

# What to Consider When Evaluating Staff Development

*District leaders must look deeper than students' achievement scores and use a multifaceted approach to assess the quality of their staff development efforts.*

THOMAS R. GUSKEY AND DENNIS SPARKS

A school district's teachers spend 30 hours learning and then implementing a set of instructional skills. After three years of training and follow-up, students' scores on standardized achievement tests show no improvement. Was the staff development a failure? Or was the program by itself insufficient to improve student learning?

To answer the first question requires an investigation of the quality of the staff development program, from planning through follow-up and support activities. Answering the second question involves a thorough look at the district's total improvement effort. Though more difficult to obtain, it is this answer that will provide program implementers and district decision makers with the most valuable information.

Today, accountability demands require that influence on student outcomes be a principal focus in evaluating staff development programs (Guskey and Sparks 1991). But documenting these effects cannot be accomplished simply by adding pre- and post-measures of student achievement to evaluation designs. A variety of factors—some outside the control of staff developers and some within their control—need to be considered when assessing a program's results.

Here we present a model that illustrates the relationship between staff

development and student outcomes, as well as the external factors that influence the relationship. If program evaluations are to truly inform, the potential impact of these factors must be considered. Then, we show how, using a multifaceted approach to evaluation, districts can gather valuable information that will enhance their total improvement effort.

## A Model for Program Evaluation

Studies of staff development conducted over the past 15 years have identified factors that contribute to change in teachers' behaviors and instructional practices (Doyle and Ponder 1977, Guskey 1986, Huberman and Miles 1984, Joyce and Showers 1988). Still,

relatively few studies have determined whether these changes do, in fact, lead to improvements in student outcomes.

The link between staff development and student learning often is not a direct one. While staff development may be essential to improvement efforts, it alone may not be sufficient. Let's consider the four elements of the model in Figure 1 and how they interact.

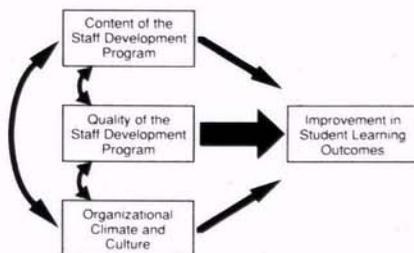
## Improvement in Student Learning Outcomes

Learning outcomes are broadly defined here to comprise the entire range of cognitive and achievement variables, as well as affective and psychomotor indices of learning. Hence, they might include measures of how well students learn, think, reason, and solve complex problems, as well as how they feel about themselves as learners or how they act as individuals. Attendance or graduation rates, incidence of vandalism, or participation in school-sponsored service activities might be variables as well. The particular outcomes one might select to analyze depend on the goals of the improvement effort and the focus of the staff development.

## Quality of the Staff Development

Staff development, as defined in the model, is a multidimensional process that encompasses all aspects of training, from readiness activities, practice and coaching, through follow-up and support activities. Though some consider "program implementation" a separate factor, we see it as a dimension of program quality. Research, though not extensive on exactly how program quality influences student learning, does offer some general notions. Doyle and Ponder (1977), for example, suggest that how an innovation is presented to

FIGURE 1  
FACTORS IN A MODEL FOR STAFF DEVELOPMENT



teachers affects their decisions about using it. They name three important criteria:

- *Instrumentality* refers to how clearly and specifically new practices are presented.

- *Congruence* describes how well new practices align with teachers' present teaching philosophy and practices.

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- *Cost* refers to teachers' estimates of the time and effort new practices require compared to the benefits they promise.

More recent studies (Bennett 1987; Joyce and Showers 1988) identify additional training components that appear to affect teachers' use of an innovation: presentation of theory, modeling or demonstration, practice under simulated conditions, structured and open-ended feedback, and coaching for application. Although other researchers question the relative importance of some of these factors (Sparks 1983, Sparks and Bruder 1987), clearly all are directly alterable by staff developers.

### Program Content

Program content directly influences the relationship between the program and student outcomes. Not all educational innovations are created equal. Some have an extensive research base; others

have virtually none. Of those that do, some have a powerful impact on student outcomes, while others' effects are relatively modest (Bloom 1984; Fraser et al. 1987; Walberg 1984a, 1984b, 1990).

Although many innovations are described as "research-based," few have been extensively or systematically studied. Two notable exceptions are cooperative learning (Johnson and Johnson 1989) and mastery learning (Guskey and Pigott 1988, Kulik et al. 1990). When used today to describe an innovation, "research-based" usually means that its creators referred to some body of research literature when formulating their ideas. Therefore, program planners should thoroughly investigate the research evidence behind an innovation before investing precious staff development resources in it. Failure to do so may lead to erroneous conclusions about the program's quality and impact.

### Context

Extensive research evidence shows that organizational climate and culture strongly influence both initial and continued use of an innovation (Joyce 1990). Berman and McLaughlin (1978) stress the importance of strong support for teachers from both principals and superintendents (see also McLaughlin 1990). Similarly, Little (1982) emphasizes the significance of a norm of collegiality and experimentation. Contexts that nurture support and trust, encourage shared decision making and responsibility, and provide ongoing assistance and opportunities for problem solving appear best in sustaining successful improvement efforts. Although known to be influential, contextual factors such as these are generally ignored both in program evaluations and in research on effective staff development practices (Fullan 1990).

### A Multifaceted Approach to Evaluation

Many studies and research reviews indi-

cate that a variety of processes and conditions are necessary for lasting, significant educational improvement; for example: a clear vision and goals, a multi-year process, strong instructional leadership, appropriate technical assistance, early success, sustained interaction among stakeholders, and staff development for everyone involved (Stringfield et al. 1991). Together, these elements are capable of producing notable and enduring gains in learning outcomes in a way that no one single element alone can accomplish.

Similarly, many teachers are integrating a variety of instructional strategies, recognizing that no single strategy works best at all times for all students (Guskey 1990). Because of the diversity among schools, especially in terms of school culture and other contextual factors, the same is likely to be true of improvement efforts.

If a multifaceted approach is necessary to produce desired results and if staff development is needed to initiate and support change, then a multifaceted approach to program evaluation also is required for meaningful and enduring improvement.

### General Guidelines

Before we discuss specifics, here are some general guidelines about evaluating any staff development program.

- Evaluation should begin during planning and continue throughout all phases of program implementation.
- Planning for any improvement effort should reflect an understanding that changes in one part of a system are likely to affect other parts as well.
- All parts of the educational enterprise—curriculum, district and school leadership, parents, and so on—should be appropriately involved in the effort.
- Evaluation information should be used to improve the program as well as to make judgments about it.
- Improvement efforts should be driven by clear objectives expressed in terms of student outcomes.
- Evaluation should be informed by

multiple sources of data, both quantitative and qualitative.

• Valuable sources to consider in evaluating programs include participant outcomes (the knowledge, skills, and/or attitudes of teachers, principals, parents), organization outcomes (changes in school culture or in role responsibilities), and student outcomes.

• It is unrealistic to expect improvement in student outcomes if participants and the organization do not change as well.

### Specific Suggestions

A multifaceted approach to program evaluation implies that different types of information will be gathered from a variety of sources. As mentioned above, these sources minimally include some assessment of the program's impact on participants, the organization (district and/or school), and students.

**Change in participants.** Student learning is unlikely to improve without a change in participants' knowledge, skills, practices, and, eventually, their attitudes and beliefs (Guskey 1986). Although teachers and administrators are the prime participants in staff development, any school employee who has an effect on student outcomes should also be included. Improvement in participants' knowledge can be assessed through pre- and post-tests, through exit interviews, and through self-assessment

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questionnaires. Growth in their skills and practices can be established through observation, interviews, and self-assessment checklists. Finally, changes in participants' attitudes, beliefs, and perceptions can be determined through interviews, self-report questionnaires, unsolicited testimonials, and analysis of records (minutes from faculty meetings, for example).

### Change in the organization.

Although more subtle and difficult to observe, change in the organization is equally important to assess. Change in the roles and responsibilities of school employees, parents, and students can be determined through interviews, questionnaires, and analysis of documents (policies, budgets, job descriptions, for example). Observations, interviews, and minutes of meetings are ways to measure increased decision making and collaboration. Other changes in the culture of schools (for instance, relationships between administrators and teacher or between teachers and students) may be appraised in similar ways.

**Change in students.** Students' learning gains can be determined through teacher-developed achievement tests, criterion- or norm-referenced achievement tests, student portfolios, and course grades. Affective and behavioral outcomes can be assessed through observation, interviews, analysis of school records (graduation and attendance rates, enrollment in advanced courses, and so on), self-report questionnaires, and unsolicited testimonials from students and/or parents.

### Putting the Pieces Together

Regardless of how schools are structured or restructured, formed or reformed, staff development is essential for anyone directly involved with students and whose actions directly influence their learning. But staff development alone will not likely bring about significant improvement. A multifaceted effort addressing all aspects of

the system is necessary. The information most useful to such an effort will come from multifaceted program evaluations that are also systemically focused. With higher quality, more prescriptive information at our disposal, we can expect better programs, more focused improvement efforts, and, most important, more successful students than perhaps ever before. □

### References

- Bennett, B. B. (1987). "The Effectiveness of Staff Development Training Practices: A Meta-Analysis." Doctoral dissertation, University of Oregon.
- Berman, P., and M. W. McLaughlin. (1978). *Federal Programs Supporting Educational Change. Vol. VIII: Implementing and Sustaining Innovations.* Santa Monica, Calif.: Rand Corporation.
- Bloom, B. S. (1984). "The Search for Methods of Group Instruction as Effective as One-to-One Tutoring." *Educational Leadership* 41, 8: 4-18.
- Doyle, W., and G. Ponder. (1977). "The Practical Ethic and Teacher Decision-Making." *Interchange* 8, 3: 1-12.
- Fraser, B. J., H. J. Walberg, W. W. Welch, and J. A. Hattie. (1987). "Syntheses of Educational Productivity Research." *International Journal of Educational Research* 11: 73-145.
- Fullan, M. G. (1990). "Staff Development, Innovation, and Institutional Development." In *Changing School Culture Through Staff Development, 1990 Yearbook of the Association for Supervision and Curriculum Development*, edited by B. Joyce. Alexandria, Va.: ASCD.
- Guskey, T. R. (1986). "Staff Development and the Process of Teacher Change." *Educational Researcher* 15, 5: 5-12.
- Guskey, T. R. (1990). "Integrating Innovations." *Educational Leadership* 47, 5: 11-15.
- Guskey, T. R., and T. D. Pigott. (1988). "Research of Group-Based Mastery Learning Programs: A Meta-Analysis." *Journal of Educational Research* 84: 197-216.
- Guskey, T. R., and D. Sparks. (1991). "Complexities in Evaluating the Effects of Staff Development Programs." Paper presented at the annual meeting of the American Educational Research Associ-

- ation, Chicago.
- Huberman, M., and M. B. Miles. (1984). *Innovation Up Close: How School Improvement Works*. New York: Plenum.
- Johnson, D. W., and R. T. Johnson. (1989). *Cooperation and Competition: Theory and Research*. Edina, Minn.: Interaction Press.
- Joyce, B., ed. (1990). *Changing School Culture Through Staff Development, 1990 Yearbook of the Association for Supervision and Curriculum Development*. Alexandria, Va.: ASCD.
- Joyce, R. B., and B. Showers. (1988). *Student Achievement Through Staff Development*. New York: Longman.
- Kulik, C. C., J. A. Kulik, and R. L. Bangert-Drowns. (1990a). "Effectiveness of Mastery Learning Programs: A Meta-Analysis." *Review of Educational Research* 60: 265-299.
- Little, J. W. (1982). "Norms of Collegiality and Experimentation: Workplace Conditions of School Success." *American Educational Research Journal* 49: 325-340.
- McLaughlin, M. W. (1990). "The Rand Change Agent Study Revisited: Macro Perspectives and Micro Realities." *Educational Researcher* 19: 9: 11-16.
- Sparks, G. M. (1983). "Synthesis of Research on Staff Development for Effective Teaching." *Educational Leadership* 41, 3: 65-72.
- Sparks, G. M., and S. Bruder. (1987). "Before and After Peer Coaching." *Educational Leadership* 45, 3: 54-57.
- Stringfield, S., S. Billig, and A. Davis. (1991). "Implementing a Research-Based Model of Chapter 1 Program Improvement." *Phi Delta Kappan* 72: 600-606.
- Walberg, H. J. (1984a). "Synthesis of Research on Teaching." In *Handbook of Research on Teaching*, edited by M. C. Wittrock, pp. 214-229. Washington, D.C.: American Educational Research Association.
- Walberg, H. J. (1984b). "Improving the Productivity of America's Schools." *Educational Leadership* 41, 8: 19-27.
- Walberg, H. J. (1990). "Productive Teaching and Instruction: Assessing the Knowledge Base." *Phi Delta Kappan* 71: 470-478.
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