

Reading, Writing, and Mastery Learning: Are They Compatible?



Thomas E. Barone

The mastery learning model should be eyed cautiously. As it is, this approach is a risky way to teach "subjects" like reading and writing.

Is the "mastery learning" approach an effective way of teaching the language arts? Proponents of the mastery learning model can point to the results of at least two major studies that seem to suggest that the answer to that question is "yes." I contend that the correct answer is "probably not."

The heart of our disagreement is easily found. I believe it lies in conflicting conceptions of the nature of the "reading" and "writing" processes, which in turn are related to more general assumptions about the nature of education. There are two such assumptions in the structure of the mastery learning model that are worth examining here. These are, first, the assumption that the educational content to be "mastered" is *closed*, and second, that it is *unidimensional*. Let me elaborate.

The mastery learning paradigm implies that

the "stuff" that is transmitted in the teaching-learning process already exists prior to the act of learning. That is to say, the primary task of the curriculum and the instructor is seen as the passing on to the learner facts, concepts, and behavioral particles already conceived by the curriculum designer and/or the instructor. The content to be learned is "closed," and, as the student learns, "absorbs," "masters" the material, he or she conforms to this preconceived content. The same idea applies in skill-training. A skill is taught as a set of discrete, sequenced behavioral particles—whether the skills of reading or even the (less basic?) skill of tying a shoe lace!¹—and the aim is

¹ Sidney J. Drumheller. *Handbook of Curriculum Design for Individualized Instruction*. Englewood Cliffs, New Jersey: Educational Technology Publications, 1971.



to transmit the pre-existing, standardized content of the skill.

There does exist, it seems to me, some "content" that is essentially "closed," for which the mastery learning approach may be appropriate. Spelling is an example. Facts and concepts in the sciences and the social studies need to be transmitted to younger generations. There are even some identifiable skills involved in reading and writing. The mistake, I believe, is to equate the entire processes of reading and writing with those skills. The contents of the latter are closed; the former includes open-ended activities in which a person creates meanings *from* what is read and *in* what one writes. In reading, securing these meanings involves interpreting a text within one's personal perspective and making sense of it, appreciating it, and even "playing" with it.

The second assumption in the mastery learning model concerning the nature of educational content is related to the first. Not only is the content-to-be-mastered closed, but it is divisible into units that are logically sequenced. That is, the

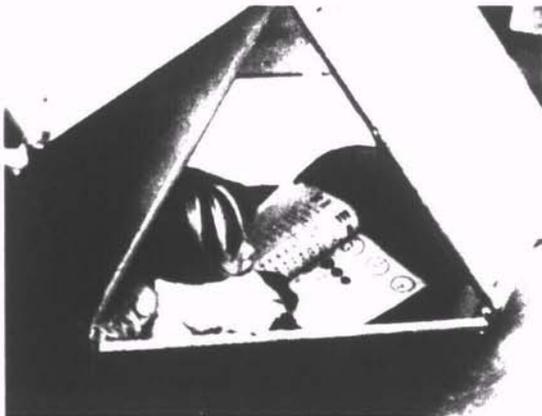
instructional process is seen as proceeding within a sequence of steps. After one "level" of the content has been attended to and "mastered," the learner proceeds to the next, more complex level of performance. But reading, for one example, is a much more elaborate, multidimensional process than is assumed within the mastery learning paradigm. Lee Cronbach once argued this point very nicely:

In subjects . . . such as reading comprehension, achievement is multidimensional. There is the level of knowing what the author said, and the level of knowing what the author meant, and the level of understanding things the author said that the author wasn't aware he had said. These aspects of reading comprehension are developed continuously and the child who has been "brought up to mastery" on only one of the dimensions probably hasn't mastered the other dimensions. Nor does the teacher know what to do to cause him to "master" reading in all these ways. The teacher can only hope that repeated interactions with material, discussed at whatever level the pupil *can* discuss these obvious meanings, will successfully move the child along.²

What Does Research Say?

But if the mastery learning model is naive in its conception of what is involved in reading and writing, what about the research results that seem to validate its effectiveness for teaching these "skills?" An extensive review of studies by Block and Burns examined this effectiveness *vis-a-vis*

² Lee J. Cronbach. "Comments on 'Mastery Learning and Its Implications for Curriculum Development.'" In: Elliot W. Eisner, editor. *Confronting Curriculum Reform*. Boston: Little, Brown and Company, 1971. pp. 49-55.



various "traditional" teaching methods.³ Only one dealt with the language arts (Okey, 1975), but there the results seemed clear: all 14 mastery groups outscored control groups, seven of them significantly.⁴ These results agree with the "not overwhelming, but decidedly positive and quite encouraging" evidence reported from the more recent Chicago Mastery Learning Reading Program.⁵ Smith and Katims reported that their mastery approach to reading, tailored to an urban Chicago setting, enabled an experimental group, in terms of "reading ability," to move slightly ahead of a control group they had lagged behind just 15 weeks before.

These results are not surprising, but they are encouraging only if one views the reading and writing processes in the rather narrow terms of the mastery learning model. I say this because the research strategies and evaluation instruments employed have shared the mastery approach assumptions about the nature of reading and writing. Researchers who conceive of a process like reading as a hierarchical set of skills naturally reach for available evaluation devices with similar tendencies. For example, "reading ability in the Chicago Public Schools," Smith and Katim tell us, "is unofficially but unambiguously defined as the reading comprehension score of the Iowa Test of Basic Skills."⁶ The definition was apparently acceptable to them for research use. And Okey used an achievement test constructed specifically for his study. The criterion measures that define success demand a "closed-system" set of performances and capture information only about those kinds of performances.

But what are the alternatives? Where are the evaluation strategies of those who see the language arts in more open-ended, multidimensional terms? Some such strategies are, at present, "busy being born." Eisner's notion of educational criticism, for example, seems particularly promising for portraying the nature of student reading and writing experiences.⁷ Certainly Cronbach's notion of *ex post facto* hypothesizing could be used for speculating about the ancillary consequences of various reading strategies. I think it is time to employ these and perhaps other newly emerging evaluation and research strategies to ascertain just how students' growth in language abilities is



affected by application of the mastery learning model—and other curricular approaches as well.

Mastery vs. Divergent Learning

Meanwhile, is there any potential danger in relying solely upon traditional instruments for

³ James H. Block and Robert B. Burns. "Mastery Learning." In: Lee S. Shulman, editor. *Review of Research in Education*, Volume 4. Itasca, Illinois: F. E. Peacock, 1976.

⁴ J. R. Okey. *Development of Mastery Teaching Materials* (Final Evaluation Report, USOE G-74-2990). Bloomington: Indiana University, August 1975.

⁵ Jeffrey K. Smith and Michael Katims. "Reading in the City: The Chicago Mastery Learning Reading Program." *Phi Delta Kappan* 59 (3): 199-202; November 1977.

⁶ *Ibid.*, p. 202.

⁷ Elliot W. Eisner. "On the Uses of Educational Connoisseurship and Criticism for Evaluating Classroom Life." *Teachers College Record* 78 (3); February 1977.



our information? In my judgment, there could very well be. Devices like the Iowa Test, along with similar learning models, carry implicit messages concerning what constitutes verbal literacy. When we teach reading through the mastery approach and when we define it as the comprehension score on a particular test, are we not also teaching that reading is, *in toto*, a set of skills attainable in a logical, step-by-step fashion for the efficient absorption of a piece of literal discourse? What about abilities to read for aesthetic enjoyment rather than only the receipt of a "usable" communiqué? What does such incessant literal-mindedness do to students' abilities to read and write poetry? Will a potential for verbal expressiveness remain nascent? Will students be more or less apt to write with imagination, with elegance and style, when to write skillfully is the consideration of primary importance?

Mastery learning supporters may argue that logically their approach is not antithetical to notions of divergent learning, that what I am talking

about is simple *application* of the basic skills of reading and writing, and that before such application is possible the necessary first steps must be taken. A person must first master the skills needed to comprehend a line of written discourse before he can graduate to the loftier realms of aesthetics, no?

No. I don't agree. Evidence is mounting that there are two equally basic modes of knowing and learning in human cognition: a logical/linear mode that emphasizes discourse, sequence, and cultural transmission, and a more holistic, metaphoric mode that is multidimensional, contextual, and geared to invention and exploration.⁸ Rico has noted the fundamental nature of the metaphoric mode of knowing, arguing that metaphor is not

... an ornamental linguistic device superimposed on existing percepts and concepts, [but rather] ... a

⁸ For a full discussion of the metaphoric mode of knowing, see: Gabriele Rico. "Metaphor and Knowing: Analysis, Synthesis, Rationale." Unpublished doctoral dissertation, Stanford University, 1976.

fundamental but non-discursive means of patterning percepts and concepts different from, but complementary to, logical, discursive patterning.⁹

Unfortunately our culture has been providing students with a lopsided education, stressing logical/linear learning at the expense of the metaphorical mode. The mastery learning model clearly rests within the prevailing tradition. Yet if students are not given access to metaphoric learning activities, if the shape of their learning activities is always linear and closed, how will their capacities for creativity and invention be developed?

We may, of course, decide to simply ignore this important aspect of human development. We may wish to join the rising chorus of those who believe that the most schools can hope to do with "those kids nowadays" is to equip them with a set of survival skills. I happen to believe that we all deserve more than that. I also believe that students, with appropriate teaching methods and support from the "significant others" in their lives, are quite capable of acquiring the abilities to read and write—in the larger sense spoken of here.

So is the mastery approach appropriate for teaching reading and writing? I have tried to show that the mastery learning model bears implicit features that should make educators, at the very least, suspicious and cautious. But I am more than ready to admit that more research is needed, employing new kinds of evaluation tools, to provide us with empirical evidence for making sound judgments concerning this question. Meanwhile, I believe that we use the mastery learning approach to teach "subjects" like reading and writing at some risk. ¹⁰

⁹ *Ibid.*, p. 2.



Thomas E. Barone is Assistant Professor of Education, Northern Kentucky University, Highland Heights, Kentucky.

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