

**Commonwealth of Massachusetts**

**The Readiness Project**

**Deval L. Patrick, Governor**

# **Sub-Committee on Long Term Financing**

## **Final Report**

March 7, 2008

**Co-Chairs:**

Thomas Downes

James P. McIntyre, Jr.

**Leadership Council Liaisons:**

Senator Robert Antonioni

Mayor Clare Higgins

**Members:**

Noah Berger

Paul Dakin

David Danning

Peter Enrich

Dorothy Galo

Peter Haley

Cam Huff

Greg Jobin-Leeds

John Musante

Robert Pura

Debra Rahmin Silberstein

William Rodriguez

George Thorn

David Tobin

Steven Theall

Michael Weisman

## **EDUCATIONAL NEED / ADEQUACY**

The Education Reform Act of 1993 ushered a wide range of reforms into public education in Massachusetts. Among the most important of these reforms were the introduction of a foundation budget finance system and a mandate to develop academic standards and a testing program to assess student's progress in meeting those standards. The resulting curriculum frameworks and the Massachusetts Comprehensive Assessment System (MCAS) testing program were developed over a number of years, and now form the core of the state's strategy to provide a quality public education for all students. However, the core component of the finance system -- the foundation budget, which should represent for each school district the minimum level of expenditures necessary to provide an adequate education -- was formulated prior to the development of the state standards and has never been aligned with these standards. There has been no systematic attempt to determine the resources necessary to implement these state standards. We strongly recommend that this work be done now.

There have also been other changes and advancements in public education that should be addressed in any funding structure. The need to integrate instructional technology into the classroom, for example, or the requirement for new teacher mentoring, or staggering increases in health insurance costs should be appropriately reflected in any calculation of educational resource needs.

What is an "adequate" education? We believe that the appropriate definition -- and one that is consistent with Massachusetts constitutional requirements -- is an education that

embraces the curriculum frameworks, provides for their full and effective implementation, provides all students with an opportunity to meet or exceed those state standards, and makes it possible for all students either to make the transition to college without needing remediation or to be ready for employment. In areas tested as part of the MCAS program, meeting the standards means achieving Proficiency or higher on the MCAS; in other areas the frameworks establish mechanisms above and beyond the tests for determining if the standards have been met. The frameworks provide a concrete benchmark for evaluating the adequacy of the financing system. We believe that the state needs to re-evaluate the foundation budget, in light of those state standards and the complete MCAS assessment program, not all assessments have been enacted since 1993.

It is our shared view that the education being provided in many districts throughout the Commonwealth does not meet the criteria for an adequate education as we have defined them. In reaching this conclusion, we rely heavily on the fact-finding performed by (now) Supreme Judicial Court Justice Margot Botsford sitting as a specially assigned judge in *Hancock v. Driscoll*.<sup>1</sup> We are not alone in our reliance on Justice Botsford's work. Chief Justice Margaret Marshall, writing for a plurality of the Supreme Judicial Court, discussing Justice Botsford's extensive Report, "concluded that her fact-finding, "stand[s] as a compelling, instructive account of the current state of public education in Massachusetts." We concur in that judgment.

In April 2004, Justice Botsford made comprehensive findings about the educational programs in four "focus" districts: Brockton, Lowell, Springfield and Winchendon. She

---

<sup>1</sup> Hancock vs. Commissioner of Education 443 Mass. 428 (2006)

concluded that in each of these districts, “the public school students are not being provided the level of education to which they are entitled and which the Commonwealth has a duty to provide” under the Massachusetts Constitution. Chief Justice Marshall recognized that there are students “whose special needs go unaddressed,” students who sit “in overcrowded classrooms” and in “ill-equipped librar[ies],” and that for these students “‘the prospect of better things to come’ in public education comes too late.” The Chief Justice also noted that, “sharp disparities in the educational opportunities, and the performance, of some Massachusetts public school students persist.” We believe it is critical to evaluate the extent to which inadequacies in the foundation budget account for, or contribute to, these deficiencies.

In this connection, it is noteworthy that although spending in many struggling districts, including the four focus districts, is consistently at or slightly above the foundation budget level, large numbers of students in these districts fare poorly on each of the objective measures that the Department of Education uses as indicators of the quality of educational programs, including MCAS scores, drop-out rates, retention rates, on-time graduation rates, SAT scores and post-graduation rates of high school seniors. Justice Botsford further concluded that, “the problems and challenges existing in the four focus districts repeat themselves in all or most of the school districts where the other plaintiffs reside.”

Judge Botsford concluded that inadequate financial resources are an important, although not the only, reason for this failure, and that the foundation budget does not provide adequate funding for public school education. As noted earlier, the foundation budget was created before the adoption of the curriculum frameworks and the MCAS test program,

and the State has made no systematic effort since its adoption to evaluate the foundation budget in light of these state standards. Notably, actual spending in affluent districts consistently exceeds the foundation budget for those districts by 50% or more, evidence that, given the capacity to do so, districts spend far more than their foundation budget. According to the recent *Preliminary Report on Current Fiscal Conditions in Massachusetts School Districts* issued by the Department of Education, on average, districts spend 18% more than their foundation budget, and nearly every district in the state is spending over foundation (although many spend only slightly more). This suggests that the current foundation budget formula may not reflect the cost of providing an adequate education.

We believe that it is necessary re-evaluate the foundation budget. As explained in 2002 by Paul Reville, the newly appointed Chairman of the Board of Education,

The Education Reform Act established the “foundation budget,” a minimum amount of spending per pupil necessary to deliver an adequate education. The original foundation budget, proposed by the Massachusetts Business Alliance for Education, was calculated in the early 1990s by asking a diverse group of superintendents what they would need to provide an adequate education to every child in their district. These calculations, now more than a decade old, were made in the absence of any state educational goals because none existed at the time. Now, however, we have a highly articulated set of educational goals (standards). Our finance system needs to be realigned so as to provide educators the means to achieve these educational goals. If we are serious about bringing all students to the high standards, then we need to ask our educators, particularly our urban educators, that question again: “What will it take to get the job done?” Then we need to calculate the costs of the necessary educational provisions – e.g. more instructional time – and develop a formula that will deliver the resources required to move each student to the standard.<sup>2</sup>

We agree with Mr. Reville’s assessment. The Commonwealth, with broad public involvement needs to determine what resources are necessary to provide an education that

---

<sup>2</sup> Commonwealth Special Issue 2002: Education Reform, “Every Child Not Yet a Winner.”

brings “all students to the high standards.” In Massachusetts, those “high standards” are presently embodied in the seven curriculum frameworks, and we consider these frameworks to be an appropriate articulation of what children attending public school should know and be able to do at the various grade levels of their public school education. The frameworks cover pre-school through grade 12 and encompass English Language Arts; Mathematics; History and Social Science; Science and Technology/Engineering; Foreign Language; Arts; and Comprehensive Health.

We believe that a detailed and comprehensive cost study is necessary to determine the resources that would be necessary to implement the curriculum frameworks and give children the opportunity to achieve state standards. There are a number of methodologies that have been used in studies of this type around the country. The dominant methodologies are Successful Schools, Professional Judgment, Evidence-Based, and Cost Function (also known as Statistical):

- The **Successful Schools** methodology builds on the plausible idea that districts already meeting a state's academic performance standard will be spending an amount that is at least sufficient to provide an adequate education. To implement this method, researchers identify districts presently meeting the standard and then calculate how much these districts are spending as a measure of adequacy.
- In the **Professional Judgment** methodology, researchers consult with professional educators (“experts”) to decide the level of spending per pupil that is required to achieve an adequacy standard in a hypothetical school with pre-defined characteristics.
- The **Evidence-Based Approach** is a variant of the Professional Judgment Methodology in which a panel of researchers is first convened to produce a report that summarizes the relevant educational research on the effectiveness of various educational strategies. This data is then used to guide the work of the professional judgment panels.
- The **Cost Function** methodology involves the use of statistical methodologies to estimate the extent to which certain factors contribute to cost variation by relating

variation in per pupil expenditures to variation in output levels, input prices, student characteristics, and district characteristics.

With any of these methodologies, the necessary resources are determined for a typical district. The resources necessary for other districts in the state are then determined by making adjustments to this baseline amount that account for variation in such determinants of cost as the characteristics of students served. (See Downes and Steifel (2007) <sup>3</sup> for a more detailed description of these methodologies and for discussions of the strengths and weaknesses of each.)

Each of these methodologies has advantages and disadvantages. Further, some prominent researchers have argued that none of the methodologies can be used to generate valid estimates of the cost of providing an adequate education. While we feel there is some merit to these criticisms, we find compelling the arguments of Duncombe (2007) <sup>4</sup> and others who make the case that, when used in concert, the methods can generate valid estimates. As a result, we recommend that at least two of these methodologies be utilized to most accurately estimate the resources needed. Based on our conversations with organizations that have recently contracted out adequacy studies, we expect that each adequacy study will cost approximately \$1 million dollars to complete and can be executed in a time frame of up to 12 months. We also feel that, whatever methodologies are chosen, steps must be taken to insure public involvement in the process. The organizations charged with conducting the adequacy studies must be attentive to process transparency and build into the study authentic opportunities for the public to advise and provide feedback during the

---

<sup>3</sup> Downes, Thomas A. and Stiefel, Leanna. (2007). "Measuring Equity and Adequacy in School Finance." In Helen F. Ladd and Edward B. Fiske, editors, Handbook of Research in Education Finance and Policy (New York: Routledge): 222-237.

<sup>4</sup> Duncombe, William. (Fall 2006). "Responding to the Charge of Alchemy: Strategies for Evaluating the Reliability and Validity of Costing-Out Research." Journal of Education Finance, 32, 137-169.

course of the study. This can include but does not have to be limited to such mechanisms as advisory committees, public hearings, and other appropriate review and engagement processes. Gaining public buy-in during the process of defining adequacy will be crucial to the success of our long-term funding efforts and our expectations concerning the cost and time frame account for the time and resources required for extensive public involvement.

We also believe that, since special attention must be paid to the particular needs associated with pre-kindergarten, taking into account the multiple settings in which education and care are provided to our youngest children, consideration should be given as to whether a separate study may be necessary to determine the resources needed to provide universal access to high quality, pre-kindergarten education. A separate adequacy study for pre-kindergarten may also be necessary because those organizations with the expertise to execute such a study are different from the organizations with experience in executing K-12 adequacy studies.

The cost to the Commonwealth of providing educational opportunities consistent with the state's standards for education must also account for the particular needs associated with education programs beyond K-12, including professional, 2-year, and 4-year certification and degree granting programs. Essential for success in today's world is appropriate post-secondary training that enables each student to develop the requisite skill set.

We believe that the resources deemed necessary for educational adequacy should, to the greatest extent possible, be incorporated into the foundation budget, rather than being subject to the vagaries of annual line item funding or unpredictable grants. The



methodologies chosen to determine the resources required to provide an adequate education will dictate how important sources of cost variation are accounted for in determining the resources each district needs to provide an adequate education. As the recently released Department of Education report, *Preliminary Report on Current Fiscal Conditions in Massachusetts School Districts*, notes, among the factors that contribute to cost variation are teacher salary and benefits, the special educational needs of students with disabilities and economically disadvantaged students, technology, and transportation. Any study that purports to determine the cost of providing an adequate education in the state must account for these factors and, since all children in the state must meet all of the standards covered by the curriculum frameworks, for such other important determinants of cost as the number of students in vocational education programs.

The adequacy studies we are recommending could indicate that spending increases are necessary in many of the school districts in the Commonwealth if those districts are to provide their students with the opportunities implicit in the curriculum frameworks. Allocating to those school districts the state and local resources needed for those spending increases only makes sense if those additional dollars are used effectively. Both MERA and the 2001 reauthorization of Elementary and Secondary Education Act (ESEA) provide the accountability tools needed to insure that additional funds are used effectively. We feel that the state should make full use of those tools. At the same time, we feel that the state must provide districts with the support they need to make effective use of any additional dollars they receive.

Our expectation is that there will be a five year phase-in period of any changes in the

funding formula made necessary by updating foundation amounts so that they are consistent with the results of the adequacy studies. We recommend that a procedure be established for systematically updating the adequacy calculations after these initial changes are phased-in. As was recognized by the architects of the 1993 reforms, who recommended updating of the foundation amounts every three years, systematic updating is necessary not just because of inflation but also because changes in the standards and in other aspects of the education landscape of the Commonwealth result in changes in the cost of providing an adequate education in each district. Given the fluidity of the education landscape, we recommend a mandate for updates to the adequacy calculations at least every five years (and more frequently if major changes to the standards are adopted), commencing five years after completion of the initial adequacy studies.

Between the updates to the foundation amounts, adjustments will need to be made for inflation. We recommend that the inflation adjustment be made using an index like the Net Services Index (NSI), as suggested by Mishel and Rothstein (1997)<sup>5</sup>, or the General Wage Index (GWI), as suggested by Goldhaber (1999)<sup>6</sup>. Both of these indices are designed to more accurately reflect changes in education costs than does the index that is currently used to adjust the foundation, which is based on the implicit price deflator for state and local government purchases.

Another subcommittee is considering the requirements of developing the workforce

---

<sup>5</sup> Mishel, Lawrence and Richard Rothstein. (1997). *Measurement Issues in Adjusting School Spending Across Time and Place*. (Washington, DC: Economic Policy Institute).

<sup>6</sup> Goldhaber, Dan. (1999). "An Alternative Measure of Inflation in Teacher Salaries." In William C. Fowler, (Ed.), *Selected Papers in School Finance: 1997-1999*. (Washington, D.C.: National Center for Education Statistics): 33-54.

needed to meet the frameworks. The results of that study should be made available to those executing the adequacy studies so that those studies can properly account for the cost to districts of recruitment, induction, and mentoring of high quality educators and principals. In short, any study of the adequacy of public education must appropriately consider the very real costs of an effective human capital development strategy in school districts across the Commonwealth.