A Critique of Madeline Hunter's Teaching Model from Dewey's Perspective

Hunter's mechanistic and simplistic model does not improve the quality of education because it stifles teacher and student thinking.

The news from California looks good. Science has unlocked the complex cause-and-effect relationship between teaching and learning. Madeline Hunter, designer of a teaching approach based on these scientific findings, is about to speak.

"Teaching [is] one of the last professions to emerge from . . . witch doctoring to become a profession based on a science of human learning, a science that becomes the launching pad for the art of teaching. Only recently . . . has long-established research in learning been translated into cause-effect relationships of use to teachers. Only recently have teachers acquired the skills of . . . using these relationships to accelerate learning" (Hunter 1984, p. 169).

"[My] model is equally effective in

Photograph by Joe Fine, courtesy of the Center for Dewey Studies, Southern Illinois University at Carbondale

John Dewey, shown here at age 90 with young friends, related thinking to learning, methods, content, and motivation. In so doing, he "made a unity from essential pieces."

elementary, secondary, and university teaching. [I]t applies to every human interaction that is conducted for the purpose of learning. [F]aculty meetings ... Rotary Club meetings ... school board meetings ... are all improved by [the] application of the principles of human learning" (Hunter 1985, p. 59).

Hunter describes the elements of lesson planning based on the principles of learning. These seven elements, she says, are "helpful in interpreting the effectiveness ... of direct teaching and in identifying what is needed should lessons be ineffective" (Hunter 1984, p. 175). These and other elements are used by teachers to make decisions about teaching. However, fearful that some teachers may slavishly follow the elements, Hunter advises caution: "Simple techniques of teaching have limitations; principles of learning are not absolute; and real-life teaching has a way of blurring the neat distinctions of laboratory theory" (Hunter 1985, p. 60).

Hunter states that the seven elements of lesson planning provide the base for her approach to teacher supervision. She explains the learning theory on which her model is based, citing Pavlov in an example, and recalls a finding of Wundt's that the beginning and end of any series are easiest to learn. "The knowledge has been around for years, but it was in terms of pigeons and rats, or in terms of the psychological laboratory..." (Brandt 1985, p. 61). She reviews key topics in her learning theory such as positive and negative reinforcement, massed and distributed practice, and task analysis to break learning into a step-by-step procedure (Brandt 1985, Hunter 1982, Hunter undated).

Her talk ends 20 minutes later. The ambiguities of teaching melt away. The invocation of science and the clarity of the speech carry the day. The audience seems to feel that Hunter has put lights on the road to better learning and teaching.

I am not so sure. I have a vague sense of uneasiness. Terms such as *task analysis, specific objectives*, and *cause and effect* have a mechanistic ring to them. So do terms such as *positive and negative reinforcement*.

In accepting Hunter, might we not be buying simplicity and a false clarity about teaching that displaces a more fundamental concern about learning? Might we not be buying a subjectively based model of teaching in the guise of science?

Hunter's Model from a Scientific Perspective

Hunter claims that her model will improve learning because it is based on research and that she has unraveled the connections between learning theory and the teacher behaviors that result in better learning. I take issue with these claims, on several grounds.

1. Hunter has not produced the research evidence to support her claim for improved learning. It is not in publications where it might reasonably be expected to appear. In her chapter titled "Knowing, Teaching, and Supervising" in *Using What We Know About Teaching* (Hunter 1984), she offers no supporting research citations and no bibliography. I find no research to support her claims for improved learning in *Mastery Teaching* (1982). Nor does she provide any research evidence to support her claims for higher achievement in *Teach More—Faster* (1969).

Photograph courtesy of The Center for Dewey Studies, Southern Illinois University at Carbondale

Dewey's admonition on technique is worth recalling. He wrote in 1916 that nothing had brought pedagogical theory into greater disrepute than handing out models and recipes to be followed in teaching. He called it "mechanical woodenness."

One would think that in the 15 years since *Teach More—Faster* was published, Hunter or others would have produced a series of studies across the 12 grade levels in a representative sample of subjects that would cast some light on her claim. Without a pattern of such studies on important cognitive and affective learning outcomes (not merely some limited time-task relationship), it is difficult to see the science in her model.

2. The lack of any pattern of research to support her claim for improved learning also confounds Hunter's starting point: "scientific" learning theory. Hunter's model starts with learning theory, moves to prescriptions for teaching, and, finally, to claims for increased student achievement. Ignoring the fact that her learning theory is based in part on research with lower animals that lack both the capacity for higher cognitive functions and culture, her view is inconsistent with at least one major theorist who embraced a generalized method of science.

John Dewey (1929) held that a finding might be scientific in psychology or in sociology, for example, but that it is not scientific in education until it has been tested in educational practice. Until that happens, psychological learning theory is only intermediary and auxiliary. Hunter conceptually equates psychology and education. Without a pattern of evidence that her psychologically based learning theory increases learning in school settings, it can be argued that the validity of her espoused learning theory is educationally suspect, however well it may be accepted by those in other fields.

3. Without a solid pattern of evidence to support the claim for improved learning, there is no scientific basis for the Hunter model. The links she infers (I cannot use the term *cause and effect*) between learning theory and rules for teaching have not been demonstrated. Even the basis for the model, learning theory, can be questioned if the criterion for testing in educational settings is applied.

I use scientific criteria to critique the Hunter model only because she, herself, invokes them. But merely to apply scientific criteria to this or any other model of teaching and learning (or supervision) misses important substantive educational questions. Science tells us at best what is, not what ought to be. If one applies some "ought to be's" to the Hunter model from the value perspective of a more intellectual and holistic theory, substantive questions can be raised about the model, regardless of whether it is proved to be effective in practice.

"Hunter's content consists primarily of technique: technique uprooted from the ideas of a comprehensive educational theory."

Hunter's Model from a Philosophic Perspective

Comparing the Hunter approach with that of Dewey reveals two major deficiencies.

1. The content of the model is primarily about technique, and the training program[1] uses a didactic teaching process that requires mostly fact-recall responses from participants. Both content and training are nonintellectual.

2. The model itself is nonintellectual and mechanistic and thus will not improve the quality of education.

According to Dewey (1916), the primary aim of teaching is to cultivate thought. Dewey relates thinking to learning, methods, content, interest and motivation, and aims. Dewey makes a unity from essential pieces.

Hunter (1982, 1984), in contrast, does not clearly assert that the primary aim of teaching is to cultivate thought. By not building from this essential aim, Hunter misses a chance to formally unite the basic elements of her teaching model with thinking. Thinking is not organic to the Hunter model in two important respects.

Some supporters of the model say that the inclusion of Bloom's Taxonomy of Educational Objectives (1956) counters my criticism that the model is nonintellectual. However, the Taxonomy did not influence Hunter to set explicit intellectual aims for her model, nor to incorporate it in the model's major elements or in the techniques she discusses in *Mastery Teaching*. In the important area of transfer of learning, Bloom (1956) explicitly cites *thinking* in the Taxonomy as fundamental whereas Hunter (1982), writing on the same topic, omits thinking.

Hunter (1982) writes about 16 techniques, of which use of the Taxonomy[2] is one. The Taxonomy's influence is not discernible on the other 15 techniques, such as "teaching students to remember" and "teaching for transfer" to which it might be expected to relate. Writing about transfer, Bloom says: "If we are concerned with the problem of transfer of training, by definition we would select intellectual abilities . . . as having greater transfer value" (1956, p. 42).

Hunter, in contrast, omits thinking when she writes about transfer. She labels transfer a principle of learning (1982, p. 107), talks about positive and negative transfer (pp. 107–108), and goes into great detail about its four attributes without ever mentioning thinking.

Hunter's content consists primarily of technique: technique uprooted from the ideas of a comprehensive educational theory. Ideas give techniques flexibility and direction and provide a basis for their intelligent use. Ideas in a theory provide criteria for what is worth teaching, for knowing when a thing is truly learned, and for giving general direction to learning and teaching so that one does not get lost in a forest of technique.

Pithy findings from psychology, which Hunter (1982) calls propositional statements, do not cohere into a satisfactory educational theory. Psychology is not education.

Dewey's admonition on technique (1916) is worth recalling. He says that

nothing has brought pedagogical theory into greater disrepute than handing out models and recipes to be followed in teaching. "Mechanical . . . woodenness is an inevitable corollary of any theory which separates mind from activity motivated by a purpose." "Purpose" is more than a behavioral objective.

Thus, the aim of Hunter's model is not the cultivation of thought, and thinking does not pervade it. We are left with technique unrelated to the aim of cultivating intelligence. The gaps and omissions in the model relative to thinking are characteristic of atomistic and mechanistic theories in which complex wholes are broken into disparate pieces with the result that critical qualities of the whole, such as thinking, are lost.

The Training Process

The learning process used by most trainers of the Hunter approach is also nonintellectual because it consists of didactic presentations to passive teachers. This judgment is based on a review of the training materials and talks with teachers and administrators in three Philadelphia-area school districts that used different trainers.

My impressions of the learning process are confirmed by Jack Corbin of the Pennsylvania State Education Association (PSEA)[3], who has conducted over 40 regional forums involving 3,000 teachers, many of whom had been trained in the Hunter model and who freely discussed the model.

The teachers and administrators I talked to, including those who support the model, agreed that the trainers lectured on the techniques to be taught; asked trainees to memorize these techniques and their subparts; used self-checking quizzes (on points such as the five factors in motivation); and dealt, in two instances, with trivial factual content: 15-minute demonstration lessons on two kinds of jellyfish and the surfaces of the teeth. Teachers agreed, further, that there was very little critical discussion or active participation by the trainees.

One teacher, who liked some of the techniques, said, "They practice what they preach. They model everything they say." I infer that her idea of what the model is was influenced by the learning process used by the trainer.

The listen-don't-talk-tell-me-what-I-said quality of Hunter's learning process is nonintellectual. It would register about Level 2 on Bloom's Richter Scale. The process excludes seminal ideas, critical discussion, use of the imagination, and critical comparisons among different perspectives in teaching. There is, in sum, little thinking.

What these trainers do is not the responsibility of Hunter. Hunter, in fact, has expressed "horror" at what some people have done to her decision-making model (Hunter 1986). There is irony here, however. This training process reflects many of the didactic and passive qualities of teaching and learning criticized by Goodlad (1984) and Sizer (1984). To use a wooden teaching process to teach technique, and to say that this is a fundamental effort to improve the quality of American education, is to believe that water can dilute itself.

The practical problem of the training process stems from a faulty idea: teach directly for results and ignore the intellectual quality of the process. This idea splits ends from means; it is managerial, not educative. Here is a more powerful and practical idea: quality inheres in ends only insofar as quality inheres in means. Results may be hurried; intellectual processes cannot be. It is the quality of the mental process that counts (Dewey 1916).

Hunter wants teachers to be decision makers. If the content is technique and the learning process is listen-recite, is not this decision making within very narrow, technique-bound limits? Is it not, therefore, a technical decision-making model that views teachers as technicians rather than as professionals? And isn't the model therefore better for teaching discrete facts than for teaching continuous and interconnected concepts?

Is the model, for example, the best choice in helping students understand *Huckleberry Finn*? Is technique the best basis to develop the ideas in the novel about racism, friendship, and social criticism? Or to develop the idea of the changing character of imperialism over the past 200 years? Or to develop the idea that science is a way of thinking based on some assumptions that in themselves are not "proven"?

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Might not the model's bias for behavioral objectives, for discrete lesson planning removed from the flow of learning over days and weeks, for breaking learning into small, sequential steps (task analysis), and for (implicitly) teacher-dominated, total group teaching, suggest that conceptual topics might be neatly boxed in advance to eliminate the ambiguity, time, and the forward-backward-forward qualities of real thinking?

What It All Means

When the content and the learning process used by trainers in the field (for which Hunter is not responsible) are critically reviewed through the lenses of Dewey's theory of learning and teaching, the following conclusions are warranted:

- The content of the model consists primarily of techniques unrelated to a coherent body of educational theory.
- The training process didactically presents techniques that are unrelated to ideas and uninformed by reading or discussion.
- Teachers are implicitly viewed as technical decision makers, not as professional decision makers.
- The model accepts the educational staus quo, in part, because it excises teaching from its essential context, and it offers an incomplete and atomistic rather than a more complete and holistic account of learning and teaching.
- Because the model is nonintellectual and mechanistic, it is not a fundamental response to the problem of quality in education.

Hunter might do two things to improve the model within its present structure. First, she needs to state the fundamental values that direct the model and let the whole content reflect these aims. Second, she should describe and practice a better learning process for "trainees." That process should include readings, more time for reflection and discussion, and less time for didactic instruction. I would still be uneasy about the epistemological roots of the model, but the great thing about thought is that it is an open-ended, self-correcting process in which "goods" and "bads" can be brought into a controlled relationship.

Fundamental reform must begin with ideas, not techniques. Practice always follows ideas. This means that principals and teachers must make explicit the unexamined ideas and assumptions that make schools the unstimulating places they are. Educators must read, think, talk, and test ideas in practice. They must ask: What must we know and value and act on in this school to cultivate the intelligence and sensitivities of teachers, students, and administrators?[4]□

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1. I am referring to the training process used by consultants who are independent of Hunter. She is not responsible for their teaching. I will return to this point later.

2. My statements about the Taxonomy do not mean that I support it as a fundamental way to approach thinking. I believe that the Taxonomy has serious substantive limitations as well as some strengths that are undercut by its unthoughtful use. The Taxonomy enters my argument only to show that the way Hunter uses it is not sufficient to counter my criticism.

3. The PSEA is critical of any one-model approach to teaching and supervision. The PSEA's concern was sparked by teacher complaints that they were being unfairly evaluated by some administrators who have reduced the model to a checklist and who looked, for example, for all seven (or most) of the elements in a lesson (a procedure opposed by Hunter). I agree with PSEA's position.

4. It is worth noting that the pattern of literature on staff development and supervision neglects ideas and what Dewey would call problem solving within one's day-to-day experience. The bias against thought is deep in the woodwork of our profession. And I know from my own experience in testing out this approach in schools that it is by no means a sure thing. New problems arise such as trust and the extent to which the school structure permits significant solutions to be tested in practice. But if it's an educational bear we are trying to slay, we should at least try shooting at the front half.

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