



Chapter 5

Common Characteristics of Programs in the Guide

Results-Based Staff Development for the Middle Grades is a timely and important initiative. Today many professional associations, federal and private agencies, and educational organizations are actively striving to upgrade teachers' preparation and to increase their opportunities for ongoing development. The National Staff Development Council is on the leading edge of these reform efforts.

Results-Based Staff Development for the Middle Grades is making a unique contribution to the baseline information about the state of staff development in the content areas. This initiative has established essential criteria for evaluating staff development programs and has identified 26 programs that meet these stringent criteria. The results of this initiative contribute new information about how staff development is being linked to student achievement. Another important outcome of this work is an understanding of the state of staff development in the content areas.

This chapter identifies conclusions drawn from the similarities that were found in the programs selected for inclusion in this guide. These similarities represent the current staff development practices in the content areas. Examples are provided to demonstrate how these characteristics tend to exist in a variety of programs.

Goals to Improve Student Achievement

Not surprisingly, when a program's goals included increasing student achievement, the program did just that. Most of the programs included in *What Works in the Middle: Results-Based Staff Development* had increasing student achievement as a goal. Most also included goals about increasing teachers' content knowledge and changing teachers' instructional practices to align with standards of reform for the content areas. And, not surprisingly, when programs did not clearly state a goal — increasing student achievement, for example — they did not!

When a staff development program aims to improve student achievement, most likely the goals will be achieved. In other words, “we get what we want.” If, for example, a program focuses on improving teacher behavior or knowledge, that is the result, rather than improvement in student achievement. On the other hand, when programs focus on improving student performance, both student and teacher performance increase.

The lesson learned here is that setting a goal for a staff development initiative, such as “a high percentage of staff members will participate,” or “teachers will increase

their content knowledge” or “teachers will change their instructional practices,” misses the whole purpose of investing time and financial resources in staff development. Increasing teachers’ content knowledge, changing their attitude about their content areas, or expanding their repertoire of instructional practices is a *step* on the path toward the *only result* that matters — increased student achievement.

In their book, *A New Vision for Staff Development*, Sparks & Hirsh (1997) state that results will be achieved when those results are clearly identified, the process for achieving results is well-planned, and the process is implemented in a supportive system. Those who say that staff development cannot be linked to student achievement may not have begun with the intention of improving student learning.

Funding Support

Funding is a commonality among the math and science programs selected for inclusion in *What Works in the Middle: Results-Based Staff Development*. For example, many of the math and science programs were funded through the National Science Foundation teacher enhancement programs, statewide systemic initiatives, or local systemic change initiative grants. This funding provided extensive resources for program design and teacher training, professional release time, teacher leadership stipends, materials, and other costs associated with the programs. With these resources, often many teachers were able to benefit from quality staff development experiences. On the downside, once such funding lapsed, many excellent programs were discontinued. Of the extensive number of math and science programs identified as showing promise for improving student and teacher learning, a number had been discontinued at the end of their funding cycle. Only a few programs, such as Mathematics Renaissance, have been able to sustain program funding beyond their funding cycle.

Dependency on external funding for staff development continues to leave staff development outside the system as an incidental, optional component of the education process, rather than as an embedded, essential part of the educational system. When schools and districts view staff development as an “add-on,” it rarely produces long-term results for students or teachers and never receives the systemic support needed to make a wide-ranging impact. In contrast, when staff development is viewed as an investment — similar to the way in which research and development is viewed in other organizations — then it receives the funding and time allocation necessary to support it as an integral component of a successful learning organization.

Training with Modeling

When people think about staff development, the predominant image that comes to mind is the traditional institute day or inservice course. This image held true for


the majority of the programs included in this resource guide. However, training is only one of five models of staff development presented in NSDC's *Standards for Staff Development: Middle Level Edition*. Other models include (1) observation and assessment, (2) individually guided staff development, (3) involvement in a development or improvement program, and (4) inquiry. While there are exceptions, most of the programs included in this guide rely heavily on the training model, often conducted during the summer in the form of institutes. In most cases, the training was conducted by an external expert who was the program developer, and these developers typically were university faculty members.

Training is an efficient way to develop knowledge and skills. It offers opportunities for collaboration among peers and for establishing support networks. When training includes modeling or demonstrations, low risk practice, and coaching or other forms of ongoing support, it can be extremely effective as a means to acquire knowledge and skills (Joyce & Showers, 1995).

Besides training, observation (in the form of demonstrations and classroom observations and coaching) was the next most prevalent model of staff development. Most staff development programs integrated training with some form of observation. For example, the staff development program associated with Peoria Urban Mathematics Plan (PUMP) included a series of summer institutes. This was followed by ongoing classroom support: some demonstration lessons, observations of teachers, and feedback or coaching sessions to help teachers refine their content knowledge and instructional practices.

Some programs included involvement in a development or improvement process. Expeditionary Learning Outward Bound, because of the comprehensive nature of the program, offered numerous opportunities for teachers to design learning experiences for students and to establish school structures to support student success. These opportunities were arranged locally, regionally, and nationally and occurred in addition to numerous opportunities for teachers to extend their content knowledge and instructional strategies.

Mathematics Renaissance, Introducing Teachers to Inquiry, and Science Partnerships for Articulation and Networking (SPAN) are examples of programs that provide training *and* other models of staff development. These models included involvement in a development or improvement process, inquiry or action research, individually guided staff development, and observation and assessment. In Mathematics Renaissance and SPAN, teachers were engaged in collaborative work that extended beyond their individual classrooms and focused on making deep changes in the entire school or organization to benefit students.



Training Outside the School Day

Most staff development occurred outside teachers' normal working day or year. For example, summer institutes offered extensive blocks of time for teachers to engage in meaningful learning experiences. In some cases, teachers received a small stipend for attending the institute or were given free tuition, room and board, and materials. During the school year, teachers often met after school and occasionally on weekends to extend their learning.

Only in a few programs were learning experiences integrated into the teachers' normal work day. Science Partnerships for Articulation and Networking (SPAN), Mathematics Renaissance, and Rice University School Mathematics Program (RUSMP) are some of the programs that have extensive staff development and support throughout the school day and year.

The National Staff Development Council recommends that 25 percent of the educators' work time be devoted to learning and collaborating with colleagues. This form of job-embedded staff development guarantees that all employees have the necessary knowledge and skills to fulfill their responsibilities and meet students' learning needs.

Support and Coaching

Follow-up for the programs included in *What Works in the Middle: Results-Based Staff Development* varies widely. Many programs built in periodic refreshers or meetings throughout the subsequent school year. Iowa Chautauqua, for example, built in two opportunities for teachers to meet, once in the fall and again in the spring to extend their learning and solve problems. Others, such as Student Team Literature, Peoria Urban Mathematics Program (PUMP) and Rice University School Mathematics Program (RUSMP), had regularly scheduled observations and feedback for teachers. Reading Power in the Content Areas held a follow-up meeting six to eight months after the initial training. Still others, such as Foundational Approaches in Science Teaching (FAST) and Project Legal, routinely provided follow-up outside of the classroom in the form of electronic and telephone support.

For some programs follow-up was at the discretion of the school or districts. Individual schools could select a format for follow-up. While a number of options existed for follow-up for most programs, the degree to which these opportunities were tapped is unclear.

The range of follow-up support can best be described by Figure 1. On one end of the continuum are non-classroom-based processes for follow-up and at the other

end are those processes that are classroom-based. Samples of follow-up processes for each end of the continuum and several that fall in between are identified. Those follow-up processes that are closer to the classroom help teachers at the point of delivery, where they are most likely to need support in order to change their instructional practices.


Figure 1: Types of Follow-up Support

Non-classroom Follow-up Support		Classroom-based Follow-up Support
<ul style="list-style-type: none"> • e-mail • phone • web site 	<ul style="list-style-type: none"> • refresher meetings • conferences • advanced training 	<ul style="list-style-type: none"> • demonstrations • co-teaching • observation with feedback • planning sessions • curriculum/lesson/unit development • problem-solving sessions • examining student work • action research
<ul style="list-style-type: none"> • listserv • electronic bulletin board 	<ul style="list-style-type: none"> • newsletters 	

Access to Experts

The development of teacher leaders in some projects, such as Introducing Math Teachers to Inquiry, the National Writing Project, Powerful Connections, and Science Partnerships for Articulation and Networking (SPAN), provided teachers easy access to local expertise at their individual schools or in their districts. Local experts are often master teachers who volunteer to assume a leadership role. They provide immediate assistance to teachers as they implement new content and instructional strategies into their classrooms. This easy access to local support increases the likelihood that teachers will seek and receive assistance in a timely manner when they have problems. Access to support also helps to sustain teachers' efforts and motivates them to continue implementing new practices, rather than falling back on more familiar or more comfortable processes.

In some cases, access to experts occurred through electronic means. The advent of e-mail, Web sites, listservs, and bulletin boards places help only a click away. Project Legal, Foundational Approaches in Science and Technology (FAST), and several other



projects provide electronic support to teachers via phone, fax, e-mail, electronic newsletters, and so on. These electronic means of providing support offer teachers the flexibility to access the support on their own terms. Via electronic media, they are not dependent on others' schedules and can tap into these resources whenever it is convenient for them.

Time for Implementation and Refinement

Staff development programs that offer teachers time to redesign their curriculum and instructional units help teachers better prepare to implement their learnings in the classroom. A number of projects, such as *Introducing Math Teachers to Inquiry*, *Peoria Urban Mathematics Program (PUMP)*, *Reading in the Content Areas*, and *Iowa Chautauqua* provide time throughout the staff development program for teachers to develop instructional materials that they can use immediately with their students.

Since redesigning curriculum and instruction is a time-consuming and complex task, teachers benefit from time set aside to work collaboratively with their colleagues to engage in this work. When several teachers plan together, they gain from the perspectives, experiences, knowledge, and skills of one another.

In addition to time during the training, teachers also need time back at school to plan and redesign their existing practices and processes. This type of planning and redesign is needed throughout the school year in larger blocks of time than typical daily planning time permits. When teachers have the opportunity to work cooperatively with their peers, they become engaged in a powerful form of staff development that allows them to grapple with “real” issues related to the new content and instructional processes.

Support Materials

Programs that provide teachers with sample units, lessons, or other instructional materials help scaffold implementation of the new strategies and content. For example, *Student Team Literature* and *Project Success Enrichment* provide resource materials for teachers to use in the early stages of implementation while they are becoming familiar with the new instructional processes. These materials make the transition phase easier for teachers as they are learning to modify comfortable processes and change their instructional practices. When materials are readily available, teachers can concentrate more on their instruction and not worry as much about developing the necessary tools to teach the new content or implement the new instructional practices.

Research-Based Staff Development

The state of staff development in the content areas leaves room for improvement. Staff development of the past was often disconnected to student learning needs, fragmented, formatted in one-shot workshops or presentations, external to the work day, and funded with limited resources. Schlechty (1997) says, “For too long, the professional development of teachers has been a third-rate undertaking conducted under conditions that are not only uninspiring, but sometimes humiliating” (p. 252). Programs included in this resource guide are breaking with tradition and beginning to offer sustained, challenging, in-depth learning experiences for teachers.

Staff development, designed to produce results in terms of student learning, is based on student learning needs; is supported with resources and time; and is embedded in the school day and year. It includes extensive opportunities for teachers to learn from and with each other in collaborative endeavors within a community of learners. It focuses on extending teachers’ content knowledge and content-specific instructional skills. And it incorporates multiple models of learning with extensive classroom-based support. Several programs in this resource guide exemplify quality staff development.

Alignment with NSDC Standards

The National Staff Development Council established standards in 1994 for middle-level staff development (see pages 182-183). Drawing from research and best practices, these standards were validated by professional organizations, researchers, and practitioners. Each program included in *What Works in the Middle: Results-Based Staff Development* was assessed in light of these 27 standards.

Table 6 (page 184) identifies the NSDC standards that each program meets. Because individual districts or schools were not studied, the presence of context standards was the most difficult to determine. Context standards describe the characteristics of the school or district necessary to support implementation. These are the essential systemic elements that increase the likelihood that a program will succeed. Some program developers consciously addressed these standards in the design of their programs; other did not. When program developers design staff development using all the NSDC standards as guidelines — including the context standards — the resulting program is more systemic in nature. In addition, it is more likely to result in increased student and teacher learning and in greater organizational improvement.

References

- Joyce, B. & Showers, B. (1995). *Student Achievement Through Staff Development: Fundamentals of School Reform, 2nd edition*. White Plains, NY: Longman.
- National Staff Development Council. (1994). *Standards for Staff Development: Middle Level Edition*. Author.
- Schlechty, P. (1997). *Inventing Better Schools: An Action Plan for Educational Reform*. San Francisco: Jossey-Bass.
- Sparks, D. & Hirsh, S. (1997). *A New Vision for Staff Development*. Alexandria, VA: Association for Supervision and Curriculum Development.

National Staff Development Council Standards for Staff Development: Middle Level Edition

Effective middle-level staff development:

Context

1. requires and fosters the norm of continuous improvement.
2. requires strong leadership in order to obtain continuing support and to motivate all staff, school board members, parents, and the community to be advocates for continuous improvement.
3. is aligned with the school's and the district's strategic plan and is funded by a line item in the budget.
4. provides adequate time during the work day for staff members to learn and work together to accomplish the school's mission and goals.
5. is an innovation in itself that requires study of the change process.

Process

6. provides knowledge, skills, and attitudes regarding organization development and systems thinking.
7. is based on knowledge about human learning and development and models this understanding in all activities.
8. provides for the three phases of the change process: initiation, implementation, and institutionalization.
9. bases priorities on a careful analysis of disaggregated student data regarding goals for student learning.
10. uses content that has proven value in increasing student learning and development.

11. provides a framework for integrating innovations and relating those innovations to the mission of the organization.
12. requires an evaluation process that is ongoing, includes multiple sources of information, and focuses on all levels of the organization.
13. uses a variety of models of staff development approaches to accomplish the goals of improving instruction and student success.
14. provides follow-up necessary to ensure improvement.
15. requires staff members to learn and apply collaborative skills to conduct meetings, make shared decisions, solve problems, and work collegially.
16. requires knowledge and use of the stages of group development to build effective, productive, collegial teams.

Content

17. increases administrators' and teachers' understanding of how to provide school environments and instruction that are responsive to the developmental needs of adolescents.
18. facilitates the development and implementation of school and classroom-based management plans that provide staff with school-wide and classroom-based management strategies that maximize student learning.
19. increases administrator' and teachers' ability to provide guidance and advisement to adolescents.
20. addresses diversity by providing awareness and training related to the knowledge, skills, and behaviors needed to ensure that an equitable and quality education is provided to all students.
21. increases educators' ability to provide challenging, developmentally-appropriate curriculum based on desired skill and knowledge outcomes for all students.
22. increases staff's knowledge and practice on interdisciplinary team or ganization and instruction.
23. prepares educators to combine academic student learning goals with service to the community;
24. prepares teachers to use research-based teaching strategies appropriate to their instructional objectives and their students.
25. prepares educators to demonstrate high expectations for student learning;
26. helps teachers and administrators engage parents and families in improving their children's educational performance.
27. prepares teachers to use various types of performance assessment in their classrooms

Table 6: National Staff Development Council's Standards for Staff Development: Middle Level

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Language Arts																												
Junker Great Books					X					X																		
Student Team Literature	X				X				X	X			X	X	X						X				X	X	X	X
Exemplary Center for Reading Instruction					X				X	X			X	X							X				X	X	X	X
National Writing Project					X	X			X	X			X	X	X						X				X	X	X	X
Profile Approach to Writing					X				X	X			X	X							X				X	X	X	X
Project Success Evaluation					X				X	X			X	X							X				X	X	X	X
Six Trait + 1 Writing Assessment					X				X	X			X	X							X				X	X	X	X
Mathematics																												
Hawaii Algebra Learning Project					X				X	X			X	X							X				X	X	X	X
Introducing Math Teachers to Inquiry	X				X				X	X			X	X							X				X	X	X	X
Mathematics Renaissance	X	X			X				X	X			X	X							X				X	X	X	X
Theoria Urban Mathematics Plan	X	X			X	X			X	X			X	X							X				X	X	X	X
Powertail Connections	X				X				X	X			X	X							X				X	X	X	X
Rice University School Mathematics Project					X				X	X			X	X							X				X	X	X	X
Link of Illinois at Chicago- All Learn Mathematics	X	X			X				X	X			X	X							X				X	X	X	X
Science																												
EartStorm					X				X	X			X	X							X				X	X	X	X
Foundational Approaches to Science Teaching					X				X	X			X	X							X				X	X	X	X
Iowa Charitauqua Program					X				X	X			X	X							X				X	X	X	X
Science Partnerships for Anticipation and Networking	X	X			X	X			X	X			X	X							X				X	X	X	X
Student Watered Research Project					X				X	X			X	X							X				X	X	X	X
Social Studies																												
Project LEGAL					X				X	X			X	X							X				X	X	X	X
We the People -- The Citizen and the Constitution					X				X	X			X	X							X				X	X	X	X
We the People -- Project Citizen					X				X	X			X	X							X				X	X	X	X
Interdisciplinary																												
Expedientary Learning Outward Bound	X	X			X	X			X	X			X	X							X				X	X	X	X
Hemwood Project					X				X	X			X	X							X				X	X	X	X
Project CRSS					X	X			X	X			X	X							X				X	X	X	X
Reading Power in the Content Areas					X				X	X			X	X							X				X	X	X	X