

# Mastery Learning Stifles Individuality

Carl D. Glickman

While serving on a panel with Benjamin Bloom and listening to his lecture on the concepts of mastery learning,<sup>1</sup> I began to feel uneasy. The beliefs that I had formed during 11 years as a school teacher, school principal, and university professor were being seriously challenged. I was not (and am not) ready to abandon my convictions about developmental learning and progressive teaching, and that is the crux of my difficulties. As a panelist, I had only a short time to organize and present the foundations of my disbeliefs. Now with additional time to do further research on mastery learning, I will try to crystalize my initial skepticism.



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## Bloom's Mastery Learning

Mastery learning is built on the assumption that the majority of children can become equal in their ability to learn standard school tasks. As Bloom has written, "To put it more strongly, each student may be helped to learn a particular subject to the same degree, level of competence, and even in approximately the same amount of time."<sup>2</sup> He believes that educators are holding to a myth when they attempt to classify some children as slow, average, or fast learners, because 95 percent of the population are equally capable of learning.<sup>3</sup> In effect, he states that to classify children as different in abilities is a "cop-out." Bloom's denigration of labels is supported by much research that documents the negative impact of teacher prophecies.<sup>4</sup>

Bloom's analysis has somehow merged the notion of respecting and teaching to individual differences with discriminating unfairly against children because they are different. I feel that to perceive a child as having unique learning abilities is not the same as categorizing and therefore limiting a child's potential. The advocates of basic or traditional education have always treated the subject to be learned as of primary importance. All students are taught the same. Everyone turns to page 55 of the workbook, hears the teacher's explanation, and then does the workbook pages. This happens even though some students are already beyond and bored with the material, some can't understand the work at all, and others are able to work competently through the material. What mastery learning does is replace "page 55" with "criterion-referenced materials" or

"learning modules." As Bloom describes it, the more advanced students who finish the work quickly are kept busy with enrichment materials; the middle third use the full 40 minutes to do the work; and the other third need extra time for reinforcing work, peer tutoring, and individual teacher consultations.<sup>5</sup> Ideally, mastery learning works so that the previously faster, average, and slower students eventually reach the same levels of proficiency, and from that point on students can be taught together as a group, mastering the same materials at the same time. The utopian vision of mastery learning is not really a radical change in schooling, but instead it's what teachers concerned with subject matter have always wanted—30 students of equal ability who need one lesson plan for all.

## Same Ability, Same Treatment?

What is wrong with this utopian traditional vision of educa-

<sup>1</sup> Association for Childhood Education International, Keynote lecture and panel discussion. Annual work study conference, St. Louis, Missouri, April 9, 1979.

<sup>2</sup> Benjamin S. Bloom. *Human Characteristics and School Learning*. New York: McGraw-Hill Co., 1976. p. 208.

<sup>3</sup> Benjamin S. Bloom. "New Views of the Learner." *Educational Leadership* 36: 564; April 1979.

<sup>4</sup> Jere E. Brophy and Thomas L. Good. *Teacher-Student Relationships*. New York: Holt, Rinehart and Winston, 1974. chapters 2, 3, and 4.

<sup>5</sup> Follow-up question and answer session to ACEI keynote lecture. (See footnote 1.)

tion? After all, if all students are equally successful, why not treat them the same? This is where I become uneasy.

As a teacher and principal of schools that have been activity-centered and developmentally based with nonstandardized curriculum,<sup>6</sup> I believe we do students a great disservice by assuming that they are the same and should learn the same material at the same time. I take issue in three ways with Bloom's assumption of same ability and same treatment. My concerns are: (1) What does research indicate about the hypothesis that students are the same? (2) What happens to teacher and child when students are taught as if they are the same? and (3) What are the philosophical implications of such a system? Let's take each concern in order.

1. *What does research indicate about the hypothesis that students are the same?* Much of the developmental research by Piaget, Bruner, and others<sup>7</sup> provides evidence that students progress through stages of cognitive, language, social, moral, artistic, and physical stages at different rates. It is important for the reader to keep in mind that a child's progression is not the same in each area. For example, a child who might be in stage two of cognitive development may be in stage four of motor development. Additionally, some of the most promising research in children's abilities to learn being done by interdisciplinary teams of brain researchers seems to support student individuality rather than sameness. Chil-

dren's learning varies in terms of development, lateralization, and functional interaction between the two hemispheres of the brain. Moreover, it may be that these developmental brain differences parallel and provide the neurological substrates for Piagetian cognitive stages.<sup>8</sup> Additionally, anthropologists have long claimed that a child's culture screens and influences certain types of learning over others.<sup>9</sup> How a child perceives what is relevant and of interest to learn is derived from his/her cultural history, which is not only different from group to group but from individual to individual. Therefore, there is much research that would refute Bloom's assertion that 95 percent of children have nearly the same potentiality for learning.

2. *What in practice happens to teacher and child when students are taught as if they were the same?* There may be adverse effects of practicing the concept of sameness. For example, if Sara is not up to the rest of the class in reading but is far ahead of the class in originality of expression, the implications of mastery learning for Sara become disturbing. Sara will be required to spend much of her time reading, with extra group work and tutoring. In fact, Bloom states that initially, "... the slowest 10 percent of students may need about five to six times as much rehearsal, practice, or participation in the learning activity as the most rapid 10 percent of students."<sup>10</sup> Obviously, the extra time in reading will need to be taken from time devoted to other activities. Sara may not only be an ex-

<sup>6</sup> "Alternatives for Children Program." Somersworth, New Hampshire: Elementary Schools (1971-1974).

<sup>7</sup> Jerome Bruner and others. *Studies in Cognitive Growth*. New York: Wiley, 1966; Jean Piaget. *The Development of Thought: Equilibration of Cognitive Structures*. New York: Viking Press, 1977; Jean Piaget. *The Language and Thought of the Child*. New York: Harcourt Brace and Co., 1976; Lawrence Kohlberg. "Stage and Sequence: The Cognitive-Developmental Approach to Socialization." In: D. Goslin, editor. *Handbook of Socialization Theory and Research*. Chicago: Rand McNally, 1969b; William Damon. *Social World of the Child*. San Francisco: Jossey-Bass, 1977. For a simplified view of development, see: David Elkind. *A Sympathetic Understanding of the Child: Birth to Sixteen*. Boston: Allyn and Bacon, 1974.

<sup>8</sup> Advanced stages of Piagetian cognitive development may parallel the development of specialized programs of information processing in the left and the right hemispheres of the brain as well as lower structures such as the thalamus and the myelination of connecting fibers between these structures, which result in more efficient interfacing of these programs. For an extensive review of this literature, see: Rosemarie H. Kraft. "Asymmetric Brain Specialization; Proposed Relationship between its Development and Cognitive Development." In: Victor Rentel, editor. *Psychobiological Aspects of Reading*. New York: Pergamon Press, in press; Rosemarie H. Kraft. "An EEG Study: Hemispheric Brain Functioning of Six to Eight Year Old Children during Piagetian and Curriculum Tasks with Variation in Presentation Mode." Columbus: The Ohio State University, 1976. Unpublished doctoral dissertation; Marlin L. Languis, Tobie S. Sanders, and R. Steven Tipps. *Future Perspectives in Early Childhood Education: New Threads on the Loom*. Washington, D.C.: NAEYC, in press.

<sup>9</sup> Ojo Arewa. "Cultural Bias in Standardized Testing: An Anthropological View." *Journal of Negro Education* 153-171; October 1977.

<sup>10</sup> Benjamin S. Bloom. *Human Characteristics and School Learning*. New York: McGraw-Hill Co., 1976. p. 215.

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cellent artist, but she probably derives great satisfaction from those art activities. In my own observation of mastery learning classrooms, it is common to see the extra time required of learners who are "slow" in the basics (that is, reading) being taken from time spent in what they enjoy the most (art, dramatizations, independent projects). How does this reallocation of students' time affect their attitudes toward school and their progress in areas where they already feel competent?

Returning to the developmental and hemispheric research, attempting to teach cognitive operations that require symbols (and abstractions) to a child who does not possess the corresponding mental organization is putting a student into a situation that is doomed to failure. Developmentalists say that the child needs to be able to "decenter" his thinking first.<sup>11</sup> Brain researchers say that structures, connecting fibers, and programs of the brain need to develop first, and that for some individuals whose learning preference reflects unique neurological organization, certain modes of learning would never tap their learning style strengths.<sup>12</sup> In other words, students are being taught what they cannot possibly learn, and furthermore they are being deprived of the experiences (that is, concrete manipulation) that are es-

sential for being able to learn such abstractions.

3. *What are the philosophical implications of such a system?* Finally, let us put aside the questions of research and practice and for a moment accept that mastery learning can be effective. Even if it "works," we still need to ask our-

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selves if we want students to be equally masterful of the same skills and knowledge. This is an important question because what is or can be is not necessarily what should be.<sup>13</sup>

In the context of a democracy we need to define what is meant by "equal." Bloom interprets equality as students having attained the same competencies.<sup>14</sup> There are many persons in the minimum competency movement who share this interpretation. But is equal identical to sameness, or is equal the opportunity to develop according to one's abilities and interests?

The question of equality is a profound question, and, although I have great respect for Bloom and believe him an honorable person who hopes that the successful application of his principles will bring about a more humane society,<sup>15</sup> I cannot share his concept of equality. This is where I must ultimately reject mastery learning as a total concept of schooling. In the end, educators must define their own promised land. Mine is where every individual is encouraged, supported, and taught to be as unique as possible.

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<sup>11</sup> Jean Piaget. *To Understand is to Invent*. New York: Viking Press, 1975. p. 90.

<sup>12</sup> M. C. Wittrock. "Education and the Cognitive Process of the Brain." Chall and Mirshky, editors. *Education and the Brain*. 77th NSSE Yearbook, Part II. Chicago: Chicago Press, 1978.

<sup>13</sup> For a fuller explanation of educators as philosophers, see: Maxine Greene. *Teacher As Stranger: Educational Philosophy for the Modern Age*. Belmont, California: Wadsworth Publishing Company, 1973.

<sup>14</sup> Bloom, *op. cit.*, p. 215.

<sup>15</sup> Bloom, *op. cit.*, p. 209.

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