2-1990

Integrating Innovations

Thomas R. Guskey
University of Kentucky, GUSKEY@UKY.EDU

Published in *Educational Leadership*, v. 47, issue 5, p. 11-15.

THOMAS R. GUSKEY

Integrating Innovations

Proponents of new ideas promote their favorites without seeing connections to other strategies—it's up to school leaders to discover how to integrate a collection of models within their improvement programs.

At no other time in the history of education have there been more new ideas and innovations available to educators Administrators and teachers who are planning school improvement programs can choose among an exceptionally wide variety of models and strategies Each of these options promises to improve student learning and enhance the quality of education, but each represents a somewhat different vehicle to use on the road to educational excellence

The following innovations, for example, have attracted the attention of large numbers of educators

- cooperative learning (Johnson and Johnson 1987, Slavin 1983),
- the effective schools model (Brookover et al 1987),
- critical thinking (Costa 1985, Marzano 1986),
- mastery learning and outcome-based education (Block et al 1989, Bloom 1968, Guskey 1985, Spady 1988),
- mastery teaching, various forms of which are also known as instructional theory into practice (ITIP), elements of effective instruction, and the Hunter model (Hunter 1979, 1982),
- Teacher Expectations and Student Achievement (TESA) (Kerman 1979),
- learning styles, including programs on learning modalities and brain hemisphere differences (de Bono 1983, Carbo et al 1986, McCarthy 1987)

Practitioners who experience support and follow-up for a year or less may come to view the innovation as an isolated fad.

All these strategies seek to provide better learning opportunities so that students can be more successful All can also be adapted for use at any grade level and in almost any subject area What's more, all have numerous advocates eager to testify that their particular strategy does indeed improve educational outcomes, although the theoretical and research foundations of each differ greatly in strength

Selecting Innovations

The number and kinds of innovations that school district leaders choose to include in improvement programs vary from one district to another Some districts center their plans on the comprehensive implementation of a single innovative strategy so that their efforts can be well focused and clearly articulated The vast majority of districts, however, include a combination of strategies in their improvement programs Although educational leaders in these districts may be aware of the need for coherence among their improvement initiatives, they are sen-

sitive to the political risks of "putting all their eggs into one basket." They may also recognize that no single strategy is likely to solve the diversity of problems that schools typically face.

Administrators also vary in the criteria they use to select innovations for their improvement programs. Often they choose one set of strategies over another after careful consideration of pertinent evidence, such as the results from a faculty needs survey, the scores from a comprehensive student testing program, or data gathered through a formal internal evaluation. More often, however, they select innovations on the basis of personal preferences or impressions. Sometimes the presentation style of the purveyor influences decision makers as much as the characteristics of the strategy itself (Abrami et al. 1982).

Putting the Innovations to Work

Once they have chosen a set of innovations, the decision makers turn their attention to implementation. To begin, they must allocate substantial funds to purchase the necessary materials and to hire consultants to introduce the innovations. In addition to the financial burden, each innovation also requires considerable amounts of time for initial staff development and for essential follow-up activities. Faced with limited resources, districts can seldom implement their selected strategies all at once.

As a result, most improvement programs are implemented incrementally: one strategy this year, another next year, and so on. This step-by-step approach assumes that teachers will assimilate each strategy as it comes along, add it to their repertoires of professional skills, and consequently improve their work with students.

Unfortunately, current evidence indicates that improvement programs implemented in this manner rarely bring about any sort of lasting improvements (Latham 1988, Huberman and Miles 1984, Loucks-Horsley et al. 1987). One reason for this failure is that practitioners often need more than one year to grow comfortable with any change. For the majority of teachers, the first year is a time of trial and experimentation. In particular, if the new strategy requires the use of unfamiliar practices, a great deal of effort goes into *adjusting to the innovation* and *adjusting it to fit* the conditions of particular classrooms. Berman and McLaughlin, who have called this process "mutual adaptation," recommend that teachers have an extended period of time to work through this difficult phase (1976, 1977). Thus, if support and follow-up activities are withdrawn after a year in order to devote resources to yet another innovative strategy, the first strategy's true effects are not likely to reach many students.

Practitioners often need more than one year to grow comfortable with any change.

The teachers, moreover, will be acutely aware of the costs of the first strategy in terms of the time and effort its implementation required. A small number may perceive its potential benefits, but without direct evidence of positive effects on students, very few indeed will persevere to refine their use of the strategy (Guskey 1986). Instead, many will abandon their efforts and return to the old familiar strategies they used in the past. A second reason the incremental approach fails to yield long-term improvement is that practitioners who experience support and follow-up for a year or less may come to view the innovation as an isolated fad. Most will see no relation between the current focus and programs that came before or those that may come afterward.

For these reasons, experienced teachers often shun new programs. They have learned that the present innovation will be gone in a year, only to be replaced by yet another bandwagon (Latham 1988). In fact, it is not unusual to hear teachers refer to the staff development program topic of the moment as TYNT, for This Year's New Thing. And cynics know, of course, that TYNT is bound to be different from LYNT, which was Last Year's New Thing.

Our jack-of-all-strategies-master-of-none pattern doesn't just obscure improvement and provoke cynicism. Sadly, it also imposes a sense of affliction. Too often, practitioners learn to see all innovations as trials they must endure in a futile attempt to cure what outsiders perceive as the ineptitude of educators.

Integrating the Strategies

Nonetheless, what is needed even more than extended support is a precise description of how to integrate a system's collection of strategies into some kind of coherent framework. It is difficult enough to learn the particular features of the individual strategies, let alone to figure out how they can be used together. Furthermore, because no one strategy is totally comprehensive, many problems will remain unresolved. It is only when several strategies are carefully and systematically integrated that substantial improvements in learning become possible.

Ideally, the purveyors of the various innovations would lead the way to a judicious, methodical synthesis of the various strategies. In presentations and demonstrations, they could show how the strategies they advocate can be used in conjunction with others, especially those with which a district's or building's staff are already familiar. They could describe how the others complement the ones they favor, then suggest practical, efficient, and manageable ways for teachers to combine and integrate them.

This ideal is realized occasionally (Guskey 1988, Mevarech 1985a) but seems unlikely to become common practice. To begin with, many advocates of innovations are deeply involved in the ongoing development and refinement of their particular ideas. Most of them work extensively

with school districts on program implementation; some participate in research studies to determine how effective their strategy is under various conditions. As a result, few have time to develop the deep understanding of other innovations necessary for suggesting how to sythesize them for use in classrooms.

Further, an underlying sense of competition among the proponents of different strategies often hinders efforts to integrate. With limited funds and time for staff development, school leaders may have to choose among innovations. Consequently, some presenters emphasize the strong points of their strategies and what they regard as weaknesses in the others. They are not inclined to concentrate on how different strategies can be combined. Unfortunately, this rivalry promotes a separatist view of the innovations and increases the frustration and cynicism of practitioners.

If the integration of innovations does not come from the advocates of innovative practices, from whom will it come? At present, I contend it will have to come from the same team of administrators and teachers who develop the district or building improvement program and who choose the set of innovations to be included in that program.

Creating a Framework

Five guidelines can aid school leaders in their efforts to synthesize the different innovative strategies that constitute their improvement programs. These guidelines should be taken as a frame of reference for addressing issues crucial to the success of integrating any combination of innovations.

1. *All innovative strategies in the improvement program should share common goals and premises.* Every innovative strategy I listed earlier is specifically designed to increase learning and enhance the well-being of students. Although each focuses on different aspects of the teaching-learning process, all presume that learning can be improved and that educators can strongly influence learning. Furthermore, all emphasize that when students experience greater success in learning, they feel better about learning, better about themselves as learners, and are more highly motivated to continue learning in the future. Explicit acknowledgment of these common goals and shared premises is a necessary first step in bringing about their systematic integration.

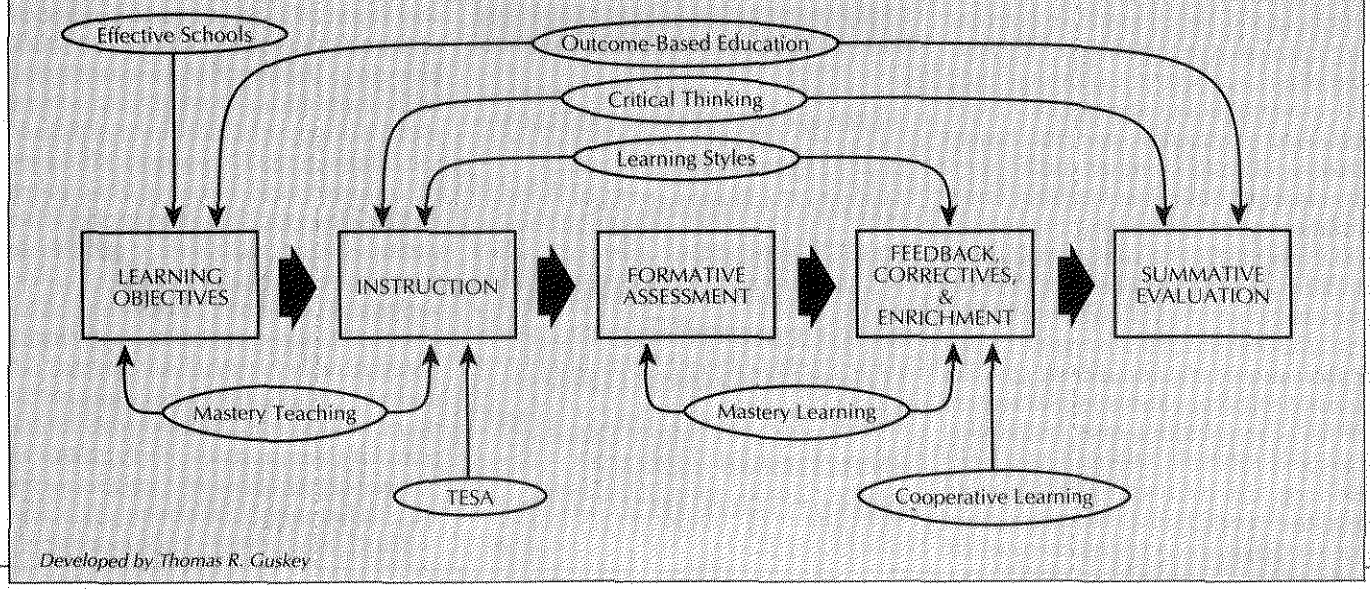
2. *No single innovative strategy can do everything.* Despite the claims of some advocates, no innovation will solve all the complex problems facing educators today. Therefore, a highly effective improvement program must note different strengths and employ a combination of strategies that will positively influence different aspects of teaching and learning.

Figure 1 illustrates how this might be accomplished. In the blocks across the center of the figure are five major components of the teaching-learning process: (1) specification of clear *learning objectives,* (2) initial teaching or *instruction,* (3) a check on initial learning through some type of *formative assessment,* (4) the provision of *feedback and corrective instruction* for students who have not learned well through the initial teaching or *enrichment* activities for those students who have, and (5) *summative evaluation* of student learning.

The figure also includes my interpretation of the major strengths of the innovative strategies mentioned earlier. Arrows extend from each strategy to the component/components that is/are a principal focus—and thus seemingly a major strength—of that strategy. This does not necessarily mean that an innovation is weak with regard to the other components but simply that less attention is devoted to that particular component in the major references describing it.

For example, as part of an excellent

Fig. 1. The Principal Strengths of Selected Innovative Strategies



Developed by Thomas R. Guskey

guide for developing a school climate conducive to learning, the effective schools model emphasizes the importance of clearly recognized and accepted learning objectives common for all students Outcome-based education also stresses the need to state clearly what students are expected to learn but does not relate objectives specifically to school climate Instead, outcome-based education emphasizes the importance of summative evaluations of performance strictly according to stated objectives

Neither the effective schools model nor outcome-based education, however, offers much specific guidance on instructional quality Mastery teaching, on the other hand, helps to clarify the important decisions teachers must make in planning and conducting classroom instructional activities TESA, too, concentrates chiefly on instruction, since it helps teachers become more aware of the expectations they communicate to their students But mastery teaching and TESA say little about assessment or evaluation

Mastery learning does address (1) formative assessment to give students regular feedback on their learning progress and (2) pairing that feedback with high-quality corrective activities for students who need additional assistance or enrichment activities for students who have learned very well But mastery learning is basically neutral with regard to curriculum objectives or instructional format

Concepts from cooperative learning and learning styles are especially valuable when teachers are planning alternative instructional approaches, especially for corrective or enrichment activities Though neither the cooperative learning nor the learning styles literature offers detailed prescriptions for evaluation, the data on critical thinking provide several methods for assessing higher-level cognitive skills

3 *The innovative strategies in the improvement program should complement each other* The complementary nature of innovations must be emphasized and constantly reinforced if practitioners are to understand how to integrate them and how to translate that synthesis into classroom practice Whenever presenters introduce a strategy, they should illustrate how that strategy ties in with the ones introduced earlier

Of course, differences between strategies should be pointed out, particularly points of disagreement, but attention needs to move beyond simple comparative analyses and toward practical synthesis The compromises necessary to attain such a synthesis are far more likely to enhance the effectiveness of each strategy than to detract from any one

4 *All innovative strategies need to be adapted to individual classroom and building conditions* Few practitioners can take what they have learned from staff development, move directly into the classroom, and begin employing the new strategy with success (Crandall 1983) Educators need time to experiment and work through the process of mutual adaptation

Support during this period of adjustment is critically important, and that support must be extended beyond the first year of implementation (Guskey 1986, Loucks-Horsley et al 1987) Teachers and administrators alike need ongoing guidance and direction to adapt the strategy to their needs while still maintaining its fidelity Without the necessary guidance and support, the innovation is apt to be implemented poorly or incompletely, and improvements will then be minimal

The complementary nature of the models must be emphasized if practitioners are to understand how to integrate them and how to translate that synthesis into classroom practice.

5 *When a well-conceived combination of innovative strategies is used, the results are likely to be greater than those attained using any single strategy* The various innovations shown in Figure 1 are complementary in nature Using a combination of them, therefore, is likely to prove very powerful In fact, research evidence suggests that when a combination of strategies is employed, each addressing a different aspect of the teaching-learning process, the results can be *additive* That is, if one innovative strategy is in place and another is added, the benefits of the new strategy do not duplicate those of the established one but rather add to them (Bloom 1984, Walberg 1984) For example, when mastery learning and cooperative learning are used together, the results can be impressive (Mevarech 1985b, 1989) Of the five guidelines offered, this is probably the most crucial—and the most neglected If the effects brought about by different strategies were not additive, the incentive to use them in combination would be far less compelling It remains our challenge to determine the optimal combinations for particular settings and to implement them in ways that give them their greatest chance to produce their best results

Broadening Our Scope

If school improvement efforts are ever to attain their full potential, educators must broaden their thinking about the way improvement efforts are planned and implemented To do so, we must first drop the practice of introducing each innovation as an isolated "new idea" without relationship to or regard for other ideas Throughout all stages of improvement initiatives, we must clearly describe the relationships between existing and new strategies in practical terms

Second, we must expect the advocates of a particular strategy to argue persuasively for the advantages of their approach, but we should press them to be explicit about the limitations of that approach Only then can one strategy's strength compensate for another strategy's weakness

Third, when new strategies are in-

If the effects brought about by different strategies were not additive, the incentive to use them in combination would be far less compelling.

troduced, we must provide support and follow-up activities for an adequate time After all, improvement means change, and change is a gradual process, taking place not over a period of days, but months and, in some cases, years (Fullan 1982)

Broadening the scope of planning and implementation will not only encourage the integration of innovations but will enhance opportunities for collegial sharing When different strategies are implemented simultaneously, not everyone will be doing the same thing at the same time Practitioners are thus likely to be at very different stages of implementation with regard to any one strategy This differential experience can be an advantage experts in one strategy can serve as excellent models, mentors, and peer coaches for those who are just beginning When another strategy is considered, the beginner may become the expert, and so on

The overarching reason to broaden our thinking about the implemention of new ideas, however, is that a broader view will promote the synthesis of innovative strategies Achieving the optimal integration of innovations will not be easy, but doing so is essential if school improvement efforts are to sustain their momentum, continue to expand, and bring about the kind of results for which the innovations were intended

The primary task that lies ahead, therefore, is not so much the generation of ideas as their integration, not so much finding individual ideas that work as making a collection of ideas work together □

References

Abrami, P C, L Leventhal, and R P Perry (1982) "Educational Seduction" *Review of Educational Research* 52 446–464

Berman, P, and M W McLaughlin (1976) "Implementation of Educational Innovations" *Educational Forum* 40 345–370

Berman, P, and M W McLaughlin (1977) *Factors Affecting Implementation and Continuation* Federal Programs Supporting Educational Change, vol III Santa Monica, Calif RAND Corporation

Block, J H, H E Efthim, and R B Burns (1989) *Building Effective Mastery Learning Schools* New York Longman

Bloom, B S (1968) "Learning for Mastery" *Evaluation Comment* 1,2 1–12

Bloom, B S (1984) "The Search for Methods of Group Instruction as Effective as One-to-One Tutoring" *Educational Leadership* 41,8 4–18

Brookover, W, L Beamer, H Efthim, D Hathaway, L Lezotte, S Miller, J Passalacqua, and L Tornatzky (1987) *Creating Effective Schools* Holmes Beach, Fla Learning Publications

Carbo, M, R Dunn, and K Dunn (1986) *Teaching Students to Read Through Their Individual Learning Styles* Reston, Va Prentice-Hall

Costa, A., ed (1985) *Developing Minds A Resource Book for Teaching Thinking* Alexandria, Va Association for Supervision and Curriculum Development

Crandall, D P (1983) "The Teacher's Role in School Improvement" *Educational Leadership* 41,3 6–9

de Bono, E (1983) "The Cognitive Research Trust (CoRT) Thinking Program" In *Thinking An Expanding Frontier*, edited by W Maxwell Philadelphia Franklin Institute Press

Fullan, M (1982) *The Meaning of Educational Change* New York Teachers College Press

Guskey, T R (1985) *Implementing Mastery Learning* Belmont, Calif Wadsworth

Guskey, T R (1986) "Staff Development and the Process of Teacher Change" *Educational Researcher* 15,5 5–12

Guskey, T R (1988) "Mastery Learning and Mastery Teaching How They Complement Each Other" *Principal* 68,1 6–8

Huberman, M, and M B Miles (1984) *Innovation Up Close How School Improvement Works* New York Plenum

Hunter, M C (1979) "Teaching Is Decision Making" *Educational Leadership* 37,1 57–60

Hunter, M C (1982) *Mastery Teaching* El Segundo, Calif TIP Publications

Johnson, D W, and R T Johnson (1987) *Learning Together and Alone* 2d ed Englewood Cliffs, N J Prentice-Hall

Kerman, S (1979) "Teacher Expectations and Student Achievement" *Phi Delta Kappan* 60 716–718

Latham, G (1988) "The Birth and Death Cycles of Educational Innovations" *Principal* 68,1 41–43

Loucks-Horsley, S, C K Harding, M A Arbuckle, L B Murray, C Dubea, and M K Williams (1987) *Continuing to Learn A Guidebook for Teacher Development* Andover, Mass Regional Laboratory for Educational Improvement of the Northeast and Islands

Marzano, R J (1986) *TACTICS for Thinking* Alexandria, Va Association for Supervision and Curriculum Development

McCarthy, B (1987) *The 4MAT System Teaching to Learning Styles with Right/Left Mode Techniques* 2d ed Barrington, Ill Excel, Inc

Mevarech, A R (1985a) *Cooperative Mastery Learning Strategies* Paper presented at the annual meeting of the American Educational Research Association, Chicago

Mevarech, Z R (1985b) "The Effects of Cooperative Mastery Learning Strategies on Mathematics Achievement" *Journal of Educational Research* 78 372–377

Mevarech, Z R (1989) "Learning Mathematics in Different 'Mastery' Environments" Paper presented at the annual meeting of the American Educational Research Association, San Francisco

Slavin, R E (1983) *Cooperative Learning* White Plains, N Y Longman

Spady, W J (1988) "Organizing for Results The Basis for Authentic Restructuring and Reform" *Educational Leadership* 46,2 4–8

Walberg, H J (1984) "Improving the Productivity of America's Schools" *Educational Leadership* 41,8 19–27

Thomas R. Guskey is Professor of Educational Policy Studies and Evaluation, College of Education, University of Kentucky, 131 Taylor Education Building, Lexington, KY 40506-0001