## Excellence for All

How Board Examination Systems and Education Gateways Will Greatly Improve High School Student Performance, Prepare More Students for Success in College, Enable Graduates to Get Good Jobs and Reduce the Costs of Our Education System

### PROGRAM BRIEF

While student achievement has remained stagnant in the United States for decades, one nation after another has overtaken us in the major international rankings. The National Center on Education and the Economy (NCEE) has been benchmarking the countries with the most successful education systems for more than 20 years to see if we could unlock the secrets of their success. We and many other researchers have concluded that one of the most important of those secrets is their very powerful, coherent and aligned instructional systems, often call Board Examination Systems.

The indispensable elements of Board Examination Systems are: 1) high school programs comprised of courses that constitute a whole, coherent core curriculum, typically consisting, at a minimum, of courses in the native language, mathematics, the sciences, history, and the arts; 2) well-designed courses described by a detailed syllabus; 3) high quality examinations (typically dominated by essay and constructed response questions to which the students must write extended responses) that are designed to assess the extent to which the student has command of the material described in the syllabus and can apply it to unfamiliar problems; 4) professional scoring of the examinations; and 5) high quality training of the teachers who will teach the courses that is explicitly designed for this purpose.

Sometimes all of this comes with explicit statements, in narrative form, of what students are expected to know and be able to do, sometimes not. When they are not explicitly stated, the standards are made evident to all by the syllabi, the annually released exam questions, and examples of the kind of student work that earned a top grade. Everyone understands that the students could not be expected to do well on the examinations without the entire apparatus just described. The experts in these other countries would be deeply puzzled at the idea that a country could produce high achievement simply by publishing a narrative statement of standards and administering tests that rely mainly on multiple choice, computer-scored tests.

The United States has taken an important first step in the direction just described, with most states adopting the Common Core State Standards, a single set of clear education standards for K-12 English language arts and mathematics, and most states affiliated with assessment consortia that are tasked with developing tests to match the standards.

But the Common Core State Standards cover only English and mathematics, it will be years before the new tests are ready for widespread use, there are no plans to construct a curriculum that matches either the standards or the tests, and there is no training available to the teachers who will have to teach to the new standards and administer the tests. Nor is there any guarantee that when the limited new system is finally in place, that it will match the quality of the best such systems that the world has already developed.

## Using Board Examination Systems to Get to World-Class Standards and Greatly Improve Student Performance at a Very Reasonable Cost

A state, of course, could use the Common Core State Standards to create its own set of Board Examinations, complete with program designs, syllabi for all the courses, examinations, scoring contractors, and teacher training programs. But when the state was done, it would have examinations only in English literacy and mathematics. It would not have the matching instructional materials or teacher training that would make it possible for students all over the state to reach the standards. Developing all the components of full Board Examination Systems, not just for English literacy and mathematics but for all the subjects in the core curriculum, would take many years and a great deal of money. And when the state was done, all that it would have accomplished is to duplicate the systems that the highest performing countries have had in place for years.

There is an obvious alternative. The oldest of these Board Examination Systems — the University of Cambridge International Examinations — is used by schools in more than 150 countries. So the question is: Why not use the best Board Examination Systems that have already been developed rather than starting from scratch? The argument for doing this is very strong. These exams set the real international standard. All over the world, elite high schools use these curricula and exams. When Singapore set out to produce the most successful school system in the world, they contracted with the University of Cambridge International Examinations to build a customized version of the Cambridge "O" Level curriculum and exams.

Using the best instructional systems that are already available makes sense. A state that does this benefits from many years and many millions of dollars of development and field-testing, all done at someone else's expense. By adopting these Board Examination Systems, a state would leap right through national standards to international standards. These Board Examinations are recognized by universities all over the world, including, but way beyond, universities in the United States. Much more important than either of these arguments, these exams have all the power that comes from fully-integrated, highly-aligned, instructional systems, something no state currently has the capacity to produce for itself, even if we were not in the midst of a financial crisis.

# One Instructional System for Lower Secondary, and Another for Upper Secondary

What follows is a description of the way that *Excellence for All* combines the tools provided by the world's best Board Examination Systems, the high school structure used

in many top-performing countries, and distinctly American ideas about educational equity to create a uniquely American high school design.

Most top-performing countries strive to deliver a common curriculum to all students by the age of 16. That curriculum embodies what they think all students, no matter what they plan to do with their lives, should know and be able to do. When their students have completed that curriculum, and taken their exams, they go their separate ways. Until recently, that meant that some would go to work, many would go on to some kind of technical program, usually two or three years, before entering the work-force, and some would go off to university. The exams that the students took at the end of their 10<sup>th</sup> year of schooling would largely determine which of these routes were taken by which students.

In such a system, the purpose of the exams is to determine whether a student is qualified to go on to work or to the next stage of his or her education. The standards for moving on are clear. The question is whether the student has met them. Because the colleges, universities and employers have agreed to the standards in advance, there is no dispute about what the students' performance on the exams means or about what it takes to move on. In the American system, the time a student puts in at any given educational institution is fixed but the standard that the student meets is variable. In nations with qualifications systems, the standard is fixed, but the time taken to reach that standard can vary widely.

There is no high school diploma in such systems. There are only the standards and the grades one gets on one's exams, and those grades are understood in the same way by the school authorities, the students, the parents, the employers, and the universities and technical schools. What is effective about such a system is that all students know just what they have to do to go on to the next stage of their lives. Schools know what they need to teach for their students to be successful. Employers and universities know how to interpret the information they get from the exams. Most important, the vast majority of students take tough courses and work hard in school, both before and after they take their first set of exams at the age of 16, because they see a direct connection between the effort they put in at school and the path they have decided they want to follow.

The downside of such a system, from an American standpoint, is that, in its traditional form in most countries, it has been used to sort students into futures from which there is little chance of escape. Americans see education as a way to open up opportunities, not to close them off. The *Excellence for All* program does just that.

Under the *Excellence for All* plan, all students get the same rigorous, internationally benchmarked core curriculum in their freshman and sophomore years. The standard for successfully completing that curriculum is the same standard of literacy and numeracy that is required to be successful in the first year of a community college curriculum, so that any student who is certified as meeting that standard is therefore certified as having the knowledge and skills needed to enroll in a community college without having to take any remedial courses. It turns out that the standard to which most internationally benchmarked lower division (9<sup>th</sup> and 10<sup>th</sup> grade) exams are set line up nicely with the literacy and numeracy requirements for succeeding in the first year of our community

college programs. This makes it possible to use these exams as the basis of a system that qualifies students for entry into our community colleges without remediation.

As matters stand now, students in most states can get a high school diploma and still have literacy levels far below what is required to succeed in any kind of college, including community colleges, or the workplace. In 2011, only 25 percent of high school graduates met the college readiness benchmarks in English, math, reading, and science, according to ACT data. The system we are describing would open up a world of opportunity to millions of American students whose futures are now bleak.

All students will get a curriculum that is designed to get them to the required standard. Students who start out behind will get extra help from their first day of high school. If the student takes the exam at the end of their sophomore year and does not succeed, it is the job of the high school to analyze their scores, and put together a customized program for them so that they will have a much better chance of succeeding when they take the exams the next time. They can take the exams as often as the exams are offered (in some cases in both the Winter and the Spring).

Some students will meet this standard at the end of their sophomore year, some at the end of their junior year and some only at the end of their senior year. But the job of the high school will be to make sure that all students reach this standard by the end of high school. When that happens, all students will be qualified to go to some kind of college and none who arrive at the college door will have to take remedial courses to be prepared for success there.

Though students who pass their exams will have the option to leave high school, get a performance-based diploma from their high school and go on to their community college if they want to, they need not do so. They have other choices.

They can stay in high school, take an upper division program of demanding academic courses and prepare themselves to take exams that will get them into some of the most selective colleges in the world. Many high schools are under a lot of pressure to offer more college prep courses like the Advanced Placement Program courses in high school and to offer them to many more students. But the success rates in those courses are plummeting because many of the students enrolling in these courses are not prepared to succeed in them. With this new program, many, many more high school students will be ready by the end of their sophomore year to take full advantage of programs like Advanced Placement and the International Baccalaureate Program, because they will be much better prepared for success. So, just as this design will make a big difference for students who now struggle in high school or who just drop out, it will make just as big a difference for students who don't drop out or struggle, but who fall far short of the achievement they could enjoy, if only they were better prepared for a strong upper division program.

But not all students who pass their lower division exams and choose to stay in high school will want to enroll in college prep programs. Some will want to take a program of

technical courses that will prepare them to begin a rewarding career when they graduate from high school. Or they can leave their high school to enroll in a regional technical high school program that will lead to the same result.

The crucial point here is that the system will not decide which of these options are available to any given student. Each student will be able to choose freely among these alternatives because every student who passes their lower division exams will have shown that they are qualified for all of these options. The choice of path is theirs.

Many students who choose the upper division academic program will be enrolled in courses that count for college credit in many institutions and so will be able to save both time and money in college. Many who either leave high school to take a technical program in their community college or who stay in high school for the same purpose will find that, by the time they are 18 years old, they have a very solid academic background and also have the training they need to start in a job with good wages and solid growth prospects. And students who choose a technical education in this system will be able to start work much earlier than is now the case and will also have the academic skills to pursue higher education later, whenever they wish.

Students who leave high school early to enroll in their community colleges will be able to choose between general education programs intended to enable them to transfer to four-year colleges and two-year and three-year certificate and degree programs intended to provide the credentials needed to begin well-paying careers in a wide range of fields. So students can head for four-year colleges whether they leave high school early or stay. And they can head for technical education and training leading to good jobs whether they leave high school early or stay. It is up to the student, whenever that student passes his or her lower division exams. This is the antithesis of the American tracking system. It is a system of multiple pathways to success.

There has been much talk in recent years about all students being college and work ready. And it has been widely asserted that the standards are the same for college as for work. Furthermore, the unspoken assertion is that college-ready is a universal standard, the same for all colleges. But none of this is true. The literacy requirements for success in the first year in your local community college are not the same as the literacy requirements for success in the first year of a janitor's job are not the same as the literacy requirements for employment as an automotive technician at your local car dealership (much higher than you think). The system just described acknowledges these differences, sets qualifications standards that are appropriate for each, lets students pursue their own dreams at their own speeds, and closes no doors, ever.

This system, which we call *Excellence for All*, is fairer and far more effective than our current high school system. It will produce a better-educated citizenry, who have more choices, and brighter economic futures than the current system. And it will do all this at little if any increase in cost.

### A National Pilot Program

NCEE is conducting a national pilot program designed to prove beyond argument that the system just described can and will produce major gains in student performance for most of our high school students. Twenty-one high schools are participating, representing diverse demographics, geography, and school types, beginning in the Fall of 2011. The Institute for Social Research at the University of Michigan, one of the nation's most respected social science research institutes, will conduct an independent evaluation of the pilot. A Technical Advisory Committee, composed of some of the world's leading experts in curriculum and testing, is overseeing the technical aspects of the work, including making sure that the assessments used in the program meet the highest standards of reliability, fairness, and validity. A list of the members of the Technical Advisory Committee appears on the NCEE website (<a href="https://www.ncee.org">www.ncee.org</a>).

In 2010, the Commonwealth of Kentucky, assisted by NCEE, conducted a competitive procurement process seeking to identify the organizations most qualified to deliver Board Examination Systems to the participating states and districts. That process culminated in the certification of the Board Examination Systems providers most highly qualified to offer these programs. The organizations certified to offer lower division Board Examination Systems were required to offer courses and programs fully aligned with the Common Core State Standards. Once these organizations were certified, NCEE and Kentucky conducted negotiations with these organizations to agree on the specific products and services to be offered and the prices at which they are made available to the participating schools.

Among the candidate products and sponsoring organizations are the following:

#### **Lower Division (9th & 10th Grade)**

ACT: Freshman and Sophomore courses from its *QualityCore* 

offering

<u>University of Cambridge</u>: International General Certificate of Secondary Education

program

#### **Upper Division (11th & 12th Grade)**

ACT: Junior and Senior courses from its *QualityCore* offering

University of Cambridge: International A and AS levels

<u>College Board</u>: Advanced Placement International Diploma Program

<u>International Baccalaureate</u>: International Baccalaureate Diploma Program

## What Participating Schools and Districts Are Committed To

Each participating school is expected to offer one of the certified lower division Board Examination System programs in the first year and thereafter. That program must cover English, mathematics, the sciences, American and world history, and the arts. It also must offer one of the upper division programs, but it can begin offering that program either in the first year of the pilot or in the third year of the pilot. The next three years, beginning in the Fall of 2011, are the years in which the program is actually piloted in the school, but NCEE anticipates that schools will continue with their Board Examination Systems aligned-instruction and end-of-course exams after the initial pilot concludes. Many more high schools are expected to begin pilots in the Fall of 2012.

The school must order and use the relevant instructional material and examinations and must offer the relevant teacher training from the organization offering the Board Examination System or Systems it has chosen and must administer the relevant examinations. It also must provide the required data to the program evaluator (The University of Michigan) and NCEE's Technical Advisory Committee.

Pilot high schools also need to devise a plan for how they will support students who begin the freshman year behind grade level in reading, writing, and mathematics, which would hinder their ability to succeed in the Board Examination program. If students enter high school two or three years behind grade level, the high school will need to offer a program during the freshman year that will get their students ready to begin the Board Examination program in their sophomore or junior years.

And pilot high schools will need to develop a program for students who do not succeed on their exams the first time they take them. The staff should be ready to analyze each student's subscores on the exams, and devise a program keyed to areas in which that student did not perform well enough so that the student can succeed in a subsequent attempt.

The district must agree to this participation on the part of the school and must provide whatever data is required to help students succeed and to ensure a thorough evaluation of the program. Together, the school and district need to purchase the necessary products and services from the Board Examination Systems provider, including the teacher training, and the substitute teachers that might be needed when the teachers are being trained. The average expenditure ranges from \$17,000 to \$32,000 per year, but the actual figure will vary depending on the number of students enrolled and the cost of the particular program the school chooses. Schools participating in the Fall 2011 pilot are using funds from federal grant programs (e.g., School Improvement Grants, Title I, Title I Part G., Title II, Advanced Placement Programs, or Title V-A Innovative Programs) and seeking funds from local and state philanthropies. Some states and districts are using state and local tax dollars to fund part of the program as well. Site-specific cost estimates are available following a further discussion of a school's unique needs.

## What Participating States Are Committed To

Participating states are committed to offer assistance to schools trying to identify sources of funding for their participation in this program, to cooperate in providing data for the evaluation, and to make whatever changes in policy or provide whatever waivers are required to enable students to have the option to graduate from high school and get a diploma as soon as they pass their board exams (but no earlier than the conclusion of their sophomore year) and move on to an open-admissions college.

## What Participating Colleges Are Committed To

Open-admissions colleges are under increasing pressure to improve the very low completion rates of those who sign up as regular full-time students. But they labor under an enormous handicap, namely the fact that a very large number of students who show up on their doorstep are not prepared to do college-level work. This program is designed to send them only students who are prepared to succeed in college. That is why some of the strongest support for this program has come from the nation's open-admissions colleges.

To make the program work as designed, students who pass their examinations as early as the end of their sophomore year must be given the option to leave their high school (if they choose) and enroll as full-time regular students in a two-year or four-year open enrollment college. That means that a college, most likely a community college, near the pilot high school, must be prepared to admit such students and enroll them as regular full time students when they pass their lower division examinations. These examinations will be set to a pass point that assures that the student who has passed them has the level of English and mathematics literacy needed to succeed in their initial credit-bearing courses in these postsecondary institutions. The participating colleges also must agree not to require these entering students to take remedial courses because they will have demonstrated that they do not need them. NCEE has assembled a prestigious Higher Education Advisory Committee, chaired by Molly Broad, the President of the American Council on Education, to advise on the cut points to be used for this purpose. Key individuals from each participating state are also on this committee.

## What The National Center on Education and the Economy Is Committed To

NCEE is committed to provide technical assistance to the states, districts, and schools involved in the program. It is committed to conducting a rigorous process for certifying that the providers of the Board Examination Systems meet world-class standards, adapt their products so that they are fully aligned with the Common Core State Standards, and meet high standards for reliability, fairness, and validity. It is further committed to significantly funding the research needed to assure that the pass points on the lower division examinations accurately reflect the levels of literacy and numeracy students need to succeed in initial credit-bearing courses in the nation's open admissions colleges. It also is committed to working with the Commonwealth of Kentucky to make sure that the schools and districts can purchase the materials and services they need from the Board

Examination Systems providers at the best possible prices.

## **For More Information**

If your state, district, or school is interested in learning more about how you might participate in the *Excellence for All* program, contact Jason Dougal, Chief Operating Officer, at 202-379-1800, or write him at <a href="mailto:idougal@ncee.org">idougal@ncee.org</a>.