examine student data to determine growth -Problem solve and develop interventions	All teachers regularly conduct progress monitoring on all students' learning with timely interventions	Students receive support so they do not fall behind	

Adapted from Killion: Assessing the Impact

**Advantages to Job-embedded Professional Development**

“Job-embedded professional development (JEPD) refers to teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers’ content-specific instructional practices with the intent of improving student learning (Darling-Hammond & McLaughlin, 1995; Hirsh, 2009). It is primarily school or classroom based and is integrated into the workday, consisting of teachers assessing and finding solutions for authentic and immediate problems of practice as part of a cycle of continuous improvement (Hawley & Valli, 1999; National Staff Development Council, 2010). Job-embedded professional development is a shared, ongoing process that is locally rooted and makes a direct connection between learning and application in daily practice, thereby requiring active teacher involvement in cooperative, inquiry-based work (Hawley & Valli, 1999). High-quality job-embedded professional development also is aligned with state standards for student academic achievement and any related local educational agency and school improvement goals (Hirsh, 2009). From Croft, A., Coggshall, J., Dolan, M., Powers, E., Killion, J. (2010). *Job-embedded professional development: what it is, who is responsible, and how to get it done well.*

When done well, with support from school leadership, job embedded professional development can result in powerful learning. Some examples of individual JEPD include mentoring, coaching, observing another teacher, and individual action research concerning student learning or school issues. Teachers feel a greater sense of ownership and investment in their learning. Job-embedded professional development can:

- Be less expensive than courses, workshops and conferences that often produce few changes in practice.
- Eliminate registration fees, travel costs, and time away from students.
- Occur in many different ways both as individual or collaborative learning.

Some examples of *collaborative* JEPD are study groups, development of curriculum, assessments, or lesson plans, aligning curriculum to standards, examining student data or student work, lesson study, and collaborative action research. For more information on learning models, please see Yendol-Hoppey and Fichtman Dana (2010). *Powerful professional development, building expertise within the four walls of your school.*

Collaborative JEPD has all the advantages of focusing on an individual's students and school with the benefit of different perspectives, skills and knowledge added to the work.

To be effective, collaborative JEPD needs to have certain elements in place including:

- Leadership support and oversight,
- clearly defined goals and expectations,
- trained facilitation,
- designated meeting time within the school day,
- agendas, and
- meeting notes to track new learning, progress toward goals, and decisions.

Because most teachers have functioned in relative isolation, they will need training in:

- group work,
- effective collaboration and facilitation,
- use of protocols to guide discussions, problem solving and study of student work.

A word of caution about JEPD: "In the absence of a theory of change, job-embedded professional development can become an unsystematic piling up of a group of unrelated experience for teachers as they jump from strategy to strategy and/or collect data here and there without intentionality or purpose." Yendol-Hoppey and Fichtman Dana. (2010). *Powerful professional development, building expertise within the four walls of your school.*

### **Do you need an external provider?**

As with any professional development experience and provider, before identifying an internal or external provider, you need to be clear on the outcomes you want for student learning and the changes needed in educator practice to produce student learning. If the knowledge and expertise can't be found in the school or district, you may need to bring in a consultant. Be sure the external (or internal) provider will create a customized program to meet your needs instead of expecting you to buy into an existing course or program that may have little correspondence to your needs. Develop a specific outline to present to potential providers stating:

- Your needs in terms of student learning and educator learning.
- Specific outcomes you expect as a result of hiring an external provider.
- Your theory of change.
- The exact services you would like the external provider to deliver.
- **Your** selection criteria.
- Any logistical concerns or needs.

You need to be in the driver's seat and interview potential providers to determine:

- If their services will be aligned with your established goals.
- How their services will contribute significantly to your long-term school improvement strategy.
- How willing and able they are to customize their services to meet your theory of change.
- If the content of their professional development is research based.

- If their services will result in building capacity of your educators instead of making you dependent upon their services in the future.
- How the professional development they provide will meet the NSDC Standards for Staff Development and the NSDC Definition of Professional Development (see Appendix).

Adapted from: Hassel, B. and Steiner. L. (2004). *Guide to working with external providers*.

**Planning How Professional Learning Will Occur Worksheet**

Fill in the professional learning goals, decide which learning mode(s) is best *for each* learning component, determine necessary resources, consult with Administration about time for learning, and determine measures of success.

<b>Professional Learning Goals or Questions</b>	<b>5 Learning Components Needed to Implement New Learning in Classrooms (This aligns with the Theory of Change diagram on page 24)</b>	<b>Learning Modes and By When will This Be Completed?</b> (examples: Book studies, Webinars, Podcasts, Videos, Lesson Study, Action research, Coaching, PLCs, Workshop, Visit another classroom or school, Course)	<b>What Resources Will be Needed?</b> (examples: Internal facilitator, External Facilitator, Learning Materials, Technology, Training in collaborative group work, Protocols Agendas, Reporting format, Associated expenses)	<b>How will Time be Allocated?</b> (examples: Common Planning time, substitutes, early student release or late start, Combining classes)	<b>Measures of Success <u>And</u> How will these be Monitored?</b>
	How will we learn theory to understand research-based practice?				Learning Theory:
	How will we observe the practice/ have it modeled?				Observe
	How will we practice using the new learning/practice?				Practice

	How will we receive regular feedback and coaching to implement this in our classroom?				Implementation Feedback and Coaching
	How will we collaborate with colleagues using the new practice?				Collaboration about Implementation

Adapted from Joyce and Showers, and Dana and Yendol-Hoppey

### Theory of Change/Logic Model

**Goal:**

<b>Inputs</b> (resources, personnel, facilities, equipment)	<b>Activities/Processes</b>	<b>Initial Outcomes</b>	<b>Intermediate Outcomes</b>	<b>Intended Results</b>

Adapted from Killion: Assessing the Impact

## Step 4: Evaluate Professional Development

*(This section is adapted from Thomas Guskey, Evaluating professional development.)*

Because professional development is a major tool for school improvement and increased student learning as well as a major expenditure in time, energy and money, evaluating its effectiveness is crucial.

- From which professional learning initiatives are we seeing the best results?
- Have educators' practices improved? How do we know?
- Is our school becoming more supportive of ongoing teacher learning?
- Is our school culture improving and becoming more focused on learning for everyone?
- Are more students meeting standards?
- Are some professional learning initiatives producing little change in educator practice and student learning?
- Was the investment of time, energy and funds in professional development worth it?

Planning to evaluate professional development is an often neglected part of the professional development planning process. Evaluating change in educator practice and student learning cannot occur after professional development unless it has been carefully addressed during the planning process. The ability to evaluate the impact of professional development relies to a good extent upon the clarity of purpose and goals defined in Step 2 Setting Professional Learning Goals. While planning the purpose and goals for professional development, the following evaluation questions should be considered.

- What questions should we address?
- How will we gather information?
- What should we measure or assess?
- How will we use the information?

Thomas Guskey tells us that there are five critical levels of professional development evaluation. Levels 1 and 2 are important parts of formative evaluation and can indicate if changes are needed in the content, process, or context to make the professional development more successful.

Level 1 evaluation looks at participants' reactions and their level of initial satisfaction with the experience. Its purpose is to improve the program design or delivery and is the most often used evaluation measuring things such as comfort of participants, participants' views of the presenter, the content and activities. Its important to use this lens for job embedded professional development such as professional learning communities, action research, etc. as well as the more traditional workshops or courses. If participants are not satisfied at this level, chances for success are limited.

Level 2 evaluation looks at participants' learning – did the participants acquire the intended knowledge and skills? The purpose of this level of evaluation is also to improve the program. Participants' learning includes observing demonstrations or modeling of the new practice and being able to practice using the new knowledge with feedback. This level of evaluation should carefully look at these areas.

Level 3 evaluation is particularly important in terms of school improvement because it focuses upon the impact of the professional development on the organizational (school/district) climate



and procedures and the level of organizational support and change. The purpose is to improve organizational support, the professional learning culture, and to inform future school change efforts.

Level 4 evaluation studies participants' use of new knowledge and skills, in other words, the degree and quality of implementation. The purpose here is to document and improve the implementation of program content. When this evaluation occurs will depend upon the expectations for implementation and the duration of the professional development. This can serve formative as well as summative purposes.

Level 5 evaluation looks at student learning outcomes. Has the professional development met the original goals and increased student knowledge, skills or behaviors to the desired extent?

When looking at issues of school improvement and improved teaching and learning, evaluations of levels 3, 4 and 5 are most critical but Tom Guskey is clear that "...each higher level builds on the ones that come before. In other words, success at one level is necessary for success at the levels that follow."

It's important for the Professional Development Team, school leadership and faculty to process the evaluation results to inform continuous improvement in the professional development program.

## Section 9: References

- Beers, S. (2007). *Strategies for designing, implementing and evaluating professional development*. Alexandria, VA: Association for Supervision and Curriculum Development
- Bernhardt, V.L. (2002). *The school portfolio toolkit. A planning, implementation, and evaluation guide for continuous school improvement*. Larchmont, NY: Eye on Education, Inc.
- Bernhardt, V.L. (2003). *Using data to improve student learning in elementary schools*. Larchmont, NY: Eye on Education, Inc.
- Collins, D. (2000). *Achieving your vision of professional development. How to assess your needs and get what you want*. Greensboro, NC: The Regional Educational Laboratory at SERVE.
- Croft, A., Coggs, J., Dolan, M., Powers, E., Killion, J. (2010). *Job-embedded professional development: what it is, who is responsible, and how to get it done well*. Washington, DC: National Comprehensive Center for Teacher Quality.
- DuFour, R., DuFour, R., Eaker, R., Many, T. (2006). *Learning by doing, a handbook for professional learning communities at work*. Bloomington, IN: Solution Tree.
- Guskey, T.R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Haslam, M.B. (2010). *Teacher professional development evaluation guide*. Oxford, OH: National Staff Development Council.
- Hassel, B. and Steiner, L. (2004). *Guide to working with external providers*. Naperville, IL: Learning Point Associates.
- Hassel, E. (1999). *Professional development: Learning from the best*. Oak Brook, Illinois: North Central Regional Educational Laboratory.
- Hord, S. M., Rutherford, W., Huling-Austin, L., Hall, G.E. (1987). *Taking charge of change*. Austin, TX: Southwest Educational Development Laboratory.
- Jolly, A. (2005). *A facilitator's guide to professional learning teams*. Greensboro, NC: SERVE.
- Joyce, B. and Calhoun, E. (2010). *Models of professional development, a celebration of educators*. Thousand Oakes, CA: Corwin.
- Joyce, B. and Showers, B. (2002). *Student achievement through staff development* (3<sup>rd</sup> ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Killion, J. (2002). *Assessing impact, evaluating staff development*. Oxford, OH: National Staff Development Council.
- Killion, J. and Roy, P. (2009). *Becoming a learning school*. Oxford, Ohio: NSDC.

National Staff Development Council. (2001). *Standards for staff development* (Rev. ed.). Oxford, OH: Author.

Reeves, D.B. (2010). *Transforming professional development into student results*. Alexandria, VA: ASCD.

Schmoker, M. (1996). *Results: the key to continuous school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Wei, R.C., Darling-Hammond, L., Andree A., Richardson, N., Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX.: National Staff Development Council.

Yendol-Hoppey, D. and Fichtman Dana, N. (2010). *Powerful professional development, building expertise within the four walls of your school*. Thousand Oakes, CA: Corwin.

## Appendix A

### National Staff Development Council

#### Definition of Professional Development

The term “professional development” means a comprehensive, sustained, and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement --

(A) Professional development fosters collective responsibility for improved student performance and must be comprised of professional learning that:

(1) is aligned with rigorous state student academic achievement standards as well as related local educational agency and school improvement goals;

(2) is conducted among educators at the school and facilitated by well-prepared school principals and/or school-based professional development coaches, mentors, master teachers, or other teacher leaders;

(3) primarily occurs several times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that —

(i) evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;

(ii) defines a clear set of educator learning goals based on the rigorous analysis of the data;

(iii) achieves the educator learning goals identified in subsection (A)(3)(ii) by implementing coherent, sustained, and evidenced-based learning strategies, such as lesson study and the development of formative assessments, that improve instructional effectiveness and student achievement;

(iv) provides job-embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom;

(v) regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging state academic achievement standards;

(vi) informs ongoing improvements in teaching and student learning; and

(vii) that may be supported by external assistance.

(B) The process outlined in (A) may be supported by activities such as courses, workshops, institutes, networks, and conferences that:

(1) must address the learning goals and objectives established for professional development by educators at the school level;

(2) advance the ongoing school-based professional development; and

(3) are provided by for-profit and nonprofit entities outside the school such as universities, education service agencies, technical assistance providers, networks of content-area specialists, and other education organizations and associations.

## Appendix B

### *Learning Forward (formerly National Staff Development Council)*

#### **Standards for Professional Learning**

(Revised 2011)

**Learning Communities:** Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

**Leadership:** Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

**Resources:** Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

**Data:** Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

**Learning Designs:** Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

**Implementation:** Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change.

**Outcomes:** Professional learning that increases educator effectiveness and results for all students aligns its outcomes with ed students aligns its outcomes with educator performance and student curriculum standards.