

Reassessing the objectives of educational accountability in Massachusetts:

The mismatch between Massachusetts and the MCAS

Damian Bebell, Boston College

Steven E. Stemler, Yale University

Contact Information:

Damian Bebell
332 Champion Hall
Boston College
Chestnut Hill, MA 02467
bebell@bc.edu

Paper Presented at the Annual Meeting of the American Educational Research Association. San Diego, CA: April 12-16, 2004.

ABSTRACT

In response to the recent and widespread proliferation of state-mandated high stakes accountability measures, the authors of the present study examine this issue in terms of the traditional aims and purposes of American education. Using Massachusetts as an example, the authors explore both the historic and present-day purposes of school through the examination of historical documents, legal precedents and a content analysis of 50 randomly selected high school mission statements. Through these examinations, the authors argue that the Massachusetts state assessment program (used as a major criterion for promotion decisions) fails to measure the stated goals/purposes of Massachusetts education as expressed in historic and legal documents as well as schools' own mission statements.

INTRODUCTION

A growing number of states have begun to rely upon the use of a single test of cognitive achievement in order to determine which students to promote or graduate (National Research Council, 1999). Many states also hold teachers and schools accountable by aggregating scores from these same tests. The proliferation of such high-stakes testing programs has been amply documented in the literature (Clarke, Madaus, Horn and Ramos, 2001). Vastly differing viewpoints have emerged regarding the wisdom of this trend, however. Grissmer, Flanagan, Kawata and Williamson (2000) have argued that the accountability provided by the use of test scores will solve many of the inequities and problems in public education. Other authors have suggested that such high-stakes testing programs tend to have adverse impacts upon such areas as school culture, student learning, and instruction (Orfield & Kornhaber, 2001; Kohn, 1999).

To date, most of the criticism of accountability programs has been directed towards the technical merits of the assessments that are used (Kane and Staiger, 2000). However, a fundamental tenet of educational accountability is that the assessments must be clearly aligned with the objectives of the program (Airasian, 1997; Tyler, 1990). In the present paper, we explore this tenet in some depth, questioning the alignment of a state's accountability system with the broad objectives of education. Specifically, we will examine the alignment of Massachusetts' school objectives (as evidenced in mission statements and legal documents) with the educational accountability practices currently in place.

Massachusetts, like most other states, has substantially revised its curriculum and assessment programs in the last ten years. Currently, the Massachusetts Comprehensive Assessment System (MCAS) is the state-wide testing program and was implemented in

response to Massachusetts Educational Act of 1993. This legislation called for the establishment of a statewide testing program that would test all public school students without exception in (at least) grades 4, 8, and 10. To this end, the MCAS is based upon newly developed curriculum standards and serves as an accountability measure for those standards. Since its inception in 1998, the MCAS has covered core academic subjects such as English Language Arts, Mathematics, and Science. The exam presently includes multiple choice, short answer, and essay questions with overall student achievement being determined by measuring student test performance against pre-established standards¹. The test results are then aggregated and used to rank schools, show longitudinal trends, and to determine which students will graduate from high school. Thus, students, teachers, schools and districts in Massachusetts are being measured by an accountability/testing system that is based entirely upon measures of the cognitive domain.

Purposes of schooling

Perhaps the most fundamental question in all of educational research is “What is the purpose of school?” Of course, there is no single answer to this question. However, most scholars have come to the consensus that public education does not have a unitary purpose but that schools hold a variety of purposes depending on the societies they serve (Tyack, 1998). Even though schools are a product of their own individual community, it is expected that there should be some common goals/purposes for American schools.

Historically, public schools have been called upon to serve a number of different

¹ This topic itself has been the subject of great controversy. For a more complete review of the technical and policy issues surrounding the MCAS, see Horn, Ramos, Blumer, & Madaus (2000) or Wheelock, Bebell, and Haney (2000).

functions since their colonial inception (deMarrais & LeCompte, 1995; Goodlad, Iura, & McMannon, 1997; Tanner & Tanner, 1990; Tyack, 1998). For example, in the 1830's, the inculcation of morality and character development dominated over subject matter in textbooks and teacher lesson plans (Tanner & Tanner, 1990). By the 1880's, however, the purpose of schooling had shifted toward an emphasis on cognitive development. The prime objective of education in this era was to prepare future leaders and to, "...weed out those unable to profit from a curriculum aimed at developing intellectual power." (Tanner & Tanner, 1990, p. 106). Yet this purpose was also tied to the need to develop future leaders and good citizens. With the massive influx of new immigrants to America, schools were also called upon to ensure that everyone would share a common heritage and that citizens would understand their civic rights and responsibilities (Tyack, 1998).

Because education is not mentioned specifically in the United States constitution, the responsibility for educating citizens falls upon the discretion of each state. Thus, individual states had the latitude to develop their own "purpose of school". In Massachusetts, the state constitution makes specific reference to the purposes of public schooling within the state:

Wisdom, and knowledge, as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties; and as these depend on spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of the people, it shall be the duty of legislatures and magistrates, in all future periods of this commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them; especially the university at Cambridge, public schools and grammar schools in the towns; to encourage private societies and public institutions, rewards and immunities, for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and a natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in their dealings; sincerity, good humor, and all social affections, and generous sentiments among the people.
 (<http://www.state.ma.us/legis/const.htm> Accessed: 3/21/02)

Clearly, John Adams, author of the 1779 document, sets a broad scope of purposes for Massachusetts schools that includes: cognitive development, citizenship, emotional development, and social development. The cognitive domain is represented by the call to promote agriculture, arts, sciences, etc. The importance of developing citizenship is found in the call to promote the natural history of the commonwealth. The importance of emotional development is found in the call to inculcate the principles of humanity and general benevolence as well as the call to promote sincerity, good humor and all social affections and generous sentiments among the people. Finally, the importance of social development is found in the call to inculcate industry and frugality and honesty and punctuality in their dealings.

The legal obligations of schools in the Commonwealth of Massachusetts were revisited in the 1993 court ruling of *McDuffy v. Commonwealth of Massachusetts* (Bolon, 2000). In this landmark case, the judge clearly outlines the state's obligation to educate students and declares seven distinct areas of education:

The crux of the Commonwealth's duty lies in its obligation to educate all of its children. As has been done by the courts of some of our sister States, we shall articulate broad guidelines and assume that the Commonwealth will fulfill its duty to remedy the constitutional violations that we have identified. The guidelines set forth by the Supreme Court of Kentucky fairly reflect our view of the nature of the matter and are consistent with the judicial pronouncements found in other decisions. An educated child must possess at least the seven following capabilities:

- *sufficient oral and written communication skills to enable students to function in a complex and rapidly changing civilization;*
- *sufficient knowledge of economic, social, and political systems to enable students to make informed choices;*
- *sufficient understanding of governmental processes to enable the student to understand the issues that affect his or her community, state, and nation;*
- *sufficient self-knowledge and knowledge of his or her mental and physical wellness;*
- *sufficient grounding in the arts to enable each student to appreciate his or her cultural and historical heritage;*

- *sufficient training and preparation for advanced training in either academic or vocational fields so as to enable each child to choose and pursue life work intelligently; and*
- *sufficient level of academic or vocational skills to enable public school students to compete favorably with their counterparts in surrounding states, in academics or in the job market'*

[Rose v. Council for Better Educ., Inc., 790 S.W.2d186, 212 (Ky.1989) (CP, p. 154)]

The emphasis on the cognitive domain is clearly articulated by the call to educate students sufficiently in the areas of oral and written communication. The citizenship component is emphasized in the second, third, and fifth elements, especially the notion that students should sufficiently understand the governmental processes that affect their community, state, and nation. Next, there is an emphasis on emotional development found in the fourth point related to sufficient self-knowledge and knowledge of his or her own mental and physical wellness. Finally, the importance of vocational preparation is emphasized by the last two points, specifically that students should receive sufficient training and preparation for advanced training in either academic or vocational fields.

The legal documents detailing the purpose of schooling in the Commonwealth of Massachusetts indicate that public schooling should not simply be an academic or cognitive experience for the students. Rather, they emphasize equally the importance of citizenship, emotional, social, cognitive/academic and vocational development. Because no explicit hierarchy amongst these goals is articulated, the implication is that no one purpose is greater than the others, but that all of the articulated purposes carry equal weight. Nowhere is it articulated that the cognitive domain should receive more emphasis than the social, emotional, citizenship, or vocational domains.

Present Inquiry

Even from the cursory treatment of the historic and legal purposes of school in Massachusetts, it seems clear that both the state constitution and the court ruling suggest that the educational system in Massachusetts has multiple objectives. Specifically, both documents purport the importance of cognitive development alongside emotional development, citizenship and social development for Massachusetts students. It also seems clear that the present-day accountability measures in Massachusetts are focusing upon only a narrow interpretation of a single purpose of school: academic/cognitive development assessed via a paper and pencil exam in a limited number of subject areas. In this paper, we investigate this hypothesis by analyzing a sample of Massachusetts schools' mission statements to see how the schools themselves express their own purpose of school. In other words, does the Massachusetts state assessment program (used as a major criterion for promotion decisions) adequately measure the stated goals/purposes of Massachusetts education (as expressed in historic and legal documents as well as schools' mission statements)?

METHODOLOGY

School Mission Statements

Though rarely used in educational research, the school mission statement has been found to be a useful indicator of a school's own self-perceived objectives and goals (Havaneck & Berleur, 1997; Stemler & Bebell, 1999; Stober, 1997). The importance of mission statements has been well established within the school effectiveness literature. Indeed, one of the most important factors that differentiates more effective schools from less effective schools is their sense of commitment to a shared mission (Claus &

Charmaine, 1985; Druian, 1986; Perkins, 1992; Renchler, 1991). This literature also suggests that considerable thought is put into the school mission statement by the school and communities and that the school mission is often taken quite seriously by the administration, parents and faculty. Other research with school missions show that mission statements can be accurately and reliably coded using content analysis techniques and that notable differences in different types of schools are reflected in their mission statements (Havaneck & Berleur, 1997; Stemler & Bebell, 1999; Stober, 1997).

Population and Sample

Massachusetts was chosen as the focus of this investigation for two reasons. First, Massachusetts has enacted a controversial high stakes testing program (MCAS) that is well documented and similar to other programs across the nation. Second, Massachusetts has the nation's oldest constitutional definition for the goals and purposes of public education (McCullough, 2001). A complete listing of every public Massachusetts high school (n=1,904) was obtained from the Massachusetts Department of Education in the fall of 2000. This list was formatted into a Microsoft Excel spreadsheet and a random number was assigned to each school on the list. The list was then sorted by the random number column and the first fifty schools were selected as a representative sample of the population. The school mission statements were obtained in the fall of 2001 from school websites, by solicited e-mail, or by fax. Mission statements were obtained for a total of 45 out of 50 schools selected (90%).

Instrumentation

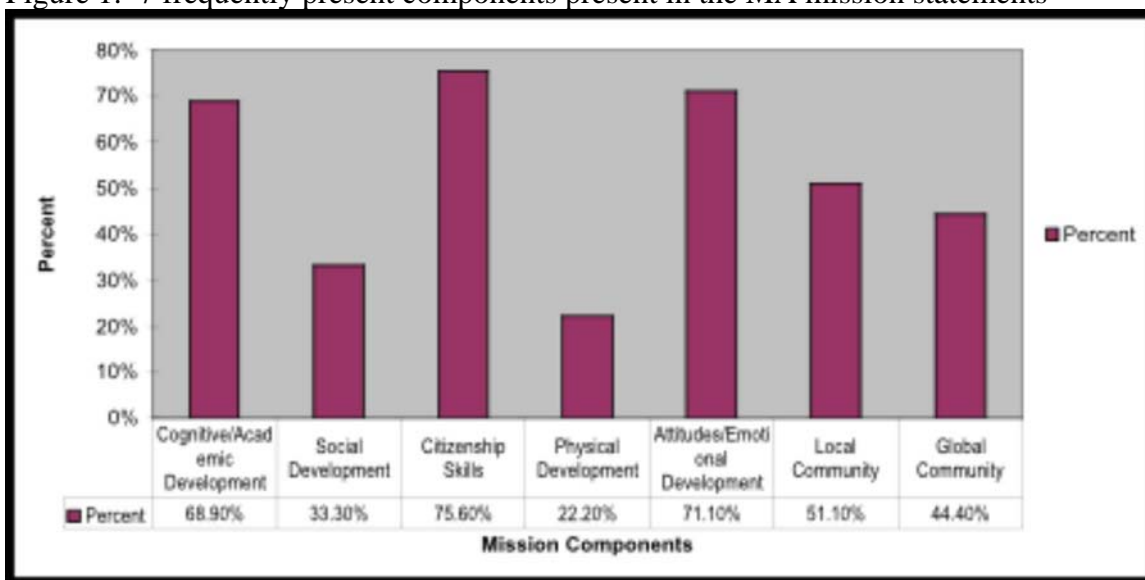
The methodology and coding scheme used throughout the present analysis was adapted from Stemler & Bebell (1999). Content analysis was used to objectively code

each statement of each school’s mission statement by a trained researcher (For a review of content analysis as a research methodology see Stemler, 2001 or Fraenkel and Wallen, 2000). Each mission statement was coded using the pre-established coding scheme, which was characterized by ten major themes (e.g., cognitive, social, emotional). Additionally, each major theme had several sub-categories that were more specific (for example, within the cognitive theme, a specific category was “problem solving skills”). For the current study, the coding scheme was modified to include one additional category: vocational preparation. Reliability analyses were conducted using Cohen’s kappa adjustment for chance and inter-rater and intra-rater reliability were deemed acceptable. Appendix A contains the coding instrument.

RESULTS

The percentages of main components present in the sample of Massachusetts school mission statements are listed below in Figure 1.

Figure 1: 7 frequently present components present in the MA mission statements



The above figure shows that 69% of the 45 mission statements analyzed contained a reference to academic/cognitive development. Perhaps even more notable is that the school mission statements were more likely to contain references to citizenship (76%) and attitudes/emotional development (71%) than academic/cognitive development. Additionally, social development is referenced in 33% of the mission statements while references for preparing students for life in their local and global community were found in 51.1% and 44% of mission statements, respectively.

The above figure also shows that most schools in the sample must have exhibited more than one major component in their mission statement. In fact, the average number of components for the school mission statements was 4.7 (standard deviation of 2.6). This means that, on average, Massachusetts high schools purport to be serving multiple needs. In other words, these schools serve a broad purpose as evidenced by their mission statement. The complete results of the content analysis for each major category and subcategory can be found in Appendix A.

DISCUSSION

A fundamental tenet of educational accountability is that the assessments used should be aligned with the objectives of the program (Airasian, 1997; Tyler, 1990). In education, this inquiry often leads one to ask the fundamental question: “What is the purpose of school?” We have shown that in Massachusetts the purpose of school is defined by the state constitution and further clarified by the courts. Through an empirical analysis of Massachusetts school mission statements we have also demonstrated how schools articulate their own purposes and roles. What’s more, the schools’ self-perceived

missions and the state's definition of schools show a great deal of alignment, continuity, and triangulation in Massachusetts. Specifically, we noted an emphasis both from the state and the schools on: citizenship skills, emotional and attitudinal development, vocational preparation, social development, and cognitive development as the major aims of compulsory schooling in the state.

The accountability systems that states (like Massachusetts) are quickly enacting rely upon high stakes tests, which are based entirely upon measures of the cognitive domain. In these states, decisions are made about students, classrooms, schools and districts that rely solely on information gathered from the cognitive/academic test. In essence, states are focusing on a narrow part of *one* area of education and placing all of their inquiry and emphasis upon this single purpose. In Massachusetts, the state constitution and the courts have defined the purpose of schools to incorporate a number of different aims, but the assessment system is based solely upon only one of these aspects. Additionally, we have found that schools' own purposes and goals are broader than then the assessment system which aims to serve it. In other words, we are holding students and schools accountable for only a piece of the bigger puzzle.

Evidence is also mounting in a number of states (including Massachusetts) that educational practices are quickly being aligned to improve test scores (Wheelock, Bebell and Haney, 2000). In fact, this is an intended consequence of many states' testing programs (Kifer, 2000). The soundness of this practice, however, is brought into question when we look at the broader role and purpose compulsory education plays in our communities. Increasing the focus on core academic subjects for standardized test preparation comes at the expense of the other equally important purposes of school. If the assessment is driving the curriculum in states like Massachusetts, and the assessment is

only focusing upon one aspect of the state's and schools' educational goals, it is evident that what happens in school will look less and less like what the school missions and state law purport. If the future purpose of school is solely an academic/cognitive one, then the reliance upon these types of tests might be justified and effective. However, if the state and schools continue to hold out a multi-faceted purpose of school that involves citizenship, social development, emotional development as well as academic/cognitive development, the current accountability practices are misaligned and potentially destructive.

In conclusion, we argue that educational accountability systems based solely on tests of cognitive achievement represent an incomplete approach to accountability. A single test of cognitive achievement represents only a small fraction of the important objectives of schooling articulated historically, legally, and currently. We suggest that states revisit their accountability policies to encourage the growth of the students in non-cognitive and academic avenues (if that is their stated purpose). Additionally, assessment systems that branch out beyond the narrow cognitive and academic areas (i.e. that focus on the other purposes of school) hold promise for an accountability program that does not suffocate the larger goals and objectives of compulsory educational systems.

REFERENCES

- Airasian, P.W. (1997). Classroom assessment. New York, New York: McGraw Hill.
- Bolon, C. (2000). Educational Reform in Massachusetts.
www.massparents.org/easternmass/brookline/ed_reform_bolon.html
- Claus, R., & Charmaine, J. (1985). An assessment of the Saginaw Successful Schools Project: A look at the data. Joint meeting of the Evaluation Research Society and the Evaluation Society. Toronto, Canada. October 17-19, 1985.
- Clark, M., Madaus, G., Horn, C. and Ramos, M. (2001). The Marketplace for Educational Testing. The National Board on Educational Testing and Public Policy Statements: Vol. 2, No. 3.
- DeMarrais, K.B., & LeCompte, M.D. (1995). The ways schools work: A sociological analysis of education (2nd Ed.). White Plains, NY: Longman Publishers.
- Druian, G. (1986). Effective schooling and at-risk youth: What the research shows. Report for the Goal Based Education Program. Northwest Regional Educational Laboratory. Portland, OR.
- Fraenkel, J.R., & Wallen, N.E. (2000). How to design and evaluate research in education (4th Ed.). Boston, MA: McGraw-Hill.
- Goodlad, J.I, Iura, L., & McMannon, T.J. (1997). The public purpose of education and schooling. CITY?? Jossey-Bass, Inc.
- Grissmer, D., Flanagan, A., Kawata, J. and Williamson, S. (2000). Improving Student Achievement: What State NAEP Test Scores Tell Us. Washington, DC: Rand Publishing.
- Harvanek, R.F., & Berleur, J. (1997). Analysis of mission statements or similar documents of Jesuit universities and higher education institutions.
<http://www.info.fundp.ac.be/~jbl/mis-stat/index.htm>
- Johnson, M. (1996). Organic Education: Teaching without failure. Montgomery, AL: Communication Graphics.
- Kohn. A. (1999). The Schools Our Children Deserve: Moving Beyond Traditional Classrooms and "Tougher Standards." Boston: Houghton Mifflin.
- McCullough, D. (2001). John Adams. New York: Simon and Schuster.

- Orfield, G., & Kornhaber, M., Eds. (2001). *Raising Standards or Raising Barriers?: Inequality and High-Stakes Testing in Public Education*. New York: The Century Foundation Press.
- Perkins, D. (1992). *Smart schools: Better thinking and learning for every child*. New York, NY: Free Press.
- Renchler, R. (1991).. Leadership with a vision: How principals develop and implement their visions for school success. *Oregon School Study Council Bulletin*, 34 (5).
- Stober, S.S. (1997). *A content analysis of college and university mission statements* (doctoral dissertation, Temple University, 1997). *Dissertation Abstracts International*, 58-10, p. 3796.
- Stemler, S.E. (2001). An overview of content analysis. *Practical Assessment, Research, and Evaluation*, 7 (17). Available online <http://ericae.net/pare/getvn.asp?v=7&n=17>).
- Stemler, S.E., & Bebell, D. (1999). *An empirical approach to understanding and analyzing the mission statements of selected educational institutions*. ED 442 202.
- Tanner, D., & Tanner, L. (1990). *History of the school curriculum*. New York, NY: Macmillan Publishing Co.
- Tyack, D.B. (1988). *Ways of seeing: An essay on the history of compulsory schooling*. In R.M. Jaeger (Ed.), *Complementary methods for research in education* (pp. 24-59). Washington, DC: American Educational Research Association.
- Tyler, R.W. (1990). *Basic principals of curriculum and instruction*. Chicago, IL: University of Chicago Press.
- Wheelock, A., Bebell, D. and Haney, W. (2000). What can student drawings tell us about high-stakes testing in Massachusetts? *Teacher's College Record Online*. <http://www.tcrecord.org> ID Number: 10634.

Appendix A: Coding scheme and content analysis results for 45 MA high schools

<u>COGNITIVE/ACADEMIC DEVELOPMENT</u>	general	2%
	foster cognitive development	60%
	problem solving skills	20%
	develop/promote creativity	22%
	research	2%
<u>SOCIAL DEVELOPMENT</u>	general	33%
	promote social interaction	2%
<u>CITIZENSHIP</u>	general	42%
	productive citizen	22%
	responsible citizen	33%
	public service	9%
<u>PHYSICAL DEVELOPMENT</u>	general	4%
	promote phys. development	18%
<u>ATTITUDES/VALUES/EMOTIONAL DEV.</u>	general	11%
	positive student attitudes	7%
	ethical -morality	24%
	joy for learning	2%
	life long learning	31%
	self sufficient students	7%
	self discipline	7%
	reach potential	44%
	emotional skills	18%
	promote confidence	13%
	spiritual development	0%
<u>SCHOOL ENVIRONMENT</u>	general	9%
	safe environment	29%
	consistent environment	2%
	person centered	9%
	technological environment	29%
<u>SPIRITUAL DEVELOPMENT</u>	general	0%
	religious education	0%
<u>LOCAL COMMUNITY</u>	general	2%
	promote community	49%
	community partnership	11%
<u>GLOBAL COMMUNITY</u>	general	22%
	appreciation of diversity/culture	31%
	global awareness	2%
	adaptive students/diverse society	9%
<u>FACULTY</u>	general	18%
	challenging environment	24%
	nurturing environment	22%
	engaging work	22%
	n	45