
Preface

“Education isn’t what it used to be, but then it never was,” Mark Twain was reported to have joked. He might have said the same thing about “standards.” Like education in general, standards either supply the promise of a better future or are the root of our problems, depending on the side of the political landscape on which you stand. Perhaps Benjamin Barber (1992) asked the hardest question: “What are we to make of a society that deploys rigorous standards of culture and learning in its schools which are nowhere to be found in the practices and behavior of the society itself?” (pp. 215-216).

And yet, when work is shoddy, food is contaminated, or air travel is unsafe, the public clamors for higher standards. It is the American way of complaining, yes, but it is also the American way of pulling ourselves up by our bootstraps. So it seems natural when education is perceived as ailing or failing that we turn to standards as our solution.

The history of standards in America is long and tortuous (for a good, brief history see Marzano & Kendall, 1996). It includes at least one notable success, defined as widespread adoption, in the invention of “the Carnegie unit” in the early 20th century, which standardized the meaning of course credit in terms of class time. The history also includes such notable failures as “the new math,” which rewrote mathematics curricula in response to the Soviet Union’s launching of Sputnik in midcentury. It failed and was eventually replaced with a back-to-basics movement. As Linus (in the “Peanuts” comic strip) quipped, “How can you do new math with an old math mind?”

The history of standards also reflects federal government versus states’ rights skirmishes, competition among professional organizations (for what will be required and what will be optional for graduation), religious versus secular issues, as well as numerous other political issues beyond the scope of this book.

What does seem relevant, however, is an apparent shift in the goals of standards from inputs to outputs, in Marzano and Kendall's (1996) shorthand. Whereas previous standards emphasized what had to go into a course (specifics of the curriculum, how material was to be taught, how many credits or Carnegie units it was worth), current standards emphasize what comes out (what students know or can do and how to assure accountability). As Marzano and Kendall (1996) summarized, "The new, more efficient and accountable view of education is output-based; success is defined in terms of students learning specific standards" (p. 17).

Whether the "outputs" view is better or worse, we cannot be sure, though it certainly created a firestorm of rhetoric over the high-stakes testing, perhaps a too-narrow view of accountability that has become linked to the standards movement beginning in the 1980s. Interestingly, the input/output categories have rough parallels with fundamental variables in John Carroll's (1963) model of school learning, which provides some of the theoretical underpinnings of mastery learning. Those variables are opportunity and perseverance. *Opportunity*, in rough parallel to input, is the time allowed or scheduled by the teacher to cover the material and induce students to learn. *Perseverance*, in rough analogy to output, is the time the students spend or are willing to spend to learn. Although both of these are important to and predictive of achievement, perseverance becomes the bottom line: Teachers have been successful to the extent that they induce students to do what they need to do to learn.

We bring this up here to point out that the mastery philosophy on which this book is based is potentially compatible with current views of standards, but it has developed methods for measuring and motivating students to persevere until they achieve those standards. Sadly, many advocates of standards, not to mention those who are charged with implementing them, know little or nothing about implementing mastery learning: its philosophy, its evolution, what makes it work or undermines it, its varieties. Thus, although the movement toward higher academic standards carries with it assumptions about learning, development, and measurement that have traditionally been central to the theory and philosophy of mastery learning, the standards movement has neither embraced mastery learning nor shown evidence of having learned from its successful or unsuccessful practices.

In this text, we describe the various foundations on which mastery learning is built—the learning/memory base, the measurement base, the empirical base, and various theoretical bases—and argue

that if the standards movement does not build on these foundations, we may be witnessing history repeating itself as “*déjà vu* all over again.”

After establishing that the “new standards” are fundamentally based on the principles of mastery learning, we will examine national and state standards and relate them specifically to mastery. The remainder of the text is dedicated to providing ways for educators to assist students in meeting the standards.

Intended Audience

This book is intended for prospective and current teachers, principals and staff developers, and teacher educators. We understand that each of these classes of professionals looks at an educational idea from a somewhat different perspective: teachers, from the point of view of the idea’s practicality and usefulness in the context of all they are required to do already; administrators and staff developers, in terms of resources and accountability; and teacher educators/professors of education, from the vantage point of its theoretical viability and empirical support. And yet all would agree that they have no time to waste on ideas that do not help students learn.

As teacher educators ourselves, we wish to reach each of these audiences. Thus in this book, we have done our best to (a) provide practical and usable ideas about mastery learning and (b) explain how to implement it in the context of a theoretical perspective, including assessing its effectiveness in achieving the standards that we as a society have set for ourselves. Finally, we have presented the evidence in a general way in the text, while providing more details (for those who wish to pursue both evidence and the methodological issues that accompany such evidence) in the Appendix.

Acknowledgments

Appreciation is expressed to Dr. Kay Johnson-Gentile for her suggestions and reflections throughout the preparation of this manuscript, as well as for permission to reprint portions of her course syllabus.

Special thanks are due to Namisi Chilungu, Nicole Robinson, and Brenna Towle for permission to use excerpts of their lessons and personal experiences, and to Dr. Marianne Baker for the data on which Table 1.2 is based.

Many thanks also to Gina Pannoza and Kathleen Lesniak for their comments on portions of this book, and to Peggy Lyons and Shelly Cohen for their word processing assistance in initial stages of the writing.

The contributions of the following reviewers are also gratefully acknowledged:

Pauline Schara
Principal
Linda Vista Elementary
Yorba Linda, CA

RoseAnne O'Brien Wojtek
Principal
Ivy Drive Elementary School
Bristol, CT

Joseph Peake
Executive Director
Central Coast California School Leadership Center
Santa Barbara, CA

Charlie F. Adamchik Jr.
Teacher/Educational Consultant
Blairsville-Saltsburg School District
Blairsville, PA

Lorin W. Anderson
Carolina Distinguished Professor of Education
University of South Carolina
Columbia, SC

Allan A. Glatthorn
Professor Emeritus
School of Education
East Carolina University
Greenville, NC