“From Aptitude to Effort: A New Foundation for Our Schools” reprinted by permission of Daedalus, Journal of the American Academy of Arts and Sciences, from the issue entitled, “American Education: Still Separate, Still Unequal,” Fall 1995, Vol. 124, No. 4.

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From Aptitude to Effort: A New Foundation for Our Schools

TWO CHALLENGES FACE AMERICAN EDUCATION TODAY: *1)* raising overall achievement levels and *2)* making opportunities for achievement more equitable. The importance of both derives from the same basic condition—our changing economy. Never before has the pool of developed skill and capability mattered more in our prospects for general economic health. And never before have skill and knowledge mattered as much in the economic prospects for individuals. There is no longer a welcoming place in low-skill, high-wage jobs for individuals who have not cultivated talents appropriate to an information economy. The country, indeed each state and region, must press for an overall higher level of such cultivated talents. Otherwise, we can expect a continuation of the pattern of falling personal incomes and declining public services that has characterized the past twenty years.

The only way to achieve this higher level of skill and ability in the population at large is to make sure that all students, not just a privileged and select few, learn the high-level, embedded, symbolic thinking skills that our society requires. Equity and excellence, classically viewed as competing goals, must now be treated as a single aspiration.

To do this will require a profound transformation of our most basic assumptions about the enabling conditions for learning. What we learn is a function of both our talents—our aptitude for particular kinds of learning—and how hard we try—our effort. But what is the relationship between aptitude and effort? Are they

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independent of one another, and, if so, which is more important? Do they compensate for one another? Does one help to create the other?

FACING UP TO OUR APTITUDE-ORIENTED EDUCATION SYSTEM

Historically, American education has wavered between the first and second of these possibilities (the independent and the compensatory) but has never seriously considered the third possibility: that effort can create ability. Early in this century, we built an education system around the assumption that aptitude is paramount in learning and that it is largely hereditary. The system was oriented toward selection, distinguishing the naturally able from the less able and providing students with programs thought suitable to their talents. In other periods, most notably during the Great Society reforms, we worked on a compensatory principle, arguing that special effort, by an individual or an institution, could make up for low aptitude. The third possibility—that effort actually *creates* ability, that people can *become smart* by working hard at the right kinds of learning tasks—has never been taken seriously in America or indeed in any European society, although it is the guiding assumption of education institutions in societies with a Confucian tradition.

Although the compensatory assumption is more recent in American education history, many of our tools and standard practices are inherited from the earlier period in which aptitude reigned supreme. As a result, our schools largely function as if we believed that native ability is the primary determinant in learning, that the "bell curve" of intelligence is a natural phenomenon that must necessarily be reproduced in all learning, that effort counts for little. Consider the following examples: *1)* IQ tests or their surrogates determine who will have access to the enriched programs for the "gifted and talented." This curriculum is denied to students who are judged less capable. *2)* Our so-called "achievement tests" are normed to compare students with one another rather than with a standard of excellence, making it difficult to see the results of learning, and, in the process, actively discouraging effort: students stay at about the same relative percentile rank, even if they have learned a lot, so why should they try hard? *3)* We grou

students, sometimes within classrooms, and provide de facto different curricula to different groups. As a result, some students never get the chance to study a high-demand, high-expectation curriculum. *4)* College entrance is heavily dependent on tests that have little to do with the curriculum studied and that are designed—like IQ tests—to spread students out on a scale rather than to define what one is supposed to work at learning. *5)* Remedial instruction is offered in "pullout" classes, so that students who need extra instruction miss some of the regular learning opportunities. *6)* We expect teachers to grade on a curve. If every student gets an A or a B, we assume that standards are too low. We seldom consider the possibility that the students may have worked hard and succeeded in learning what was taught.

These are commonplace, everyday, taken-for-granted features of the American educational landscape. They are institutionalized expressions of a belief in the importance of aptitude. These practices are far more powerful than what we might *say* about effort and aptitude. Their routine, largely unquestioned use continues to create evidence that confirms aptitude-based thinking. Students do not try to break through the barrier of low expectations because they, like their teachers and parents, accept the judgment that aptitude matters most and that they do not have the right kinds of aptitude. Not surprisingly, their performance remains low. Children who have not been taught a demanding, challenging, *thinking curriculum* do not do well on tests of reasoning or problem solving, confirming our original suspicions that they did not have the talent for that kind of thinking. The system is a self-sustaining one in which hidden assumptions are continually reinforced by the inevitable results of practices that are based on those assumptions.

ORGANIZING FOR EFFORT: NEW ASSUMPTIONS AND NEW PRACTICES FOR SCHOOLING

It is not necessary to continue this way. Aptitude is not the only possible basis for organizing schools. Educational institutions could be built around the alternative assumption that effort actually *creates* ability. Our education system could be designed primarily to foster effort. What would such a system look like? How might it work? There are five essential features of an effort-oriented

education system: *1)* clear expectations for achievement, well understood by everyone; *2)* fair and credible evaluations of achievement; *3)* celebration and payoff for success; *4)* as much time as is necessary to meet learning expectations; and *5)* expert instruction. Let us consider each of these features and what the implications may be.

Clear Expectations

Achievement standards—publicly announced and meant for everyone—are the essential foundation of an equitable, effort-oriented education system. If students are to work hard, they need to know what they are aiming for. They need not only to try hard, but also to point their efforts in a particular direction. To direct their efforts, students need to know what they are trying to learn, what the criteria of "good" performance are. Artists building a portfolio of work engage in a continuous process of self-evaluation—aided, when they are fortunate, by friendly but critical teachers and peers. If clear standards of achievement existed, elementary and secondary students could work that way, too, building portfolios of work that they continually evaluate, eventually submitting their best work for external "jurying" to see whether it meets the standards they have been working toward.

An equitable standards system must not just make the goals clear but also must set the same expectations for all students. In the absence of publicly defined standards, our inherited aptitude assumptions lead us to hold out lower expectations for some children than for others. We will go on doing this as long as official achievement standards do not exist. The best remedy, the equitable solution, is to set clear, public standards that establish very high minimum expectations for everyone, providing a solid foundation for effort by students and teachers alike.

Fair and Credible Evaluations

If I am to put out serious effort, I need to know that I will be evaluated fairly, and that those evaluations will be honored and respected. There is more to fairness than the simple absence of bias in tests and examinations, but fair evaluations are also transparent. Their content is known in advance; they can be systematically and effectively studied for. In America today, students rarely have

the experience of studying hard to pass an examination that they know counts in the world and for which they have been systematically prepared by teachers who themselves understand what is to be examined.

Local tests and exams, usually made up by teachers and administered at the end of teaching units or marking periods, may appear to contradict my claim. Students can study for those, and they are clearly related to the taught curriculum. But, especially for students from poor schools, those tests do not really "count." They are not credible to the world at large. It is understood that an A or a B in an inner-city school does not equal the same grade in an upscale suburban or private school.

A credible evaluation system, one that will evoke sustained effort by students and teachers throughout the system, must evaluate students from all kinds of schools against the same criteria. It must include some externally set exams graded by people other than the students' own teachers, along with an external quality control of grades based on classwork (as in an audited portfolio grading system, for example). Neither of these is a new idea. Some version of external exams and audited classwork is used in virtually every country except ours as the basis for diplomas, university entrance, and employment. Joined with the other elements of an effort-oriented system, this kind of evaluation system constitutes a strategy for optimizing both equity and excellence in our schools.

Celebration and the Payoff for Success

Hard work and real achievement deserve celebration. And celebration invokes future effort. An education system that actively tries to promote effort will make sure that its schools organize visible, important events highlighting the work students are doing and pointing clearly to achievements that meet the publicly established quality standards. There are many options for organizing celebrations. School-community nights can become occasions for displaying work, organizing exhibitions, and putting on performances. Local newspapers and radio and television stations can be recruited to publish exemplary student work or otherwise mark achievements. Community organizations can be asked to participate. It is critical that these celebrations include people who matter

to the students, and that what is celebrated is work that meets or is clearly en route to meeting the established standards.

For older students, celebration alone may no longer be enough to sustain effort. Adolescents are increasingly concerned with finding their way into adult roles. They will want to see connections between what they are accomplishing in school and the kinds of opportunities that will become available to them when they leave school. This is why many today advocate some kind of high school credential that is based on specific achievements and that is honored for entrance into both college and work. Celebration coupled with payoff will keep the effort flowing; achievement will rise accordingly.

Time and Results—Inverting the Relationship

Schools today provide roughly equal instructional time to all students: a certain number of hours per day, days per year, and years of schooling. As much instruction and learning as can be fitted into that time is offered. Then, at the end of the prescribed period of study, some kind of evaluation takes place. The spread of results confirms the aptitude assumptions of American schooling.

What if, instead of holding time fixed and allowing results to vary, we did the opposite: set an absolute standard of expectation and allowed time (and the other resources that go with it) to vary? That arrangement would recognize that some students need more time and support than others but would not change expectations according to an initial starting point. Everyone would be held to the same high minimum. Effort, then, could really pay, because all students would know that they would have the learning opportunities they need to meet the standards.

Allowing time to vary does not have to mean having young people remain indefinitely in school, repeating the same programs at which they failed the year before. We already know that this kind of additional time produces very little. Instead, schools and associated institutions would need to offer extra learning opportunities early on. For example, pullout instruction could be replaced with enriched, standards-oriented after-school, weekend, and summer programs. Churches, settlement houses, Scouts, 4-H clubs, and other youth service organizations could be asked to join with the schools in providing such programs. A results-oriented system of

this kind would bring to all American children the benefits that some now receive in programs organized by their parents and paid for privately.

The Right to Expert Instruction

I have been arguing that we ought to create the right to *as much* instruction as each child needs. That is what the time-results inversion is about. But an equitable system requires more than that. It requires *expert* instruction for all children. We are far from providing that. With notable exceptions, the best teachers, and, therefore, the best instruction, gravitate to the schools that teach children with the fewest educational problems. Children who start out with the greatest need for expert instruction are the ones least likely to get it.

That will not do. An effort-oriented system that sets high expectations for all will create a demand—indeed, a right—to expert instruction. To fulfill that demand, it will be necessary to create enhanced instructional expertise up and down the teaching force, so that there is enough expert instruction to go around. This means that new forms of professional development, for teachers now in the force as well as for those preparing to enter the field, are an essential ingredient of the standards and effort revolution.

CONCLUSION

My proposal is, in some respects, a radical one. The effort-oriented education that I am calling for—a system in which everyone in the schools knows what they are working toward, in which they can see clearly how they are doing, and in which effort is recognized in ways that people value—is based on assumptions about the nature of human ability that are very different from those that predominate today. But in other respects, my proposal is a practical and feasible one. It calls for a return in institutional practice to values that most Americans subscribe to: effort, fair play, the chance to keep trying. Most of the elements of the proposal—standards, exams, celebrations of achievement, extended time for those who want to meet a higher standard, expert instruction, and professional development—already exist somewhere in our practice. These elements need to be brought together in a few major

demonstrations that show the possibilities of effort-oriented practices. Just as aptitude-oriented practices have created confirmatory evidence for assumptions about aptitude, so a few effort-oriented demonstrations can begin to create evidence of the power of effort in creating ability. As evidence accumulates, beliefs will begin to change, and we can, perhaps, look forward to education in America that is equitable in the deepest sense of the word because it creates ability everywhere.