



TEL AVIV UNIVERSITY

School of Education

The Harold Hartog
School of Government and Policy

The Rise and the Price of the Standards Movement

Ami Volansky

Graphic Design: **Tali Niv-Dolinsky**

Production: **TAU Printing Press**, October 2007

Table of Contents

A Note from Prof. Yossi Shain	5
Abstract	6
Introduction	7
The standards crisis	11
The United States	16
Australia	21
Israel	22
The great debate	24
Statistical findings	30
Conclusions	39
Appendix 1	43
Endnotes	44
Bibliography	48
Net sources	52

Acknowledgments

The author would like to acknowledge the Goldman Foundation, School of Government & Policy, Tel Aviv University for a research grant that contributed to the development of the first version of this paper and the Asia Pacific Centre for Educational Leadership and School Quality, Hong Kong Institute of Education, Prof. Y.C. Cheng and his staff members for hosting him as a visiting fellow .

A note from the Head of the School of Government and Policy

Education systems around the world have long been attempting to define standards in education. The need to define such standards has become acute, in light of continued disappointment in the mediocrity of so many public education systems around the world, and the need to provide today's students with a relevant set of skills that will enable them to compete in today's global economy. These needs have encouraged education systems to develop assessments that regard today's students as potential "products" of the system, which must be measured according to well defined standards.

This essay by Dr. Ami Volanski provides an in-depth analysis of the pros and cons of the institutionalization of standards within education systems. It traces the historical development of the standards movement and the two main schools of thought that dominate the discussion: the first advocates the promotion of a common curriculum, while the second argues for variation and individualization of the curriculum.

Over the past two decades, the ongoing tension between these two schools of thought has affected education systems worldwide. Volanski's analysis is therefore an important resource for students of public policy and policy makers who wish to strike a subtle equilibrium between the need to respond to the practical and academic needs of students in the global era, on the one hand, and the need to preserve the cultural, national, historical and scientific heritage of Israel, on the other.

Prof. Yossi Shain

Abstract

This essay seeks to uncover the origins of the standards movement in education as it has developed since the end of the 1980s, spreading quickly through numerous countries. The principal focus falls on two of those countries: the United States and England. The article examines various forces that have inspired the standards movement, such as public criticism over poor schools performance, scientific management and the strong standards tradition in East Asian countries, which lead the world in international test scores.

The essay examines the ongoing controversy over standards. It points out the high pedagogical price that is paid as a result of the institutionalization of standards and it analyzes over two decades of statistical data regarding test scores based on a standards policy. The article explores various factors that complicate the construction of standard knowledge in a class society, and argues that the standards policy must take the cultural context into account, including the great diversification to be found in immigrant societies.

This paper does not address other forces at play, such as globalization and the job market, nor does it discuss the new paradigm developed for existing standards, intended to bring about an improvement in the educational situation. These subjects will appear in later chapters.

Introduction

Over the course of two decades, and principally during the 1980s and 1990s, educational systems throughout the western world have adopted management approaches based on the idea of standardization . This new management paradigm finds expression in a varied range of ideas and practices that pertain to school-based management, school empowerment, professional development, greater parental choice of schools and the role of school leaders. All have been regarded as a step forward (Caldwell and Spinks, 1998; Caldwell, 2003; Bush and Middlewood, 2005; Cheng, 2005). The movement towards centralized control over the curriculum, principally by means of external standards and assessment practices, was carried out with great dedication, enthusiasm, optimism, and authority in a great many countries. This tendency was opposed to perspectives that preferred to empower schools and the teaching profession. In fact, the new management policy of standardization adopted by numerous educational systems ran counter to a postmodern emphasis of diversity, creativity, and innovation. In this sense we might say that the education system went only half way in modernizing itself, clinging as it did to various aspects of an outdated organizational approach.

During the first quarter of the twenty century a similar attempt at centralized control, known as scientific management, reached its apotheosis in the industrial world. Scientific management conceived of workers as machines that were to perform tasks planned and controlled by management. Daniel Wren (2005), in characterizing the contribution of Taylor, the father of scientific management, to the history of management, has written of a total approach towards the "standardization of tools and methods."¹ The fundamental axiom in Taylor's scientific perspective was the notion that all activity should begin with measurement. "[What] could be effectively measured could then be effectively controlled."²

Scientific management's indifference to human needs, together with the fact that it provoked passionate resistance on the part of employees, is well documented in Morgen Witzel's study (2002). Scientific management thought reached its zenith in the late 1920s, to be gradually replaced over the next decade by a behavioral science movement that privileged the goals of work satisfaction and human motivation. Webb and Norton (2003) explain that, despite postmodernism's focus on the impact of change, innovation, and diversity and its influence on new forms of management that have, in turn, introduced new paradigms of thought into the workplace, this development is not to be found in the sphere of education, whose systems continue to adhere to older approaches emphasizing "performance outcomes.

³ At all levels, from primary to higher education, standardization became a synonym for educational quality and equity. Such ideas, already abandoned by an earlier century

, and principally pertaining to relations in the workplace, were seen as a remedy to some of the ills that had come to plague education in the last two decades of the twentieth century.

* * *

The quick expansion of all levels of education, and especially secondary education, following the Second World War, and the expansion in tertiary education since the 1980s, triggered criticism in numerous countries of poor standards. In retrospect, this criticism seems to have become a general refrain, a world-wide consensus that used the same arguments at the same time, and adopted the same panacea, for the problem of poor standards.

Educational expansion provoked numerous complications and dilemmas that needed to be addressed. These included questions about how to supply the demand for better quality education at the secondary and post-secondary levels, the place of selectivity in an increasingly egalitarian society, the need to cope with powerful forces advocating desegregation and streaming, the replacement of selective schools and the role of bilateral or comprehensive schools, ameliorating the growing economic competition between states, ensuring greater economic support for education during an era of expansion, and the place of past glories from a time when education systems had been far more selective and only a fraction of the population enjoyed secondary and higher education. Addressing these issues was one factor necessitating a new approach on policy and management .

These problems were shared by various countries. There was a move towards a blended policy that centralized school curriculum and standards assessment while decentralizing decision making, to some extent, for instance, by institutionalizing greater parental choice and greater parental control over management decisions, including the hiring and firing of staff members, charter schools, such as the GMS in England, magnet and specialized schools, and self-managing schools. But the issue most relevant to our discussion was the support for a standardization of the curriculum. Despite great variation in the extent of the reforms ultimately instituted by various countries, they all shared a sense of urgency about the need to define standards for most if not all the foundation subjects. A deeper analysis of this dynamic is necessary in order to understand the idea and practice.

Any attempt to generalize must compare western and eastern approaches to educational practice. The principal aim of many western countries at the end of the twentieth century was to establish teacher accountability for student achievements. Examinations were consequently adopted as a tool for evaluating the effectiveness of teaching and learning. Meanwhile, examinations had a long history and were deeply rooted in the pedagogic cultures of eastern countries in Asia.

In western countries, oral and written exams emerged as the basis of scientific educational measurement during the nineteenth century. Objective testing such as that manifest in multiple-choice models became important towards the end of the century. From the 1920s until the 1950s educators and psychologists began to develop new methods for assessing students. This resulted in two new kinds of tests: achievement tests, which determined what a student knows, and aptitude tests (SAT), which sought to predict future achievement. Both types of examinations were soon integrated in the selection procedures of secondary schools (the 11+ exams) and for higher education (the SAT) (Trice, 2000; Worthen, et.al., 1999; Volansky, 2005). Worthen further notes that by the mid-1930s more than half of the states in the United States had adopted some form of statewide testing. In England and additional countries in Europe, 11+ examinations became a common tool for evaluating secondary school applicants from the 1930s, increasing in popularity after the Second World War with the expansion of secondary education. In the 1960s and 1970s a counter movement gathered momentum which sought to limit the use of tests as a tool for screening applicants and as a basis for excluding some. Attacks were made upon the tests' credibility and criticisms were heard about the harm that was done by them to democratic and egalitarian ideas (Satterly, 1989; Volansky, 2003).

While in western countries we can speak of a gradual development in the use of examinations, several studies have described how much more deeply rooted the exam culture was in East Asian culture. There is evidence that as early as 2000 B.C. Chinese officials utilized examinations in order to measure the proficiency of candidates for the civil service. This continued into the twentieth century A.D. (Worthen, et.al., 1999; Nagaiha, 1984). Zeng's impressive analysis of the powerful examination culture characteristic of Japanese colonization is most enlightening. Part of his explanation points to the origins of Confucianism, which has served as a value system for East Asian meritocracy,⁴ and which "laid down the structural principle for developing an exam system through which people were raised to power and prestige on the basis of achievement."⁵ Confucianism served to connect moral virtue to knowledge and rationalistic and agonistic qualities to revelation and futurism. The idea of a king being served by a group of advisers known for their moral integrity and wisdom had deep roots in Chinese history. According to Zeng, this came from Confucius's insistence on rule by moral men of talent (p.8). This strong commitment to individual achievement and success by means of learning, realized in the successful completion of government examinations, is well documented by research into the cultural origins of education in East Asia. Thus, for example, Nagaiha (1984) describes the rigid regulations that guided the administering of examinations at the district, provincial, and national administrative levels of government in China from the T'ang Dynasty (618 AD) through 1905. Additional insight into the ancient origins

of a culture of learning in China and the strong role assumed by examinations in that culture is expanded upon by Kin-Keung Chan (1997). Chan explains that the purpose of examinations in the life of the gentry "was precisely the social and cultural reproduction of the elite system."⁶ The shared view of researchers is that the style of learning found in East Asia is based on cultural continuity, one that leads students to invoke the Gods of Examination . It is born of a traditional emphasis on education as well as being the result of the high stakes inherent in meritocratic exams that determine social mobility.

This analysis emphasizes how the exam system serves as the *raison d'être* for a vast "cram" industry in the East, a sort of cultural obsession, a meritocratic drive embodied in the entrance exam. This "cram phenomenon," or "exam hell," which is regarded as an engine for competitive work and a guarantee of society's competitiveness,⁷ explains much about the differences in the role played by the examination in western and eastern countries.

The standards crisis

Opposition mounted in the 1960s against the policy of educational expansion that had been followed since the Second World War.⁸ The English were a prominent voice of protest.⁹ That protest found its most serious and influential expression in a series of studies published from 1969 to 1977 that were known as the "Black Papers," edited by C.B.Cox, a professor of English at the University of Manchester, and A. Dyson, a senior lecturer at the University of East Anglia. The papers sought to draw the attention of the public and of members of parliament to the decline in standards that was occurring at all levels of the educational system – in primary schools, secondary schools, and universities – and to the urgent necessity for government intervention in order to repair the situation.

The introductory section of the first Black Paper, written in the form of a letter to members of parliament, opened with the contention that "many people have become increasingly unhappy about certain aspects of the general trend. Anarchy is becoming fashionable." The editors described this "anarchy" in the following terms:¹⁰

The teacher is no longer regarded as the exponent of the great achievements of past civilization . . . the traditional high standards of English education are being overthrown . . . At the post-eleven stage there is a strong impetus to abolish streaming . . . there is a feeling that excellence in education is snobbish or undemocratic.

These publications asserted that standards were in drastic decline, that, in fact, the educational system was collapsing as a result of egalitarian ideas, the comprehensive trend, the abolition of selection between and within schools, and "progressive methods" of pedagogy.¹¹ Two main threads run through many of these arguments on falling standards: first, a romanticized emphasis on a glorious past when the education system's main features were defined by the need to train an elite by means of formal teaching methods;¹² and, second, suggestions for recapturing these lost days of excellence. Some of the essays drew on comparisons with other countries that had abolished selection, citing evidence that educational achievements in these countries were among the lowest.

The attack was marshaled under the heading "Comprehensive Disaster," which encapsulated the thesis of the Black Papers and their view of the consequences of egalitarian ideas and comprehensive schools. In the first Black Paper, published in 1969, Angus Maude, a member of parliament, raised the claim of a contradiction between "equality" and "standards." In this piece, entitled "The Egalitarian Threat," Maude argued that "in the name of 'equality of opportunity' the egalitarian seeks to destroy or transmogrify

those schools which make special efforts to bring out the best in talented children . . . the egalitarian takes the alternative course of leveling down the higher standards towards uniform mediocrity."¹³ Maude claimed that such egalitarian trends in education would lead to the ruin of anything remotely resembling effort and excellence, thus making it impossible for any kind of elite to emerge. The only way to avoid mediocrity and anarchy was by means of central intervention. This would take control of education and overcome the egalitarian ideas that had brought about the plunge in standards.

The first Black Paper set an "agenda for educational debate." This meant opening a forum in which attacks by educators, university lecturers, psychologists, economists, and members of parliament on the deterioration of standards could be made (Ball, 1984; Moon, Isaac and Powney, 1990; Volansky, 2003). Debate mostly glorified the recent past, when intelligence testing, selection, streaming, grammar school, and elite were guiding terms in education, and called for a return to the high performance standards they deemed to be the hallmarks of education in England and Wales.

In the second Black Paper, Richard Lynn, a professor of psychology in Dublin, mobilized cultural factors, comparative data, innate intelligence, and home factors in explaining the necessity for reestablishing selection and grammar schools. This essay opened with the statement: "British education has been designed primarily to produce an intellectual elite,"¹⁴ and continued to cite the 1944 Education Act as a "dreadful mistake." It concluded as follows:¹⁵

Britain has a great cultural tradition of intellectual achievement. Even in the post-war period, Britain has won more Nobel prizes for science and literature per head of population than any other major country. Britain has been enabled to do this partly because of her outstanding education system which has been so efficiently geared to producing an intellectual elite. This is the system the progressives are now demolishing on the basis of false premises which seriously underestimate genetic class differences . . . The British grammar and independent schools have been extraordinarily successful in the purpose for which they were designed, the training of an intellectual elite for the maintenance of a cultural tradition. The progressives are destroying this system in a hopeless quest for a degree of equality which can never be attained. The preservation of quality in a democratic age may well be impossible and we should perhaps resign ourselves to the imminence of a new dark age in which the envy, malice and philistinism of the masses, and the intellectuals who identify with them, lead to the destruction of a culture that can never be enjoyed by the majority.

Higher education was not spared criticism either as the Black Paper focused its attack on the expansion of the country's universities that had come about in the wake of the Robbins Report of 1963. The critique argued that the university's new role in serving social, technological, and economic needs was responsible for creating a climate that detrimentally affected standards and independent thought. In so doing, the Black Papers propounded an elitist philosophy that emphasized the disadvantages of egalitarianism (Musgrove, 1987; Griggs, 1989; Wright, 1977). Wright (1977) has explained that the Black Papers sought "to make a stand on behalf of the traditional standards of academic and intellectual excellence"¹⁶ while pointing out that "traditional standards" had been achieved through a highly selective system developed when education was the privilege of only a few. The attack on "falling standards" that were a result of "progressive teaching methods" should thus be seen as camouflage for the real goal of the critics, namely, restoration of a culture of selection that included grammar schools serving the social elite and a rigid stratification of the education system as a whole throughout England and Wales.

The ideas propounded by the Black Papers soon found an echo in the media. The rise of comprehensive schools, the abolition of grammar schools, and the emergence of mixed-ability classes and "progressive methods" provoked criticism in the media that was directed at the developing nature of the educational system and which complained of the lack of standards. The violation of the "secret garden," that is, the curriculum, was regarded as a requisite governmental step that was necessary in order to remedy low performance and the absence of standards.

Such controversy could not be ignored by political forces. The Labour Prime Minister James Callaghan ultimately responded to the criticisms with a speech he delivered in October 1976 at Ruskin College, Oxford, opening a public debate on the question of educational standards. The speech marked a milestone in the movement supporting a national core curriculum, standards, and assessment. Callaghan referred to three principal factors that had prompted him to speak out on the education controversy: (1) the criticism of educational standards by employers; (2) the informal methods that had been adopted in the classroom; and (3) the Black Papers. A new element now interjected into the debate was the government's declared goal of bringing an end to teacher discretion on curriculum matters and, in general, to the "golden age" for teachers (Chitty, 1989; Volansky, 2003). And, in fact, an Education Reform Bill was presented in parliament in December, 1987 as Kenneth Baker, Secretary of State for Education in Margaret Thatcher's government, argued that raised standards would result from "a broad-based and relevant curriculum."¹⁷ The document known as "The National Curriculum 5-16," which was published by the DES in the same year, sheds further light on government expectations vis-à-vis the national curriculum. The prime task, it

stated, was to "raise standards consistently, and at least as quickly as they are rising in competitor countries."¹⁸ The other aim was "to secure for all pupils in maintained schools a curriculum which equips them with the knowledge, skills and understanding that they need for adult life and employment."¹⁹

The national curriculum that was adopted for those grades covered by compulsory education was based on three core subjects – mathematics, English, and science – and six foundation subjects – history, geography, technology, music, art, and physical education. A modern foreign language constituted the third level of the curriculum. The Act went on to specify that the program of study in each subject should be linked to attainment targets that would be subject to assessment. The Secretary of State appointed a working group to advise on appropriate attainment targets in each subject. The working groups became the machinery by which targets were centrally determined for all the nation's pupils between the ages of five and sixteen. Thus, for example, Professor Brian Cox, head of the English working group and editor of the Black Papers during the 1970s, presented the need for broad attainment targets as "enabl[ing] children to develop confidence and competence as speakers and listeners in a wide variety of situations."²⁰ This became the rationale for establishing requirements for ten distinct levels from five to sixteen, attainment targets being defined for each skill at each level. As a result, 39 attainment targets were defined for speaking, 52 for reading, 42 for writing, twelve for spelling, four for description, and ten for presentation. Altogether, this meant 169 attainment targets for English, 427 for science, and 319 for mathematics. Desmond Nuttall observed that the targets "multiply like mice,"²¹ and illustrated the overall mechanism with a quote from Maurice Holt:²²

The entire document is steeped in the mechanistic assumption that schools can be run like biscuit factories. Providing the skills and technology are there, backed by clear objectives and precise assessment, the right product will roll off the assembly line.

Nuttall attacked the pre-ordained nature of the attainment targets, saying that they should instead be negotiated between teachers and students and should be defined in a more responsive way to the pupils' progress rather than by some distant authority far removed from the actual site of learning, namely, the classroom.

What's more, Clause 19 of the Act introduced a mechanism that not only transferred authority from the teachers to the Secretary of State, but revoked the discretionary power of schools to modify or adapt the national curriculum as it saw fit. This was carried out by delimiting those cases when teachers would be allowed to make interim changes in exceptional cases. This reform clashed directly with the notion that schools knew

best in determining realistic objectives for particular contexts. Central control over the curriculum not only dictated the objectives and the content of studies from afar, but even determined the rate of learning and the attainments that were to be expected from the child at each particular stage of his or her school life. In Professor Tomlinson's words, the Act "apparently forbids all innovation without the express approval of the Secretary of State, and that by a cumbersome procedure."²³

The National Curriculum and the establishment of attainment targets were followed, according to the 1988 Education Reform Act, by national assessment of achievements. A newly-created body called the School Examination and Assessment Council was assigned with carrying out school assessments and with "furnish[ing] the Secretary of State with such reports and other information with respect to the exercise of its functions"²⁴ as he required. This regulation redefined assessment from being a means by which teachers could improve the learning/teaching process to one dominated by a central mechanism for monitoring and controlling standards. According to the new policy, each child would be assessed against attainment targets at the ages of 7, 11, 14, and 16, according to the subdivision of subjects into so-called "profile components" at ten different levels. At seven, a child would be expected to achieve a level of 1 to 3, at the age of eleven a level between 3 and 6, at the age of fourteen a level from 4 to 8, and at sixteen a level between 4 and 10.²⁵ The government further insisted on publishing "league tables" of achievement as an incentive for teachers and children to achieve better scores.²⁶

How has the examination system affected education? How flexible is the national curriculum? How adaptable is it in encompassing the wide range of abilities and aptitudes to be found in schools? To what extent are schools able to make decisions about the curriculum so as to meet realistic objectives? The idea of standards and the standardization of school life by means of a curriculum straight jacket provoked enough criticism to give birth two decades later to a powerful counter-movement supporting gradual change.

The United States

The 1980s witnessed the rise of a system of standards in American education. During the early years of the decade ten or so documents were issued warning against the deterioration of standards.²⁷ The most famous of these was entitled "A Nation at Risk." It was published in 1983 and opens with the following statement:²⁸

Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. This report is concerned with only one of the many causes and dimensions of the problem, but it is the one that undergirds American prosperity, security, and civility. We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur—others are matching and surpassing our educational attainments.

This diagnosis of the ills afflicting the education system ended by declaring that "if an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war."²⁹ The dimensions of the risk were explained by the Commission as follows:³⁰

- International comparisons of student achievement from a decade ago reveal that American students had never placed either first or second in nineteen academic tests. They had, however, in comparison to other industrialized nations, ranked last seven times.
- Some 23 million American adults are functionally illiterate on the basis of the simplest criteria of everyday reading, writing, and comprehension.
- About 13 percent of all 17-year-olds in the United States can be considered functionally illiterate. Functional illiteracy among minority youth may run as high as 40 percent.

- The average achievement by high school students on most standardized tests is now lower than it was 26 years ago when Sputnik was launched.
- Over half the population of gifted students do not realize their tested ability in actual classroom achievement.
- Many 17-year-olds do not possess the "higher order" intellectual skills we should expect of them. Nearly 40 percent cannot draw inferences from written material; only one-fifth can write a persuasive essay; and only one-third can solve a mathematics problem requiring several steps.
- There was a steady decline in science achievement scores on the part of American 17-year-olds as measured by national assessments of science in 1969, 1973, and 1977.
- The Department of the Navy, for example, reported to the Commission that one-quarter of its recent recruits could not read at the ninth grade level, the necessary minimum for simply understanding written safety instructions. Without remedial work they cannot even begin, much less complete, the sophisticated training essential for many modern military tasks.

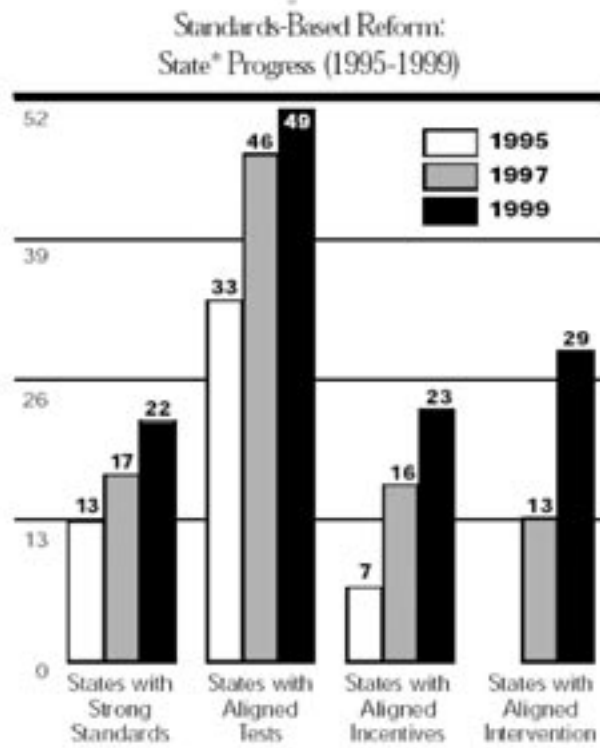
The publication of the Task Force Commission report was followed by a number of educational initiatives on the part of most states. However, a unified national system of standards was not adopted. In 1989 President Bush convened a conference at which he and the nation's governors, including Bill Clinton of Arkansas, announced the creation of six main goals that were to be achieved by the year 2000 in the sphere of education. They were as follows:³¹

1. All children in American will start school ready to learn.
2. The high school graduation rate will increase to at least 90 percent.
3. American students will leave grade four, eight, and twelve having demonstrated competency in challenging subject matter that includes English, mathematics, science, history, and geography. American students will be first in the world in science and mathematics achievement.

4. Every adult American will be literate and possess the knowledge and skills necessary to compete in a global economy and to exercise the rights and responsibilities of citizenship.
5. Every school in America will be free of drugs and violence and will offer a safe, disciplined environment conducive to learning.

These national goals were supported by prominent decision makers such as governors, politicians, academics, and educators. In addition, specific standards were formulated to accompany the recommendations in almost every aspect of school life. As a result, various states began to develop and define challenging standards. By 1994, sixteen of them had established content standards in the four core academic areas: English/language arts, mathematics, science, and social studies. By 1996 that number had increased to 26. And by 1997 there were 39 states with content standards in the core areas. The American Federation of Teachers (AFT) reported in 1997 that 49 states, in addition to the District of Columbia and Puerto Rico, "have or will have common academic standards for their students," not always exclusively in the core subjects.

The ongoing process of standards formulation at the state level is presented in the following graph number 1:



* In this report, "state" tallies are based on the 50 states, the District of Columbia, and Puerto Rico.

Source: *Making Standards Matter*, 1999, no. 11, p. 11.

Significant improvements in education require what was called an "obsession with results," which means that success can ultimately only be gauged by student testing and performance. Putting this definition into practice, however, has proven to be difficult, fraught with complexities in three areas: fair and reliable "assessments of achievement to the standards for all children; definitions and reports of progress in student performance; and accountability measures that consider sanctions, supports, and rewards for performance" (<http://www.ed.gov/pubs/G2KReforming/g2ch3.html>).

Despite these complexities, three successive presidents – George Bush, Bill Clinton, and George W. Bush – committed themselves to the standards movement. This is partly to be explained by the fact that numerous and powerful forces had a stake in the setting of standards, albeit not always for the same reason. There were supporters of national standards to be established through federal legislation, or state standards that would be defined as a legal requirement, or local and district standards, or school-based standards, or grade level standards, or content standards determined by several boards such as the Curriculum Standards for Social Studies or National Standards of History, each with their own roster of subjects of study that students would be required to learn. Thus, for example, Lauren Resnic and Katherine Nolan (1995) describe the role of NCTM (the National Council of Teachers of Mathematics) in advancing the notion of standards for K-12 in their field.

Meanwhile, textbook companies were advocating the move to standards as well and were quick to supply new editions. Many testing programs, including the National Assessment of Educational Progress (NAEP), sought to reconfigure their instruments in accordance to the new standards. Worthen, et. al. (1999) show that in spite of widespread complaints and criticism about testing, the "use of tests is booming"³² and that the sales figures of some test companies had increased by 25 to 43 percent in a very short time. Horn (2004) clarified the role of business forces such as IBM, AT&T, Boeing, Bell South, Kodak and various others in advancing the idea of standards throughout the 1990s. The common justification for their strong support was that "standards should reflect the academic skills and knowledge that students will need once they are in the workplace."³³ Such reasoning suggested that a further step be taken, namely, that "business leaders as well as the general public should be involved in the writing and reviewing of state standards."³⁴

The business community was not alone. Professional organizations, groups connected to specific educational subjects or disciplines, communities, school districts, local politicians, and a wide range of individuals including educational researchers, educational practitioners, and university scholars all took an active part in the standards project (see appendix 1). Each group promoted its own version of standards that "presented [each] organization's perspective."³⁵

The very idea of national standards meant that they would be "consistently used by all schools or universities in America."³⁶ This would mean a "unified presentation of knowledge, skills, and attitudes in all educational institutions."³⁷ Such statements should be understood in light of the earlier attitude of a Texas governor who had chaired a task force named the Select Committee on Public Education and explained his view on the school system: "We've got to drop a bomb on them, we've got to nuke them – that's the way you change these organizations."³⁸ The public image of education, as reflected in the Texan's language, together with the definition of standards being made by organizations that were not even a part of the education system but were interested in standards for their own reasons, led each new federal administration to apply greater pressure in the area of standards. Thus, while George Bush had initiated the first step in this direction with his America 2000 agenda, Bill Clinton went further with Goals 2000 and the Improving America's School Act. And then George W. Bush instituted his No Child Left Behind Act in 2002, which brought with it a supplementary budget of \$100 billion (Kosar, 2005). All these efforts created a powerful momentum that brought school restructuring and reforms to all levels. In addition, they also presented a new creed, or vision, that claimed that a better education could be achieved by standardization followed up by testing. Has this vision achieved its goals? That question will be addressed later in this chapter.

Australia

Concern over low standards led to the establishment in 1979 of Australian Studies in Student Performance (ASSP), whose aim was to provide a national database on performance in basic skills (Power, 1984). Power describes those years as a "political time bomb" during which the support for national assessments that was characteristic of the 1970s gave way to opposition in the early 1980s and to increasingly vocal attacks on the validity of assessment programs in general. Barry McGaw's study (1995) effectively describes the forces involved and the process by which standards were defined during the first half of the 1990s. Demands for improvement in student performance and for the development of a monitoring system – an issue that had provoked teachers' resistance during the 1980s – were made during the 1990s by business and industry groups. This eventually led to adoption of standards in English and mathematics, at first for grades 3, 6, and 9.

Justification for monitoring programs was based on the purported need for accountability regarding student performance, on the need to generate some kind of data that could be compared from state to state, and on the growing spending on the part of territory ministers on education per capita. These early standards were then expanded to other subject areas in the mid-1990s. Art, English, health and physical education, foreign languages, mathematics, science, social studies, and technology were all restructured in the curriculum as the learning process was organized by strands. Thus, for example, English became divided into "speaking and listening, reading, viewing, and writing, each of which [was] subdivided into the same four strand organizers: texts, contextual, understanding, linguistic structures and features, and strategies."³⁹ The government explained that the benchmarks were necessary in order to "describe nationally agreed minimum acceptable standards for literacy and numeracy for a particular year level, and [to] enable State and Territory reporting of aggregate student achievement data against these common standards to the Australian community through the *Annual National Report on Schooling*" (http://www.dest.gov.au/sectors/school_education/policy_initiatives). Each state and territory school authority conducted its own annual literacy and numeracy tests. The main purpose of this testing was to monitor student performance vis-a-vis the state or territory curriculum across the full range of student ability. Under the National Literacy and Numeracy Plan, all states and territories agreed to report student achievement data against the benchmarks each year to the Australian community through a *National Report on Schooling in Australia* for grades 3, 5, and 7, each subject being tested in a different year.

Israel

The international comparison tests results of 1999 (TIMSS) in science and mathematics placed Israel relatively low in the international table (25 out of 38 countries in science; 27 out of 38 in mathematics). The poor results provoked considerable criticism of the education system in Israel. Two essential responses were heard: a demand for restoration of an older curriculum and a "return to basics;" or, in light of the poor results, a reduction in government spending on education to a point where it matched the levels of actual performance. And, in fact, from 2000 to 2005 the national education budget was cut by 14 percent. Teachers were publicly blamed for the deterioration in standards and they felt humiliated by the Ministry of Education and various public leaders. The atmosphere of bad faith and the conflict between the government and the teaching profession developed into a bitter crisis, which reached a peak in 2004 in a "media battle" between the Ministry and the teachers unions. Tensions were exacerbated after submission of the intermediate Task Force Recommendations to the government in 2004.

The poor results of 1999 had provoked a vigorous call to define standards. The first step came in 2001 with increasing support for the idea of improving the country's standing by means of standards in a wide range of disciplines. An internal committee of Ministry of Education officials was asked to submit a proposal. The fragmented nature of the system meant that each representative of each discipline sought to set standards for that field. Even that division within the Ministry of Education that was responsible for informal education sought to create school-level standards affecting extra-curricular activities.

The feeling was that "if you don't have a standard, you don't exist." It became an obsessive question of prestige. No one asked what the impact would be of the growing corpus of standards on the schools themselves, or on teachers' workloads, or what they would mean for the varying abilities and needs of students. Instead, standards became a slogan, the flagship jargon of the central administration. In 2003, another step was taken when the government established a National Task Force that would recommend reforms for improving school performance. Standards were given high priority:⁴⁰

Each disciplinary committee of the national curriculum will define standards of achievements and expected aptitude as part of the core and other foundation subjects of the full national curriculum.

Standards will be defined at three levels: basic; intermediate; and high. ... a school which develops additional subjects of study will be asked to set up standards of achievement in those subjects.

At this point in time, in the beginning of 2007, the Task Force's recommendations on standards have not been implemented. However, there is a common opinion, particularly among parts of the central educational administration, that the only way to bring about significant improvement in school performance is by instituting standards.

* * *

The development of standards movements in other countries followed a common script. Similar reasoning, similar disputes, similar crises, and similar forces at play have resulted in a similar idea, namely, that standards are a panacea. The standards movement became an international trend exactly when countries responded by declaring "We do not need or want to copy other countries. We will want to create our own standards, but we surely need to know what others are doing."⁴¹ But a convergence has occurred and it was only a question of time before the education systems of western countries joined this movement begun in England and the United States. International organizations joined the effort as well, reinforcing the standards movement by either publishing their own international standards, such as the International Society for Technology in Education, which published a list of essential standards that was funded by NASA in 1998 (NETS, 1998), or the OECD, which published a review of ten countries that had already established standards. The justification was always an alleged deterioration in student performance. These claims were made after the appearance of the standards idea at all levels of education. John Lowe, a consultant to the OECD, contributed concluding remarks to the OECD's review of the development of the standards movement:⁴²

Nevertheless, two overriding conclusions can be drawn from the ten case studies. The first is that raising standards in core subjects for all students and at all levels is today the main priority for national, regional, and local education authorities. The second is that the public, parental, and student interest requires that education systems provide sound information on how schools and individual students are performing. The vital question of how to improve education remains to be answered.

The standards movement, followed by national reforms, generated a huge number of publications as a result of the controversy surrounding these reforms. What are the principal lines of argument for and against? Why do some regard these steps as revolutionary, and as a necessary step in a period of educational expansion, while others see them as a giant mistake and as marking a tragic turn of events for education? Let us dig deeper into the issues at stake.

The great debate

There were four principal justifications for standards. The first claimed that it was otherwise impossible to simultaneously improve access to education for an increasingly diverse student population while at the same time maintaining the quality of education. Therefore, it was argued, the conflict between excellence and equity needed to be bridged by defining standards for all. The second line of reasoning claimed that educational quality rests on competition between schools and between pupils which brings out the best in them, leading to hard work. What's more, such effort helps keep society itself competitive. The third justification for the idea of standards views a rigorously and vigorously-defined structure as a positive contribution to the educational experience. The fourth reason was to satisfy the demands of parents to know more about the quality of education that their children were getting. Diane Ravitch (1995) clarified all these views when she declared that "educational improvement in the late twentieth century became a necessity, not a luxury,"⁴³ while TheodoreSizer (1995) adopted the historian Robert Wiebe's term in arguing that the search for standards was no less than "The Search for Order." Standard curricula and examinations which would function as tools for measuring the results of learning was, thus, regarded as essential for restoring order and control to education. The adoption of standards in every school, every school district, and every state was seen to be a reflection of high expectations, of focus on the subjects in the curriculum, and of a clear and common target guiding teaching and learning. Moreover, advocates of standards argued that their program would widen opportunities for all, including those of children living in disadvantaged neighborhoods whose poor performances would over time improve (Smith, 1995; Falk, 2000; Blanchard, 2002; Conley, 2005).

The standards reform provoked opposition to the new education policy. Opponents presented four principal objections. First, they argued that problems in the schools were not born of the lack of standards but of an unrealistic work load being placed on teachers and schools. Hargreaves (2004) argues that new curriculum standards also increased job stress. Such a development came together with inadequate school funding, an increasingly diverse student population, assumption of responsibilities once assigned to the home or to the community. Teachers then faced possible dismissal if their schools did not produce instant results. Hargreaves further argues that this policy has led to the fact that "85 percent of teachers said that they would be more hesitant to seek promotion to leadership positions as a result of these reforms."⁴⁴ As TheodoreSizer has remarked, "What could be absolutely more insane than the world history course 'Cleopatra to Clinton' in 180 days? What could be absolutely more insane than an English teacher with 130 kids in five classes a day [who was] expected to edit childish writing into prose

of quality and grace and clarity?"⁴⁵ Now, in addition to their daily teaching load, teachers would have to expend time and energy on trying to plot a pedagogical course between local practice and external standards, all the while collecting their pupils' assessment data with increasing frequency. One of my more talented graduate students works part time as a biology teacher in a secondary school. After presenting a seminar paper in an inspiring and stimulating teaching style, he was asked if this was characteristic of his teaching practices as well, to which he frankly replied, "How could I possibly do that? I have to keep an eye on the upcoming national exams, teach according to the national curriculum, which leaves me very little room for expressing enthusiasm for learning and actually pushes me to practice a rigid instruction style which is tedious and boring, both for the teacher and the students."⁴⁶

Another criticism focuses on the reaction of students to the pressures of detailed learning and memorization, which has led to a new school ritual recently observed by teachers and principals, namely, the burning of personal notebooks at the conclusion of the matriculation exam period. Such an event can be explained by Theodore Sizer's claim that the pressure on teachers to prepare their students to perform on standard examinations ultimately increases the ignorance on the part of both of them. A further argument is made which claims that such dense curricula keep the schools from functioning any more as "learning communities," that they have no place for individual knowledge, either on the part of students or teachers, and care little about cultivating anyone's mind. As a result of this system, we find schools and teachers focusing their efforts on adhering to external standards rather than to students' needs (Glatthorn, 1999; Horn, 2004; Falk, 2000; McNeil, 2000; Kordalewski, 2000; Carr and Harris, 2001; Horn and Kinchekoe, 2001).

Many critics share a view of standards as something that schools themselves should develop (Koretz, 1995; Sizer 1995). Sizer argues, for example, that a realistic approach would be to standardize a limited number of subjects, such as language and mathematics.

The second argument against standards claims that they generate academic competition between schools that is liable to harm less able students who often come from disadvantaged and minority neighborhoods. This argument is made despite the fact that the original intent of the standards movement was to ensure equity for the less advantaged. In contrast, it is now claimed that schools might be trying to protect their academic reputations at the expense of leaving some children behind (Sizer, 1995; Cullingford, 1997; Filer and Torracne, 2000; Volansky, 2003). Case studies have clearly shown a gradual move towards exclusionary rather than inclusionary policies. For example, Linda McNeil (2000) has noted the correlation between a standards policy and the drop out rate in Texas. By 1990, after four years of "Perot-era standardization reform,

graduation rates for Blacks, Latinos, and Whites *all dropped*.⁴⁷ McNeil further argues that testing restratifies access to knowledge in school and that it "further harms the education of poor and minority youth by masking historical, persistent inequities."⁴⁸ Deborah Meier (2000) has made the same argument in the opening sentence of her book by stating that "In the past two years, the number of students expelled from elementary and secondary school in Chicago has nearly doubled."⁴⁹ She goes on to explain how standards both mask and create new educational agendas. These include punishing kids, privatizing public education, and giving up on equity. Standardization, in other words, comes at the expense of tolerance for other ideas and the capacity to negotiate or manage differences. Instead, it turns teachers, students, and parents into the local instruments of externally-imposed expertise. And so, school administrators and teachers often lose their jobs if the school fails to reach a particular goal after a given period of time.

Or children are held back a grade, or are sent to summer school, or are finally "refused diplomas if they don't meet the cutoff scores."⁵⁰ Similar findings are to be found in England as well. When the National Curriculum for all foundation subjects was published, based as it was on a "table" of **school performances based on** exam results, it reversed the prior policy of curriculum flexibility that integrated technical and vocational studies with the aim of attracting students to stay in school after the age of sixteen. The new policy's exclusively academic curriculum resulted in thousands of youngsters leaving schools without any real options for study (Dale et al. 1990; Finegold and Soskice, 1990). A similar dynamic was to be observed in Israel as well, as powerful figures voiced criticism of technological studies, recommending instead that an exclusive focus on academic subjects be adopted in the national matriculation curriculum.

Debate erupted in 2003 when a school was asked to abandon an educational program that attracted older secondary school students, many of them previously drop outs, who had returned to school because of the possibility of receiving a matriculation certificate for studying to be a disc jockey. This specific course of study counted for one credit out of the twenty-two required for complete matriculation certification. Most of the subjects of the matriculation exams were standard and compulsory, as required by the national curriculum instructions.

Disc jockey studies was an optional field. But this option became a national symbol for declining standards and the subsequent loss of public faith in the national curriculum, provoking a scandal that then became the background for calls to restore order to the curriculum. The controversy was eventually addressed by the Education Committee of the Israeli Knesset, or parliament. As an outcome of the debate, the Ministry of Education canceled such programs and declared in their stead the birth of a policy of "back to the basics" without noticing that the only alternative for some students is the street. The pressure to eliminate technological studies effected a gradual and steady process by

which numerous subjects that had been attractive and meaningful to students of lower abilities were eventually excluded from the curriculum over the course of the 1990s and the 2000s. Another claim made against the standards movement complained how the entire school would be mobilized on behalf of the single aim of preparing pupils for examinations, that is, "teaching to the test," or "learning to the test" became the dominant pedagogy (Davies, 1998; Biggs, 1998). This entailed a narrowing of the spirit of education, in addition to narrowing the curriculum to a group of core subjects that necessarily disregarded other important subjects of study. It also meant the end of any democratic process for making curriculum decisions, which were now increasingly centralized (Meier, 2000; Thernstrom, 2000; Sizer, 2000). This, in turn, affected teacher morale and enflamed feelings of unfairness and injustice,⁵¹ affecting too children's expectations, motivation, ambition, and self-image (Cullingford, 1997; Filler and Torrance, 2000; Volansky, 2003). The practical meaning of these feelings was given expression by an English teacher:⁵²

If you become so frightened of losing a single point of your "league table" you become restricted in your teaching and lose your enjoyment of it. You would then not get the quality you expected and the whole school will suffer.

In attempting to characterize the reliance on examinations, researchers have resorted to strong and even bitter terms such as "an orgy of analysis" (Tomlinson, 1997) or an "obsessive neurosis that manifests itself in an almost pathological belief in the value of assessment" (Broadfoot, 2001) and an "annual ritual feast of celebration or condemnation" (Walford, 2002). Linda McNeil (2000) expanded on the significance of such descriptions in addressing the invasion of school life by a culture of exams:⁵³

The TAAS [Texas Assessment of Academic Skills] system of test-driven accountability masks the inequalities that have for decades built unequal structures of schooling in the state. Test-score inflation, through concentrated test-prep[preparation], gives the impression that teaching and learning are improving in minority schools when in fact teaching and learning may have been severely compromised in the attempt to raise scores. The investing in expensive systems of testing, test design, test contracts and subcontracts, training of teachers and administrators to implement the tests, test security, realignment of curricula with tests, and the production of test-prep materials.

McNeil claims that in the case of Texas, "the educational costs of standardization are high. ... It is critical to note that the effects of the Texas accountability system is de-skilling teachers [and] restratifying access to education."⁵⁴ In her concluding remarks she asks "How then do systems arise that narrow the possibilities for children's learning, which perpetuate old discriminations and create new ways of walling off this heritage from our poorest children? ... We must create curricula and learning environments that affirm all children's capacities to learn along with the diversity of children as an inherent *strength* of our educational enterprise [emphasis in original]."⁵⁵

Beverly Falk (2001) depicts the totalitarian nature of the examination regime through a ground level perspective: "Test preparation frequently begins in kindergarten, replacing instruction in some schools for an entire half of each week throughout the school year... In one school district that I visited during this period, a principle lamented to me about how test prep this year had replaced the rich studies that had been going on at the very same time last year: reading, book talks, writing, research, book making, plays, trips, and school-wide presentations of students work were abandoned in favor of page after page of test-prep worksheets."⁵⁶ Meier (2000) argues that evidence suggests that "most youngsters have sufficiently deep hunger for the relationships these schools offer them."⁵⁷ The ritual of burning copybooks in Israel at the end of the matriculation examination period manifested the same sort of hunger which Deborah Meier has described in her book. The heavy burden placed on school life by a national examination policy is exemplified in a case study analysis of an Israeli primary school where teachers prepared their students for the following examinations in a single school year (2003/2004):

- National examination for sixth graders on the Book of Deuteronomy.
- National examination for fifth graders on Dinim
- National examination for fourth graders on the Bible.
- National examination on Hebrew, math, English, and the sciences.
- School-based examination for fourth graders on the book of Numbers.
- District control over the full implementation of examinations.

In interviews with fifteen staff members who worked at this school many teachers claimed that such a heavy exam load was unnecessary. Moreover, information regarding each student's achievement level is already to be found as a part of a regular process of school-based assessment to which all teachers contribute as part of a school norm of monitoring standards. The external examinations put great pressure on the system and consume much of the school's time, without giving very much back in terms of helping the school improve its performance (Volansky, 2005).

The dispute over standards continues to generate publications, seminars, and protests. Raymond Horn (2004) summarized the opposition to standardization as follows:⁵⁸

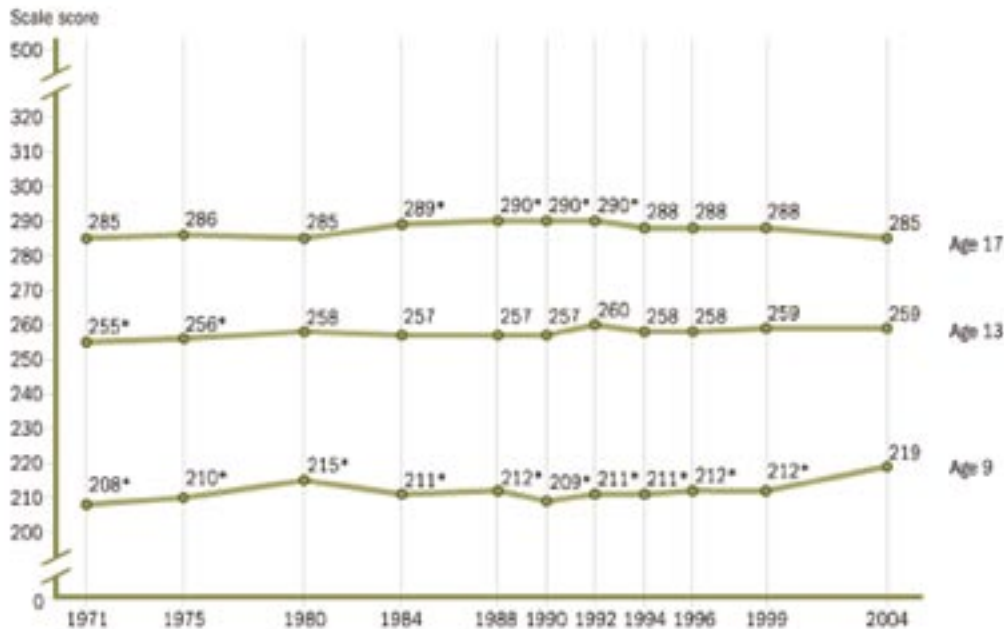
- High-stakes testing often produces an illusion of accountability and an illusion of progress.
- The flip side of the focus on the contents of a high-stakes test is a narrowing of instruction.
- Teaching to the test often degrades instruction.
- The tests that most reformers want to use – various types of performance assessments – face some formidable technical obstacles.
- As commonly administered, most tests reveal virtually nothing about the quality of schools.
- Many reform proposals establish too many, and often conflicting, goals for assessments.
- Excessive emphasis on testing and test-based accountability diverts attention from other problems, some of which are severe and pressing.
- Focusing on standards is a smoke screen that hides the real causes of low quality education.

However, the central question remains open. After almost a quarter of a century, can it be argued that those countries that were keen to standardize their curriculum are doing better? Has "the rising tide of mediocrity" of the 1980s been checked by the 2000s? Are students doing better in school? Has the standards movement improved student achievement? Is the educational gap between school districts, communities, and social classes in decline?

Statistical findings

Answers to these questions have to be formulated with a great care, by means of close observation of the outcome of the standards movement in two principal countries, the United States and England. The publication of NAEP (National Assessment of Educational Progress) in the United States provides some figures on reading and mathematics over the last three decades:

Figure 1: Trends in average reading scale scores for students at the ages of 9, 13, and 17: 1971–2004



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1971–2004 Long-Term Trend Reading Assessments (<http://nces.ed.gov/nationsreportcard/ltr/results2004/nat-reading-scalescore.asp>)

Figure 1 shows that reading scores from the year 1971 until 2004 have been mostly flat. Only nine-year-olds have made a modest improvement, moving from the 208 point in 1971 to the 219 point in 2004.

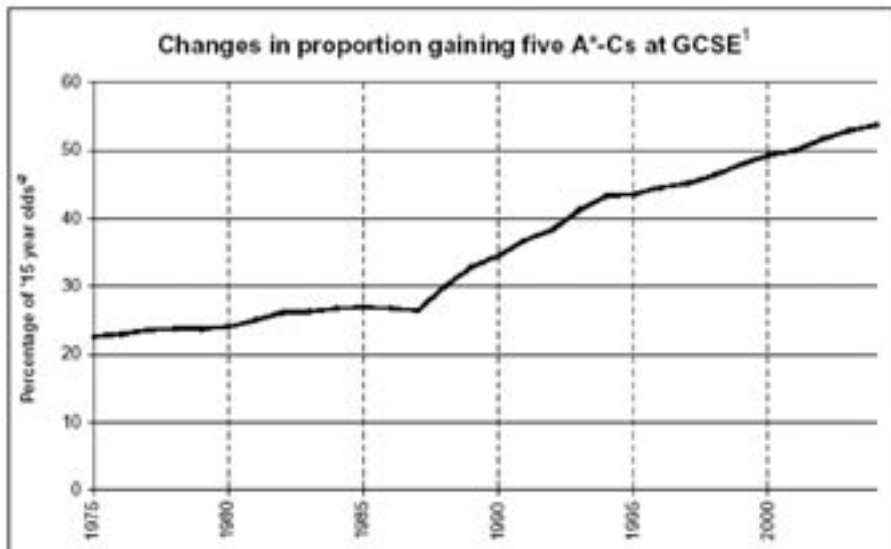
Figure 2: Trends in average mathematics scale scores for students at the ages of 9, 13, and 17: 1973–2004 



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1971–2004 Long-Term Trend Reading Assessments

Figure 2 shows that mathematics scores have made a slight improvement from 1973 to 2004 among nine-year-olds and 13-year-olds. The average score in 2004 did not reveal a significant change for the 17-year-olds over their score in 1973 or in 1999. The overall picture shows that scores have remained flat, similar to that discovered in reading scores. In an analysis of an additional source of data, Kosar (2005) reached a similar conclusion. He argued that "In this case, *A Nation at Risk* was correct in its most fundamental judgment: there is a wave of mediocrity. But it is not rising; it has been high for a least three decades."⁵⁹

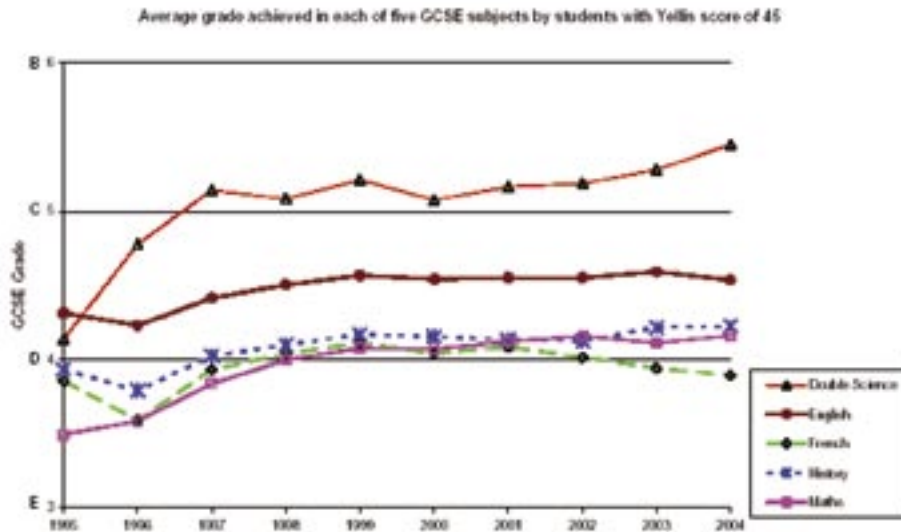
Turning to official publications in England, we learn about improvements in various aspects of the curriculum as charted in Figure 3:



Source: Tymms, P., Coe, R., and Merrell, C. (2005)

At GCSE, the official statistics in Figure 3 show the percentage rising slowly and steadily since 1975. This seems to suggest that over the course of three decades progress has been made, demonstrating that a leveling-up dynamic is built into the system and human nature, and is not merely a function of the new policy of standardized tests and benchmarks. Thus, for example, practical changes such as the shift from O Level1/CSE to GCSE in 1988 inaugurated a period of much faster increases. This lasted until 1994. From 1995 the rate of growth slowed, remaining roughly steady since then with an annual increase of one percent. Tymms and others (2005) argue that there is no clear change in the pattern after 1997. Thus, it is not at all clear if policies implemented since then have influenced the rate of improvement.

In additional observations of five main subjects of study – double science, English, French, history, and maths – we find somewhat mixed results in Figure 4:

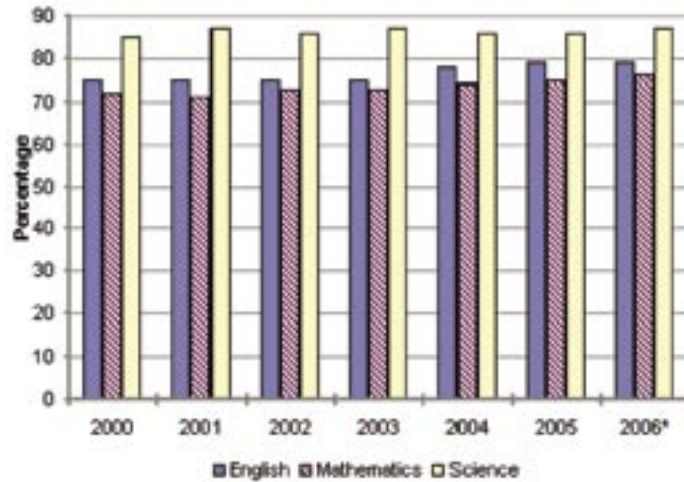


Source: Department of Education and Skills (<http://www.dfes.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=29&chid=113>)

We see in Figure 4 that science and math have both risen steadily. Students in 2004 achieved approximately a third of a grade more than those of similar ability in 1997. English and history GCSE rose slightly between 1997 and 1999 but then leveled off. Performance by students of matched ability also rose in French until 1999 but then fell off again, ending the period in 2004 at a lower place than it began in 1997.

The school outcome of the English system is also presented in the following Graph Number 2.

Graph 2: Percentage of pupils achieving level 4 or better in the Key Stage 2 tests, 2000 to 2006

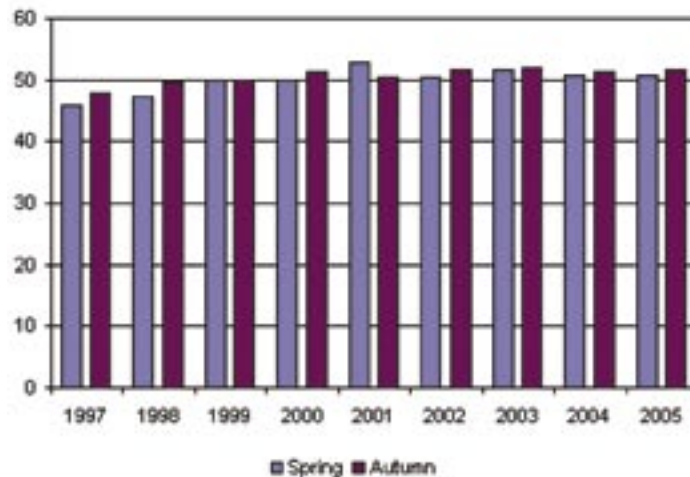


Source: Department of Education and Skills (<http://www.dfes.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=29&chid=113>)

Graph Number 2 shows that the percentage of pupils achieving level 4 or better in Key Stage 2 tests of three subjects (English, mathematics, and science) between the years 2000 and 2006 has been largely flat.

Similar findings are presented in the data for 19-year-olds at level 3 for the years 1997-2005 in Graph Number 3:

Graph Number 3: Proportion of 19-year-olds who qualified to level 3 or higher, England, Spring and Autumn quarters, 1997 to 2005



Source: Department of Education and Skills (<http://www.dfes.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=29&chid=113>)

Graph Number 3 also shows a modest gain of about 3.5% between 1997 and 1998 while since then (1998 to 2006) the scores remain flat.

In a comprehensive analysis of the original resources, together with an analysis of thirteen other academic studies on the effect of standards in English schools, Peter Tymms, Robert Coe, and Christine Merrell came to the following conclusions:⁶⁰

- In primary schools there have been small but clear gains during the last decade. ... It is possible that the children's greater familiarity with the testing procedure and test formats could explain all or some of the rise. The gains have been greatest in mathematics but modest in reading. ...
- At the end of compulsory secondary school, at GCSE, there have also been clear gains since the Labour Party came into office. They are steady and modest, but gains nonetheless, although they did not suddenly start in 1997.
- At both the end point of primary schooling and the end point of compulsory secondary education, attainments over nearly a decade are small. In technical terms they both amount to ... about 0.2.
- At A level the clear gain is in the number that have gained A levels and moved on to higher education. But there has been a problem with setting standards at A level. The top grades no longer mean the same as they used to. There is a suspicion that the very highest levels of achievement have been sacrificed to the greater numbers of students.

The authors argue that the modest gain was achieved at the cost of hundreds of millions of pounds expended on hundreds of initiatives. They ask if these resources could not have been better invested.

Analysis of these American and English cases clearly shows that in spite of the considerable effort made in implementing a system of standards, the results remain mostly flat, revealing no significant changes over the years. We still need to address the social stratification evidenced in these figures. This can be done by referring to another source of data. Gillborn and Youdell (2000) have shed light on the progress made by ethnic groups in England. The researchers argue that the gap between various ethnic groups is growing:

Table Number 1: Percentage of pupils attaining five or more higher-grade GCSE passes, according to social class (England)

Year	1988	1990	1991	1993
Professional	58	58	64	66
Managerial	40	46	47	50
Skilled (non-manual)	26	30	30	33
Skilled (manual)	18	20	21	26
Partly skilled	13	15	18	19
Unskilled	9	11	10	12

Source: Adapted by Gillborn and Youdel (2000) p.40

The figures in Figure Number 5 clearly reveal a link between social class and educational achievement. Those children whose parents are unskilled or partly-skilled are to be found at the bottom of the table of achievements, while those pupils whose parents are professionals are located at the top. The researchers attribute these results to the growing trend in the 1990s to triage pupils into "hidden" tiers at three different levels of the GCSE. This was part of the assessment system. Prior to the institution of the assessment system pupils could confound their teachers' expectations by taking a higher status exam, despite advice to the contrary, and passing it. This was no longer possible in the 1990s. Pupils now "must accept the grade ceilings imposed by the exam tier that their teacher judges 'appropriate.'"⁶¹ Tomlinson came to a similar conclusion regarding how the standards policy was "cementing a system that cut off large numbers of young people from education at 16, and perpetuates the notion there are separate types of students suitable for separate tracks."⁶² Tomlinson critiques standardization in a national report (The Tomlinson Report, 2004) that addressed the education of 14-19 year-old students. The Tomlinson Report became the basis of legislation that was introduced into Parliament in May 2006⁶³


Certain similarities with the English data are to be found in the American experience as well.

Trends in average reading scale scores and score gaps for white and black students, ages 9, 13, and 17: 1971–2004 



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1971–2004 Long-Term Trend Reading Assessments (<http://nces.ed.gov/nationsreportcard/ltr/results2004/nat-reading-scalescore.asp>)

Figure Number 5’s comparison of achievements by white and black students aged 9, 13, and 17, respectively, from 1971 to 2004, shows clear improvement on the part of the latter from 1971 to 1980. However, the average gap between blacks and whites remained stable over the course of 33 scores for nineteen years after 1980 . From 1999 to 2004 the gap was closed over nine scores, black scores rising from 186 to 200. Similar findings are evidenced in Figure 6’s comparison between white and Hispanic students as well:

Trends in average reading scale scores and score gaps for white and Hispanic students aged 9, 13, and 17: 1971–2004 



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), selected years, 1971–2004 Long-Term Trend Reading Assessments (<http://nces.ed.gov/nationsreportcard/ltr/results2004/nat-reading-scalescore.asp>)

The average gap shown in Figure Number 6 between white and Hispanic students between 1980 and 1999 was 26. The gap decreased to 21 from 1999 to 2004. Nevertheless, both charts reveal a flat improvement.

Kosar (2005) claims that the data from the United States not only shows that the standards movement failed to achieve its goals but, in fact, "shows the opposite to be the case: few are. Most students are low achieving, and many black and Hispanic students are achieving at an especially low level."⁶⁴ The following table explains his argument:

Table Number 2: SAT Composite Scores by Race/Ethnicity, 2002

	Black	Puerto Rican	Mexican	Other*	White	Asian
Verbal	431	456	448	457	534	575
Math	426	453	457	464	534	575
Total	857	909	905	921	1063	1083

Source: Kosar (2005)

*Includes those who identified themselves as Latin American, South American, Central American, Latin, or other Hispanic.

Analyses of the findings in England and the United States raise strong doubts about the standards movement and its various justifications. In practical terms, testing results provoke more questions than provide answers in regards to the various claims made by proponents of standardization as educational policy.

Conclusions

The principal argument made by opponents of the standards movement was not directed at the intention to create more rigorous curriculum goals or to improve achievement by raising expectations. Rather, opponents protested the tendency to ignore the psychological and motivational needs of both teachers and students, needs that constitute the very basis of modern practical motivation theories in all types of organizations today. The problem, in other words, was not with standards, *per se*, but with the way they were integrated – or not – with the needs of the profession and encouragement of students. Furthermore, those who oppose standardization were not even arguing against the notion of standards. Rather, they attacked the sheer amount of standards introduced into the school experience, which subsequently became far more centered on taking exams rather than on learning for its own sake.

This totalitarian nature of the standards movement, together with its demands to centralize education and so "take over" the schools and assume control over curriculum matters, came at the expense of teachers and students alike. Indeed, students, teachers, schools, and communities – their needs, priorities, and values – were all ignored. This was not only disregard for the teaching profession but for basic democratic values, an ignorance of what it means to respect others' needs and strength. Instead, a single opinion was established, defined through a centralized mechanism by either boards of experts in a particular discipline, or by district, state, or federal governments by means of specific legislation or funding policies. It goes without saying that the school was excluded from these deliberations. The outcome of this policy has been documented by numerous case studies, of which only a fraction have been cited above.

Criticisms of the scientific management ethos put into practice in the 1920s attacked its strict focus on measurement combined with its ignorance of the human side of running a workplace. Scientific management tended to view laborers as machines and so provoked the concern of many, who considered it inhumane (Morgen and Witzel, 2002; Webb and Norton, 2003; Wern, 2005). These two controversial values of the early twentieth century, namely, measurement and ignorance of human psychology, are to be found at the heart of the standardization movement in education at the end of that century. Businesses that sought to survive, if not flourish, had sensitized their management style, recognizing the importance of the human factor in any organization.

What became essential in the workplace, replacing scientific management, was recognition of the strength of individuals and the need to reinforce their motivations, morale, satisfaction, shared values, and corporate harmony. This was not the case with the standards movement. In the world of education, individuals felt that their needs, experience, values, professional identity, and expectations were all ignored, turning their

work into a humiliating experience in the process. This was not the initial intention of education policy planners or dreamers of better standards. But this was the outcome. In Linda McNeil's words, "It was an unintended consequence and not a deliberate one."⁶⁵ This brings us to another question: How is it that so many different countries adopted the same policy without bothering to learn from the less than stellar experiences of others? The reason is that standardization and the policy of examinations was regarded at the time, and is probably still regarded even today, as the only solution, or remedy, to the illnesses of the education system. Standards were the most obvious response to the problems at hand. It should come as no surprise that the only solution "on the shelf" soon became official policy in so many places. Comparative education studies directed countries looking for answers to the rising mediocrity to look at those societies that were doing well in the international arena.

These mainly included countries in East Asia such as Japan, Singapore, Taiwan, Korea, and Hong Kong who consistently dominated international tables of test achievements in mathematics and the sciences. One of the explanations for this convergence between West and East is the former's deep impression from the statistical successes of the latter. It was assumed that the most direct route to comparable success was by adoption of the same methodology. The BBC produced a documentary film in the early 1990s on the Japanese education system which was broadcast in several countries.

It concentrated, on the one hand, on the nature of the "exam hell" that had shaped education in Japan and, on the other hand, highlighted Japanese society's formal style of study. The overall impression was one of an educational system being well-managed and controlled. A visit by Margaret Thatcher to Japan in the mid-1980s supplied another source of inspiration. The message was students and classrooms can achieve new heights when governed by strict rules regarding curriculum, in contrast to the lack of such discipline displayed by the poor results of "progressive methods" founded on a "child-centered approach." Although we lack any hard evidence on the impact of East Asia on the practice of educational standards in the West, we cannot ignore the fact that the performance of these Asian countries far outpaced many countries in the West. No one should thus be surprised that the only response to poor performance that could be imagined was based on standardization and exams as practiced with demonstrable success by teachers and students in East Asia.

One of the mistakes in pursuing such a policy is the failure to understand how culturally-driven the East Asian examination system is. It belongs to a very powerful structural dynamic by which the population is taught that power and prestige are distributed on the basis of achievement. This system, in Zeng's words, "brings out the best in people, ... leads to hard work, and ... this effort helps keep society competitive."⁶⁶ Standardization thus becomes a natural pattern of thought and behavior in the East. The same method

of learning in the West does not bring the same results. On the contrary, it detrimentally affected the professional status of teachers as well as having left a significant segment of the student population behind. We can understand why Western countries were so eager to enjoy the same commitment to learning in their schools on the part of both students and teachers as that found in East Asia. But the ambition was naïve. Any cross-cultural comparison needed to take into consideration differences in culture. These include the relative homogeneity and heterogeneity of each culture, the immigration rates of various distinct ethnicities, the number of mother tongues spoken in a society, the public status of the teaching profession, and economic stratification, to name just some. All would be revealing of the complexities and complications encountered in transplanting educational achievement in one place to another. Walker and Dimmock (2002) have reinforced this argument by claiming that "it is clear that a key factor missing from many debates on educational administration and leadership is context. ... [C]ontext is represented by societal culture and its mediating influence on theory, policy, and practice" (quoted in Bush and Middlewood, 2005, p. 48).

McNeil (2000) presents a case study that offers support for such an argument by claiming that in Texas the state ignored the local *strength* of its people, which was completely forgotten once the idea of standardization was taken up. Why has the scientific management approach, abandoned by business during the 1930s, been embraced by education, and in the face of its apparent weaknesses? The answer has two parts. First, the construction of learning is a far more complicated project than running a business. Successful businessmen and, less frequently, army officers occasionally raise fresh ideas for putting order into education. New slogans, presented in glib sound bites, attract politicians and bureaucrats who are in search of quick remedies and thus are impatient with the old ideas of educators that seem helplessly conservative and inefficient. What's more, the "construction of knowledge" might seem to be a "secret garden" to decision makers no less than so than for professionals and academics. The construction of learning, however, means allowing students, in Beverly Falk's (2000) terms, to make "connections within the idiosyncrasies of their own thoughts; time to actively discover relatedness among events; time for the expressing, questioning, likening, remembering, appreciating, enjoying, discerning, and imagining what leads to the development of deep understanding."⁶⁷ Educational reform based on technical content standards, in contrast, distances both students and teachers from the construction of a knowledge that happens within the individual mind. If powerful learning is to occur, students require a much broader and deeper experience than preparation for exams can provide. We currently live in an era busy reconceptualizing the nature of thinking and learning. Leading universities have established during the last decade multidisciplinary research departments devoted to research on the brain. Meanwhile, the standards movement

insists on oversimplifying the meaning of learning processes, reducing them to mechanisms. This can partly explain why studies have discovered no improvement in school performance in spite of almost three decades of standardization. In 1916 Elwood P. Cubberly, a school superintendent, wrote in a letter (quoted by Webb and Norton, 2003, p. 8):

Our schools are, in a sense, factories in which raw products (children) are to be shaped and fashioned into products to meet the various demands of life. The specification for manufacturing comes from the demands of life.

Seventy-three years later the controversy over standards is managed in the same terms. Nuttall refers to Maurice Holt's views on attaining targets, which sound a disturbing echo to Elwood Cubberly's language from 1916.⁶⁸

The entire document is steeped in the mechanistic assumption that schools can be run like biscuit factories. Providing the skills and technology are there, backed by clear objectives and precise assessment, the right product will roll off the assembly line.

Both these eras viewed people as machines. standardization became the engine at the end of the same century for which standard exams constituted the petrol. The second answer to the return of the spirit of scientific management is found in popular analogies to business, for whom the key to survival is improvement of performance. Any failure in the long run to achieve better results might shorten the life of a business. When it was realized, in the late 1920s, that scientific management did not address all of the complexities and contradictions immanent to running a business, new ideas, research, and thinking arose to take its place (i.e., Hawthorne effect). This has not yet happened in the case of education systems. The data clearly show that in both the United States and in England improvement has remained mostly flat over the last two to three decades. Nevertheless, no new ideas have been seriously entertained in an attempt to replace standardization, which continues to galvanize and dominate educational theory, such as we saw to be the case in Israel in 2004.⁶⁹ The goal of improving standards during an era of educational expansion remains a public priority. As Ravitch has rightly pointed out, educational improvement became a necessity in the late twentieth century. Society has been looking for the proper means of achieving that improvement. This chapter has sought to clarify the problems and discrepancies that have afflicted the subsequent practices, while drawing attention to the need for further observation and study. Only then will we achieve a better understanding of the issues at stake, being in a better position to judge if any realistic alternatives to the standards movement exist.

Appendix 1

List of major professional organizations that have created educational standards (source: Horn (2004), p. 29-30).

- International Reading Association
- National Council of Teachers of English
- National Council of Teachers of Mathematics
- National Council for the Social Studies
- National Science Board
- The American Association for the Advancement of Science
- The National Center for History in the Schools
- The Geography Education Standards Project
- National Council on Economic Education
- Center for Civic Education
- National Board for Professional Teaching Standards (NBPTS)
- Interstate New Teacher Assessment and Support Consortium (INTASC).
- National Council for the Accreditation of Teacher Education (NCATE)
- National Commission of Teaching and America's Future (NCTAF)
- Interstate School Leaders Licensure Consortium (ISLLC)
- Educational Leadership Constituent Council (ELCC)

Private organizations that have created or were involved in creating education standards:

- Fordham Foundation
- Heritage Foundation
- Hudson Institute
- Olin Foundation
- The Pioneer Institute
- Manhattan Institute
- Brookings Institutes
- The Century Foundation
- The Civil Rights Project at Harvard University
- National Education Association
- American Federation of Teachers

Endnotes

- ¹ Wren, A. D. (2005): *The History of Management Thought*, John Wiley, US, p. 152.
- ² Witzel, M. (2002): *Builders & Dreamers – the making and meaning of management*, Pearson Education, London, p. 64.
- ³ Webb. L. D. and Norton. M. S. (2003): *Human Resources Administration*, Merrill Prentice, Columbus, p.11.
- ⁴ Zeng (1999) argues that historically, the Confucian literati were not interested in breaking away from irksome mundane life, but Confucianism was marked with the term *ema* which means a kind of Stoic spirit, self-control and a willingness to postpone gratification while any entrance exams need to rely on some how of such characteristics - high concentration, time, efforts and sacrifice on part of the students and their families.
- ⁵ Kangmin Zeng (1999): *Dragon Gate – Competitive Examinations and their Consequences*, Cassel, London, p.327.
- ⁶ Chan Kin-Keung. D. (1997): *The changing role of the educational system and in intellectuals in China: 1895-1927*, an unpublished thesis, Nottingham University, p.161.
- ⁷ Kangmin Zeng (1999): *Dragon Gate – Competitive Examinations and their Consequences*, Cassel, London, p.321.
- ⁸ An ignorance to the expansion movement could be identified in any decade prior to the 1960s. But more vocal and influential one was clearly appear during the 1960s.
- ⁹ Pages 5-10 was partly adapted from Volansky, A. (2003)
- ¹⁰ Cox.C.B and Boyson. R (eds.) (1969): *Black Paper: 'Fight for Education'*, Critical Quarterly 1, London, p.1.
- ¹¹ The term progressive methods includes pedagogical terms such as "discovery methods", "creativity", "self expression" and "child centered" learning.
- ¹² Formal education refers to an emphasis on such matters as oral teaching, order, structure, hierarchy and formality.
- ¹³ Ibid, p.7
- ¹⁴ Lynn. R. (1969): *Comprehensives and equality: The Quest for the Unataiable*, Black Paper Two, London, Critical quarterly, p. 26.
- ¹⁵ Ibid, p.31.
- ¹⁶ Wright. N. (1977: *Progress in Education*, Croom Helm, London, p.140.
- ¹⁷ Hansard. 1 December 1987, Co.775
- ¹⁸ Department of Education and Science (1987): *The National Curriculum 5-16*, pp. 2-3.
- ¹⁹ Ibid, p.3.
- ²⁰ Department of Education and Science (1989): *English for Ages5 to16*, Section15,17.
- ²¹ Nuttall. D. (1989): "National Assessment: Complacency or Misinterpretation?" In Lawton. .D. (ed.) *The Education Reform Act: Choice and Control*, Hodder & Stoughton, London, p.52.

- ²² Quoted by Nuttal (1989), p.54, from Maurice Holt "Bureaucratic Benefits" *Times Educational Supplement*, 18.9.87
- ²³ Tomlinson. J. (1988): "Curriculum an Market: Are they Compatible?" in Haviland. J. (ed.), *Take Care, Mr Baker*, Fourth Estate, London, p.11.
- ²⁴ Department of Education and Science (1988): *The Education Reform Act 198: The School Curriculum and Assessment*, Circular 5/89 (22 February 1989), p.14.
- ²⁵ Levels 6 to 10 are regarded as GCSE grades of A to F.
- ²⁶ The *Times Educational Supplement* published every year the "league table" (in October or November) of all the 23,000 schools in England.
- ²⁷ The following documents and books have been published: Task Force in Education for Economic Growth (1983), *Action for Excellence*, Denver, Education Commission of the States; Ernest Boyer (1983), *High school: A Report on Secondary Education in America*, New York, Harper; Phillip, L., Cusick, (1983): *The American High School and the egalitarian Ideal*, New York, Longman; Theodore Sizer (1984): *Horace's Compromise: The dilemma of the American High School*, Boston, Houghton Mifflin; Diane Ravitch (1983): *The Troubled Crusade*, New York, Basic books;
- ²⁸ <http://www.ed.gov/pubs/NatAtRisk/risk.html>
- ²⁹ *ibid*
- ³⁰ *ibid*
- ³¹ National Education Goals Panel, *Building a Nation of Learners*, (1991), Washington, p. ix.
- ³² Worthen et. al. p. 4.
- ³³ Horn, A., R (2004): *Standards*, Peter Lang, New York, p. 23
- ³⁴ Quoted by Horn, A., R (2004): *Standards*, Peter Lang, New York, p. 23 from Thurlow & Ysseldyke (2001), p.388.
- ³⁵ Horn, A., (2004) *ibid*, p. 28.
- ³⁶ Horn, A., (2004) *ibid*, p. 26.
- ³⁷ *ibid*
- ³⁸ McNeil, L.,M. (2000): *Contradiction of school reform: Educational costs of standardized testing*, Routledge, New York, p.153
- ³⁹ McGaw (1995) 'Australia' in OECD, *Performance Standards in education – In Search of Quality*, OECD, Paris, p.36.
- ⁴⁰ National Task Force to Improve Education in Israel. (2005). *The national program for education*. Preliminary draft. Jerusalem, p. 93. [in Hebrew]
- ⁴¹ Resnick. B.L and Nolan.J.K (1995): Standards for Education in Ravitch. D. (Ed.): *Debating the Future of American Education – Do We Need National Standards and Assessments?* Brooking Institute, Washington D.C. p.100.
- ⁴² Lowe. J. (1995), Overview in OECD, *Performance Standards in education – In Search of Quality*, OECD, Paris, p.25.
- ⁴³ Ravitch. D. (1995): Introduction in Ravitch. D. (ed.) *Debating the Future of American Education*

- *Do We Need National Standards and Assessments?* Brookings Institute, Washington D.C. p.2.
- ⁴⁴Hargreaves, H. (2004): *Sustainable Change*, A paper presented in a Conference in Honk Kong, November (The paper is a development of inaugural lecture delivered at the Lynch School of Education, Boston College, November 2003).
- ⁴⁵Sizer, R., T. (1995): *Will National Standards and Assessments Make a Difference?* in Ravitch, D. (Ed.): *Debating the Future of American Education – Do We Need National Standards and Assessments?* Brookings Institute, Washington D.C. p.36.
- ⁴⁶ This student is a young and promised professor at Tel Aviv University have decided to change direction and instead of having a promising position at the University decided to make a shift, leaving the academic life in favor of becoming a principle in a primary school.
- ⁴⁷ McNeil, M. L (2000): *Contradictions of School Reform – Educational Costs of Standardized Testing*, Routledge, New York, p. 254.
- ⁴⁸ McNeil, M. L (2000), p.258.
- ⁴⁹ Meier, D. (2000): *Will standards save public education?* Beacon, Boston, p.3.
- ⁵⁰ Meier, D. (2000): *ibid.* p.6.
- ⁵¹ Times Education Supplement, 11.5.89
- ⁵² Quoted in Volansky (2003), p.281
- ⁵³ McNeil, M. L (2000): *Contradictions of School Reform – Educational Costs of Standardized Testing*, Routledge, New York, p. 257.
- ⁵⁴ McNeil, M. L (2000): *Contradictions of School Reform – Educational Costs of Standardized Testing*, Routledge, New York, p. 270.
- ⁵⁵ McNeil, M. L (2000): p. 271.
- ⁵⁶ Falk Beverly (2000): *The Heart of the Matter – Using Standards and Assessment to Learn*, Heinemann, Portsmouth, p.xii
- ⁵⁷ Meier, D. (2000): p.23.
- ⁵⁸ Horn, A. R, Jr. (2004): *Standards*, Peter Lang, New York, p. 9.
- ⁵⁹ Kosar (2005) *ibid.* p. 37.
- ⁶⁰ Tymms, P, Coe, R, Merrell, C. (2005): *Standards in English schools: changes since 1997 and the impact of government policies and initiatives*. A report for the Sunday Times, CEM Centre, University of Durham,
- ⁶¹ Volansky, 2003, p.278
- ⁶² Tomlinson, S. (ed.) (1997): *Education 14-19: Critical Perspectives*, Athlone, London, p. 16.
- ⁶³ This subject will be discussed in a separate chapter of a book-length study of which this article is also a part. The book is tentatively entitled *Contradictions Between the Standards Movement and the Learning Movement in Education*.
- ⁶⁴ Kosar, R. K. (2005): *Failing Grades – The Federal Politics of Education Standards*, Lynne Rienner, London, p.36.
- ⁶⁵ McNeil, M. L (2000): p. 270.

⁶⁶ Kangmin Zeng (1999): *Dragon Gate – Competitive Examinations and their Consequences*, Cassel, London, p.321.

⁶⁷ Falk. B. (2000): p.157.

⁶⁸ Quated by Nuttal (1989), p.54, from Maurice Holt "Bureaucratic Benefits" *Times Educational Supplemen*, 18.9.87

⁶⁹ At that year The Task Force recommendation was to move towards stands in most of the curriculum subjects. The recommendations approved by the government in 2005, but reshuffle in the Ministry has stopped the implementation of the Committee recomendtaions.

Bibliography

- Ball, J. S. (1984): "Comprehensive in Crisis?" In Ball, J. S. (ed.) *Comprehensive Schooling: A Reader*, Falmer, London.
- Biggs, J. (ed.): *Testing: To Educate or to Select? Education in Hong Kong at the Crossroads*, Hong Kong educational Publishing, HK, p.8
- Blanchard, J. (2002): *Teaching and Targets – Self-evaluation and school improvement*, Routledge, London.
- Broadfoot, P. (2001): "empowerment or Performativity? Assessment Policy in the Late Twentieth Century" in Phillips, R. and Furling, J. (eds.): *Education Reform and the State – Twenty-five Years of Politics, Policy and Practice*, Routledge, London.
- Bush, T. and Middlewood, D. (2005): *Leading and Managing People in Education*, Sage, London.
- Caldwell, J. B. and Spinks, M. J. (1998): *Beyond the Self-Managing School*, Palmer, London.
- Caldwell, J. B. (2003): "A Theory of Learning in the Self-Managing School" in Volansky, A. & Friedman, A. I. (eds.) *School-Based Management – An International Perspective*, MOE, Jerusalem.
- Cheng, Y.C (2005): *New Paradigm for Re-engineering Education, Globalization, Localization and Individualization*, Netherlands, Springer.
- Carr, F. J. and Harris, E. D. (2001): *Succeeding with Standards – Linking Curriculum, Assessment, and Action Planning*, ASCD, Alexandria (Virginia).
- Chitty, C. (1989): *Towards a New Education System: The Victory of the New Right?* Falmer, London.
- Conley, M. (2005): *Connecting Standards and Assessment Through Literacy*, Pearson, Boston.
- Cox, C.B and Boyson, R (eds.) (1969): *Black Paper: 'Fight for Education'*, Critical Quarterly 1, London.
- Cullingford, C. (1997): "Conclusion: The Personal Effects of Assessment" in Cullingford, C. (ed.) *Assessment Versus Evaluation*, Cassel, London.

- Dale, R. et. al. (1990): *The TVEI story: Policy, Practice and Preparation for the work Force*, Open University, Milton Keynes.
- Davies, A. (1998): *The Limits of Educational Assessment*, Blackwell, Oxford.
- Department of Education and Science (1987): *The National Curriculum 5-16*.
- Department of Education and Science (1988): *The Education Reform Act 1988: The School Curriculum and Assessment*, Circular 5/89 (22 February 1989).
- Falk, B. (2000): *The Heart of the Matter – Using Standards and Assessment to Learn*, Heinemann, Portsmouth.
- Filer, A. and Torrance, A. (2000): "Assessment as Loved experience Beyond the Classroom" In Filer, A. (ed.) *Assessment, social Practice and Social Product*, Routledge, London.
- Finegold, D. & Soskice, D (1990): "The Failure of Training in Britain: Analysis and Prescription" In Gleeson, D (ed.) *Training and its Alternatives*, Open University, Milton Keynes.
- Gillborn, D. and Youdell, D. (2000): *Rationing Education - Policy, Practice, Reform and Equity*, Open University, Buckingham.
- Glatthorn, A. A. (1999): *Performance Standards Authentic Learning*, Eye on Education, New York.
- Griggs, C. (1989): 'The New Right and English Secondary Education', in Lowe, R. (ed.): *The Changing Secondary School*, London, Falmer, London.
- Hansard. 1 December 1987, Co.775
- Horn, A. R. & Kincheloe, L. J. (eds.) (2001): *American Standards*, Peter Lang, New York.
- Horn, A. R. (2004): *Standards*, Peter Lang, New York.
- Kordalewski, J. (2000): *Standards in the Classroom*, Teachers College, New York.
- Koretz, D. M. (1995): Sometimes a cigar is only a cigar, and often a test is only a test, in Ravitch, D. (Ed.): *Debating the Future of American Education – Do We Need National Standards and Assessments?* Brooking Institute, Washington D.C.
- Kosar, R. K. (2005): *Failing Grades – The Federal Politics of education Standards*, Lynne Rienner, London.

- Lynn, R. (1969): *Comprehensives and equality: The Quest for the Unataiable*, Black Paper Two, London.
- McGaw, B. (1995): 'Australia' in *Performance Standards in Education – In Search of Quality*, OECD, Paris.
- Meier, D. (2000): Reply in Meier, D. (ed.) *Will Standards save public education*, Beacon, Boston.
- McNeil, L.M. (2000): *Contradiction of school reform: Educational costs of standardized testing*, Routledge, New York.
- Moon, B. I. J. & Powney, J. (1990): *Judging Standards and Effectiveness in Education*, Hodder, London.
- Musgrove, F (1987): 'The Black Paper Movement' in Lowe, R (ed.): *The Changing Primary School*, Falmer, London.
- National Education Goals Panel, *Building a Nation of Learners*, (1991), Washington.
- Ngai-ha, N. I. (1984): *Interaction of East and West – Development of Public Education in Early Hong Kong*, Chinese University, Hong Kong.
- National Educational Technology – Standards for Students (1998): International Society for the Technology in Education, ISTE, U.S.
- Nuttall, D. (1989): "National Assessment: Complacency or Misinterpretation?" In Lawton, D. (ed.) *The Education Reform Act: Choice and Control*, Hodder & Stoughton, London.
- Resnick, B.L. & Nolan, J. K (1995): Standards for Education in Ravitch. D. (Ed.): *Debating the Future of American Education – Do We Need National Standards and Assessments?* Brooking Institute, Washington D.C.
- Sizer, T. (2000): A Sense of Place in Meier. D (ed.) *Will Standards save public education*, Beacon, Boston.
- Smith, S. M. (1995): Education Reform in America's Public Schools: The Clinton Agenda in Ravitch, D. (Ed.): *Debating the Future of American Education – Do We Need National Standards and Assessments?* Brooking Institute, Washington D.C.
- Thernstrom, A. (2000): No Excuses in Meier. D (ed.) *Will Standards save public education*, Beacon, Boston.
- Thurlow, M. L.& Ysseldyke, J.E. (2001): Standards setting challenges for special

- populations in G. J. Cizek (Ed.) *Setting performance standards: Concepts, Methods, and perspectives* (pp.387-410), Mahwah, NJ: Erlbaum.
- Tomlinson, J. (1988): "Curriculum an Market: Are they Compatible?" in Haviland. J. (ed.), *Take Care, Mr Baker*, Fourth Estate, London.
- Tomlinson, S. (ed.) (1997): *Education 14-19: Critical Perspectives*, Athlone, London.
- Trice, D.A. (2000): *A Handbook of Classroom Assessment*, Longman, New York.
- Volansky, A. (2005). *Academe in a Changing Environment – Higher Education Policy of Israel 1952-2004*, Hakibbutz Hameuchad, Bney-Brak.
- Volansky, A. (2005): The Meaning of accountability of teachers in the work of primary school, an unpublished Case Study Analysis, submitted to CET, Tel-Aviv.
- Volansky, A. (2003): *The Pendulum Syndrome – Centralisation and Decentralisation of Education in England and Wales*. Ramot Tel Aviv.
- Webb, L. D. and Norton, M. S. (2003): *Human Resources Administration*, Merrill Prentice, Columbus.
- Witzel, M. (2002): *Builders & Dreamers – the making and meaning of management*, Pearson Education, London.
- Walford, G. (2002): "Redefining School Effectiveness" *Westminster Studies in Education*, 25 (1).
- Walker, A. & Dimmock, C. (2002): "introduction" in Walker, A. and Dimmock.C. (eds.), *School Leadership and Administration: Adopting a Cultural Perspective*, Routledge Falmer, London.
- Worthen, R.,B. & White, R.K. & Fan, X. & Sunweeks, R. R.. (1999): *Measurement and Assessment in Schools*, Longman, NY.
- Wren, A. D. (2005): *The History of Management Thought*, John Wiley, US
- Wright, N. (1977: *Progress in Education*, Croom Helm, London
- Zeng, K. (1999): *Dragon Gate – Competitive Examinations and their Consequences*, Cassel, London.

Net sources

<http://www.ed.gov/pubs/G2KReforming/g2ch3.html>

http://www.dest.gov.au/sectors/school_education/policy_initiatives

<http://nces.ed.gov/nationsreportcard/ltr/results2004/nat-reading-scalescore.asp>

[http://www.dfes.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=29
&chid=113](http://www.dfes.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=29&chid=113)

<http://www.ed.gov/pubs/NatAtRisk/risk.html>