

**CURRENT RESEARCH**

# PROFESSIONAL DEVELOPMENT:

An Effective Research-Based Model

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The role of the teacher in the success of every student is of paramount importance in all educational situations. The Federal Government recognizes this in calling for “highly qualified” teachers for all students (No Child Left Behind, 2002). A part of the success of every teacher is highly dependent upon his or her knowledge and skill. A part of every teacher’s knowledge and skill is dependent upon his or her training. No longer can schools rely on teachers having and maintaining their own professional knowledge. “Sustained and continuous professional growth toward effective... instruction is every educator’s and every school’s responsibility” (Learning First Alliance, 2000, page 2). Professional development is necessary for every teacher to be effective in every teaching situation (Jones, 1990).

## PROFESSIONAL DEVELOPMENT DEFINED

The terms **staff development**, **in-service**, and **professional development** are often used interchangeably. For the purposes of this paper, professional development is used to describe all of these categories of training. Professional development focuses on knowledge, skills, and attitudes required of teachers, administrators, and other school employees that are directed toward all students learning at high levels of achievement (Sparks and Richardson, n.d.). Educators need to continually update their knowledge and skills throughout their careers, just as professionals in any field must do.

Professional development can be viewed in two categories—pre-service and in-service. Pre-service professional development occurs before the individual’s first job and in-service professional development occurs after that first job begins. Regardless of the category of professional development one considers, there is ample evidence to guide decision-making about what high-quality professional development must entail.

*“...considerable evidence supports the conclusion that the differences in achievement between students of mainstream and nonmainstream backgrounds are not the result of the differences in their ability to learn, but rather of differences in the quality of instruction they have received in school.”*

—Association for  
Supervision and  
Curriculum  
Development, 1995

## THE RESEARCH BASE FOR EFFECTIVE PROFESSIONAL DEVELOPMENT

Numerous researchers have studied the characteristics of and factors related to successful professional development (Darling-Hammond, 1997; Darling-Hammond, 1999; Gersten, Chard, and Baker, 2000; IASA, 1996; Joyce and Showers, 1988; Showers, Joyce, and Bennett, 1987; Sparks, 1983; Sparks and Hirsch, 1997). The body of evidence accumulated over more than 40 years provides research-based conclusions that can guide the development of effective professional development. Following are the major conclusions that can be drawn from the existing body of evidence:

**What the teacher believes about teaching before becoming a teacher influences what the teacher does when teaching.** Professional development provided for teachers at both the pre-service and in-service levels must help teachers take a look at their belief systems in order to help them develop accurate and sound beliefs about teaching.

**Teachers are positive about all opportunities to learn.** Evidence strongly suggests that teachers want professional development. They know they often need assistance in improving their instruction and welcome any opportunity to do so.

**Professional development should be directly focused on the curriculum and programs teachers are teaching.** In order for professional development to be effective, it must relate directly to what teachers are doing every day. The most effective professional development is focused specifically on the materials and programs the teachers are using for instruction. General types of training are much less effective than specific ones.

**There are four critical components to help teachers learn new strategies and skills: (1) presentation of theory, (2) demonstration of the strategy or skill, (3) initial practice in the workshop, and (4) prompt feedback about their teaching.** Each of these components must be included in any model for effective professional development. The evidence supporting these elements is extremely strong.

**In order for teachers to retain and apply new strategies, skills, and concepts, they must receive coaching while applying what they are learning.** Coaching can involve an expert in the area or can come from a peer. The important thing is that the teacher has someone to interact with and receive feedback from while trying something new.

**Effective professional development is ongoing.** “One-shot” in-service sessions are not effective. To ensure success, the professional development must be spread over time to accomplish the goals and objectives of the program.

**Initial enthusiasm on the part of teachers for the training is reassuring for the trainers, but has little influence on learning.** It is nice to have enthusiastic teachers at the beginning of any training, but the design of the training has more influence on the teacher’s ability to learn. It is possible to overcome negativism through effective professional development.

**The design of the various sessions in the professional development is the most important factor influencing its success.** The training must be practical and helpful to the teacher. It must be delivered in a way that engages teachers and provides them with what they need to improve classroom instruction. The time of day when it is held, the persons—whether teacher or administrator—who plan and lead it, and the location of the training are not as important as the actual training itself.

**Individual teaching styles and value orientation do not usually influence teachers’ abilities to learn.** Well-designed professional development can have an impact on teachers regardless of how they teach or the values they bring with them.

Given these conclusions, what is an appropriate model for effective professional development?

## A MODEL FOR EFFECTIVE PROFESSIONAL DEVELOPMENT

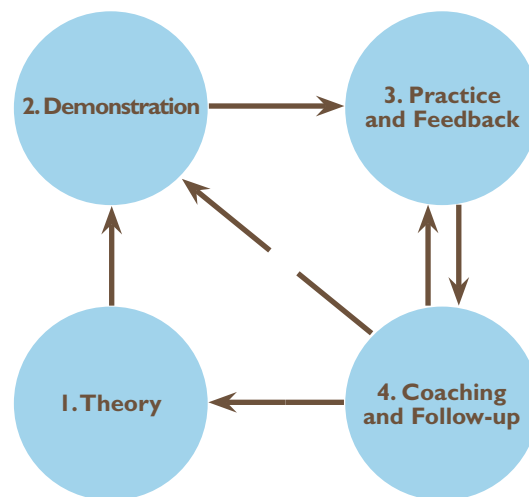
Figure 1 presents a model for effective professional development based on the conclusions discussed on the previous pages. As this model is implemented, it must take into account the elements of effective adult learning theory (Sparks, 2001). Each component of this model plays a significant role in the process of professional development (Learning First Alliance, 2000).

**1. THEORY:** The teacher must understand the underlying research base and rationale for the new instructional strategy, skill, or concept being presented. Only those ideas supported by scientific research as capable of improving student achievement should be included (Armbruster and Osborne, 2001). For example, if teachers are learning strategies to use to develop fluency, terminology must be defined, research supporting the concept must be presented and discussed, and an explanation of the relationship between fluency and the other aspects of effective reading instruction must be presented.

**2. DEMONSTRATION:** This step in the process provides the teacher an opportunity to observe a model of what is being taught. This demonstration may be provided with actual students or through a video. If teachers are learning to teach a comprehension strategy, such as summarizing, they must see someone teach the strategy.

**3. PRACTICE AND FEEDBACK:** Immediately following the demonstration, within the session, opportunities to practice what has been demonstrated are provided and immediate feedback is given. For example, if teachers are learning to take an oral reading sample, they must immediately practice this procedure with a student or use an audio or video tape to practice the coding process. The trainer must then provide each teacher with feedback on how well he or she recorded the student's reading.

**Figure 1**  
Model for Effective Professional Development



**4. COACHING AND FOLLOW-UP:** This step is the one that ensures that the teacher is likely to keep the strategy, skill, or concept and make it a part of her or his classroom repertoire (Joyce and Showers, 1988; Murphy, 2000). Coaching is the process of being observed (usually by a peer) and receiving feedback; this helps the teacher internalize what is being learned through observation and feedback. Follow-up includes the discussions after the coaching session and any additional training meetings related to what is being learned. If teachers have learned the management routine of presenting and using a time schedule with their students, as they try this in their classrooms, a video could be made. Later, they meet with their colleagues to view the video and discuss how things went.

Evidence strongly indicates that “one-shot” workshops are ineffective (Murphy, 2000). All training and professional development must fit together in an overall cohesive plan that focuses on the school or school district’s standards. The coaching and follow-up may lead to the need for more theory, demonstrations, and/or practice. Figure 2 (*see page 6*) summarizes each step in the model and presents an additional example of each.

The values of this model for effective professional development have been demonstrated over many years of use. As can be seen from examining the data in Table 1 (*see page 7*), the application of skills is much higher when professional development includes theory, demonstration, practice with feedback, and peer coaching with follow-up (Joyce and Showers, 2002).

*“Professional development must be an ongoing, continuous activity, and not consist of ‘one-shot’ workshops or lectures.”*

–Reading First,  
U.S. Department  
of Education  
April 2002  
p. 26

**Figure 2****A Summary of the Steps in the Model for Effective Professional Development**

STEP	DEFINITION	EXAMPLE
<b>1. Theory</b>	Present underlying definitions, research, and rationale.	The assessment technique of using a decoding screening test is presented. The definitions and research related to the procedure are presented.
<b>2. Demonstration</b>	Show the teachers how “it” is done.	Techniques for teaching phonemic awareness are learned. The trainer models each technique by using the teachers as students.
<b>3. Practice and Feedback</b>	Give teachers time to try the procedure and provide a critique of their efforts.	The technique of semantic mapping has been taught as a way to expand meaning vocabulary. Teachers practice the technique with their colleagues by constructing several semantic maps for words that are included in a particular selection. Under the direction of the trainer, they discuss how they did and receive input from their colleagues and the trainer.
<b>4. Coaching and Follow-up</b>	Provide observation, feedback, and additional support.	After attending a workshop on comprehension strategies, teachers return to their schools. Each teacher selects one strategy to model for his/her class. A mentor colleague observes the lesson and makes suggestions for improvements. At the monthly staff meeting, teachers share the results of their lessons and discuss the feedback.

**Table 1**  
Effectiveness of Training Components

COMPONENTS	KNOWLEDGE	SKILL	TRANSFER
Study of Theory	10%	5%	0%
Demonstration	30%	20%	0%
Practice	60%	60%	5%
Peer Coaching	95%	95%	95%

Based upon the research by Joyce and Showers



## PROVIDERS OF PROFESSIONAL DEVELOPMENT

Educators are finally realizing how important professional development is in improving student achievement. They know that a school's plans for professional development must be customized to school standards and differentiated to meet teacher needs. With this realization comes the demand for action. How is it possible for schools to meet the call for all the professional development needed? Who should provide this professional development?

First and foremost, it is the school and/or school district that must take the lead in developing a plan for its own professional development. Evidence strongly suggests that an intensive overall plan focused on the specific programs and curriculum that the teachers will use is critical if the professional development is to be successful (Darling-Hammond, 1999).

This cannot be a "one-shot" deal (Murphy, 2000)! It must be a comprehensive plan focused toward the standards, goals, and objectives of the district. The plan must focus on the materials and programs the teachers are teaching (Darling-Hammond, 1997, 1999). It must be a plan that adheres to a model for effective professional development like the one discussed in Figure 2 (*see page 6*).

Many schools and school districts lack the personnel to plan and/or conduct their professional development; they need assistance. For this help, they must turn to outside resources. These resources may consist of outside consultants from other districts or schools, colleges or universities, publishing companies, or professional development companies. The important thing is that all training meet the standards for effective professional development and that each training course a school uses fits together into the school's overall professional development plan. Figure 3 (*see page 9*) provides a checklist for helping individual schools and districts plan their professional development.

Figure 3

Checklist for Planning Effective Professional Development		
SCHOOL/DISTRICT _____		
AVAILABLE FUNDS _____		
<b>DIRECTIONS:</b> Respond to each of the following statements as you develop your professional development plan.		
	Yes	No
1. We have clearly stated goals and objectives for our professional development.	<input type="checkbox"/>	<input type="checkbox"/>
2. Our professional development plan is focused on the programs and materials teachers will use to teach.	<input type="checkbox"/>	<input type="checkbox"/>
3. Our plan for professional development utilizes the model for effective professional development:		
THEORY	<input type="checkbox"/>	<input type="checkbox"/>
DEMONSTRATION	<input type="checkbox"/>	<input type="checkbox"/>
PRACTICE AND FEEDBACK	<input type="checkbox"/>	<input type="checkbox"/>
COACHING AND FOLLOW-UP	<input type="checkbox"/>	<input type="checkbox"/>
4. We have accounted for in-depth training in the areas where teachers need more support.	<input type="checkbox"/>	<input type="checkbox"/>
5. Our professional development plan has a strong evaluation component that allows us to revise it based on teacher feedback.	<input type="checkbox"/>	<input type="checkbox"/>
6. Our plan is individualized to meet the special needs of our teachers.	<input type="checkbox"/>	<input type="checkbox"/>

## STANDARDS FOR EFFECTIVE PROFESSIONAL DEVELOPMENT

Given the significance and importance of professional development, much attention has been focused on developing standards to guide what should be done (Sparks, 2001). The National Staff Development Council (NSDC) has adopted the following standards which are widely accepted as guidelines for effective professional development. These standards fall into three categories:

**Context**—where the learning will be applied and the organizational structure where the improvement is expected

**Process**—how the learning occurs

**Content**—what is learned

These standards can be clearly described by the key words for each: **Learning Communities, Leadership, Resources, Data-Driven, Evaluation, Research-Based, Design, Learning, Collaboration, Equity, Quality Teaching, and Family Involvement.** Professional development that adheres to these standards will help all schools achieve the success they should.

Figure 4

<p><b>Context Standards</b></p> <p>Staff development that improves the learning of all students:</p> <ul style="list-style-type: none"> <li>• Organizes adults into learning communities whose goals are aligned with those of the school and district. (Learning Communities)</li> <li>• Requires skillful school and district leaders who guide continuous instructional improvement. (Leadership)</li> <li>• Requires resources to support adult learning and collaboration. (Resources)</li> </ul> <p><b>Process Standards</b></p> <p>Staff development that improves the learning of all students:</p> <ul style="list-style-type: none"> <li>• Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement. (Data-Driven)</li> <li>• Uses multiple sources of information to guide improvement and demonstrate its impact. (Evaluation)</li> <li>• Prepares educators to apply research to decision making. (Research-Based)</li> </ul>	<ul style="list-style-type: none"> <li>• Uses learning strategies appropriate to the intended goal. (Design)</li> <li>• Applies knowledge about human learning and change. (Learning)</li> <li>• Provides educators with the knowledge and skills to collaborate. (Collaboration)</li> </ul> <p><b>Content Standards</b></p> <p>Staff development that improves the learning of all students:</p> <ul style="list-style-type: none"> <li>• Prepares educators to understand and appreciate all students; create safe, orderly and supportive learning environments; and hold high expectations for students' academic achievement. (Equity)</li> <li>• Deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to appropriately use various types of classroom assessments. (Quality Teaching)</li> <li>• Provides educators with knowledge and skills to appropriately involve families and other stakeholders. (Family Involvement)</li> </ul>
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## WHY PROFESSIONAL DEVELOPMENT IS SO IMPORTANT

Over the years, educators have frequently said, “The teacher makes the difference.” Just how true is this statement? Researchers have repeatedly shown that the teacher’s qualifications are one of the most significant factors in determining student achievement (Darling-Hammond, 1997). In some cases, the teacher’s qualifications account for 40 – 90% percent of student success on achievement tests. “...research indicates that the effects of well-prepared teachers on student achievement can be stronger than the influences of student background factors, such as poverty, language background, and minority status” (Darling-Hammond, 1999, p. 39). The evidence is clear, **“the teacher does make the difference.”**

So just how important is professional development? Effective professional development is the KEY to student success. Dollars spent on professional development will have a greater impact on student learning than any other dollars spent. Help every teacher be a better teacher and we will help every student be a more successful learner. “There can be no more urgent agenda at this point in our quest to become a society that educates everyone. Well-prepared teachers who are confident of their instruction are indispensable for children’s reading success” (Learning First Alliance, 2000, p. 28).

*“In-service teachers not only demonstrate improvement in their teaching; their improvement leads directly to higher achievement on the part of their students.”*

–Report of the National Reading Panel  
p. 5-13–5-14

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