| A New Model of Student Assessment<br>for the 21st Century                             |                           |
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Further information about Young Women's Leadership Charter School can be found at www.ywlcs.org

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The chronic academic underperformance and student failure of most American urban high schools are actually *created by* the antiquated way that schools evaluate student academic performance and award (or deny) course credits. When the school leaders in a small inner-city high school in Chicago began to question the "received wisdom" of high school student assessment and common practices of grading, remarkable improvements in student performance followed, not just once, but year after year. By changing the system by which high school students pass courses and earn course credits, the school was able to simultaneously raise graduation requirements *and* increase graduation rates. These school leaders also created a student assessment database that serves as a model for a new generation of school and district student data systems, using classroom assessment data to inform instruction and to direct support services and remediation.

How does a school take urban kids with low test scores and myriad other life challenges and, within a few years, remediate a history of underachievement, significantly improve their chance of graduating, and successfully propel them on to college? This brief case study challenges long-established practices and offers districts possibilities for improving secondary education outcomes by rethinking our understanding of academic success and transforming the structure and tracking of student achievement.

#### **Problems with the Traditional System**

The traditional system for evaluating student achievement has implications for urban high school students at every achievement level:

*For all students*, there are only time-limited incentives to learn course material and no opportunity or incentive to improve performance or learn more after grades are issued; no

mechanism for recording student progress relative to learning goals; and a lack of connection between classroom grades, state learning standards, and standardized accountability measures.

*Students earning low but passing grades* accumulate credits even in the absence of substantive learning. They earn a high school diploma without achieving a requisite level of skills and knowledge, and a low grade point average threatens their eligibility for colleges and financial scholarships.

*For students who fail classes*, the resultant credit deficiency increases the likelihood that they will leave school without a diploma; a low GPA threatens their eligibility for colleges and financial scholarships even if they persevere to graduation; and their official school transcripts permanently record their failure and undermine their future life choices.

Under this traditional model, a small proportion of students in urban schools do well, but significant numbers fail to graduate, and the majority of those who do are inadequately prepared for college or the workplace. Other factors, too, affect student achievement in urban schools, such as the quality of teaching and instructional leadership, characteristics of school culture and organization, and the availability of adequate resources. But even in a well-resourced classroom with a highly qualified teacher in a caring and challenging school environment, a heterogeneous group of students will be stratified in their achievement when learning time is held constant. Those who demonstrate achievement above a bare minimum level will be awarded course credit at the rate of one Carnegie unit per 120 hours of seat time, whether or not they have mastered requisite skills and content knowledge. Final letter grades will be communicated on report cards, permanently recorded on student transcripts, and calculated into grade point averages. External tests will be used to provide an evaluation of learning that mechanisms internal to the school

seem unable to supply. This is how student achievement is currently structured in most American high schools.

Essential to this traditional structure of student achievement is the function of sorting students for entry into higher education and the labor market. Indeed, the system was designed for these purposes a hundred years ago; form follows function. Structural mechanisms record student success and failure in order to make clear distinctions between students at different levels of achievement; students at the lower end are effectively barred from further educational opportunity and severely limited in their capacity to participate in American society. Given the economic realities of the 21<sup>st</sup> century and the civic demands of our democracy, we cannot afford to write off the huge numbers of young people who struggle to succeed in high school. High dropout rates and low levels of academic achievement in urban high schools have dire consequences for individual students with ripple effects on families, communities, and the nation at large. Hundred-year-old structural mechanisms designed to draw academic distinctions among students have become powerful structural barriers to academic achievement for a significant number of students in today's urban high schools.

#### Hope: An Innovative Model in Chicago

An in many urban districts, almost half the students in Chicago drop out of school without a high school diploma. The district-wide five-year cohort graduation rate in the Chicago Public Schools (CPS) in 2005 was 52%.<sup>1</sup> That same year, the Young Women's Leadership Charter School (YWLCS) graduated 78.6% of its students – mostly low-income, mostly African American and Latina – achieving the highest graduation rate of any non-selective public school in the city. YWLCS also sent the highest percentage of those graduates (87%) on to college.<sup>2</sup> Any girl in the city is eligible to attend this public school, regardless of past grades or test scores.

What YWLCS does is to educate and evaluate "regular" public school students in a radically *irregular* structure. In the process, the school greatly increases the chances that its students will finish high school and be prepared for college. In calculating the "value added" by attending YWLCS, the University of Chicago's Consortium on Chicago School Research found that students with similar demographics and achievement levels would be *1.7 times more likely to graduate* if they attended YWLCS than if they had attended the average Chicago public high school.<sup>3</sup> While the school's graduation rate has fluctuated year to year since 2005 (see Table 1), YWLCS has consistently rated at or near the top of Chicago high schools in the number of its students who graduate high school and who enter college. For example, in 2007, YWLCS's graduation rate was 26.4% higher than that of a statistical neighborhood comparison school, according to CPS's annual report.<sup>4</sup>

|  | 2005    | 2006   | 2007    | 2008 |
|--|---------|--------|---------|------|
| Chicago Public<br>High Schools –<br>All Students | 52.0    | 52.7   | 55.1    | NA   |
| YWLCS –<br>All Students                          | 78.6    | 64.8   | 67.7    | 70.0 |
| Difference                                       | + 26.6% | +12.1% | + 12.6% | NA   |

Table 1 – CPS and YWLCS 5-Year Cohort Graduation Rates<sup>5</sup>

By directly addressing two major barriers to high school graduation and post-secondary success, – (a) student deficiencies in course credit and (b) gaps in necessary knowledge and skills – YWLCS offers a possible model for schools, districts, and states looking to improve the educational outcomes of their high school students.

#### Young Women's Leadership Charter School

In fall 2000, the Young Women's Leadership Charter School opened its doors to a mostly minority, low-income student population in the Bronzeville neighborhood on Chicago's South Side. By law, the public charter school has no entrance tests or proficiency requirements for admission. Any girl in the Chicago Public Schools system is eligible to apply, and applicants are admitted by lottery. Having now completed its eighth year of operation, YWLCS continues to serve a student population typical of CPS students, with over 90% racial/ethnic minorities, over 80% low-income, and 15% receiving special education services. <sup>6</sup> Like their peers in neighboring schools, the lives of many YWLCS students are complicated by issues that disproportionately affect children in poor neighborhoods: housing instability, unemployment, violence, substance abuse, physical and mental health problems. Low incoming achievement levels are also typical of other students in the district.<sup>7</sup> In short, like their counterparts in urban districts nationally, students entering YWLCS are relatively undereducated and experience multiple demands on their time, energy and attention.

The authors of this paper are two of the educators who opened the Young Women's Leadership Charter School and who designed the assessment system that we highlight in these pages. Margaret Small continues as principal to this day. We argue that chronic academic underperformance is largely the result of the way student academic achievement is traditionally structured. Achievement is historically defined as the successful exposure to a given academic content within a fixed period of time, generally reported using semester grades. By standardizing the amount of instructional time available for learning, regardless of students' needs, academic skills, or background knowledge, this traditional structure of achievement virtually *assures* some percentage of student failure and limits the potential performance of marginal students who might be reasonably expected to learn more if given more time and more exposure to instruction and feedback.<sup>8</sup>

A related school structure – the mechanism for awarding course credit, typically associated with the Carnegie unit – also impedes the academic performance of students. First, it encourages low student performance by rewarding marginal students for passing classes with low grades, and, second, it makes it very difficult for failing students to recover from early course failure when they try. Taken together, these two structural mechanisms – semester grades and Carnegie units – make it likely for many students to under-perform and unlikely for failing students to get back on track to graduate.

## Young Women's Leadership Charter School (2007-2008) at a glance:

Student Body:

348 female students in grades 7-12

77% African American, 15% Latina, 6% White, 1% Asian, 1% multi-racial/ethnic

81% low-income, 15% special education

Admission based on lottery, with primary entry in grades 7 and 9

Current waiting list for 2008-2009 academic year: 400 students

Faculty and staff:

32 teachers, 9 administrators, 10 support staff, 4.5 custodial/security

The School:

\$4.3 million annual budget (72% from public funds, 28% from private contributions)

Located in a public school building in the Bronzeville neighborhood, South Side of Chicago

Initial charter granted by the Chicago Board of Education 1999, currently renewed through 2011

Ironically, these structural mechanisms were instituted a hundred years ago by college and university administrators who wanted to ensure a worthy applicant pool for higher education. The traditional use of semester grades and Carnegie units to award course credit has served two intended and related purposes for the last century: (a) stratifying students for higher education and the labor market on the basis of school performance, and (b) providing quality control in the transition from high school to college while facilitating this transition for the upper strata.<sup>9</sup> As America's public goals have shifted over time from promoting "the best and the brightest" to the aspiration of "no child left behind," we contend that these structures, intentionally designed to stratify achievement, have become impediments to achieving universal high school graduation.

In this paper, we explore the relationship between chronic high school failure/dropout and the structural apparatus that organizes the traditional high school experience into timelimited learning opportunities. While federal and state pressures to raise academic standards are intended to address the problems of chronic underachievement, by raising the bar we may also be lowering the boom on under-prepared high school students, given the traditional structure of academic achievement in America's high schools.

### The Traditional Model of Student Assessment

We start with a critique of the system of student assessment now used almost universally in American high schools, because understanding how and why it functions the way it does helps us to make intelligent decisions about reform. Following this overview of the traditional system, we discuss the development and intentions of our alternative YWLCS system. We then detail how the traditional system creates problems for a large number of high school students, coupled with illustrations of how the YWLCS approach to assessment circumvents these problems to create a more educationally sound assessment system that improves student learning while also better serving the needs of teachers and administrators for real-time classroom achievement data. Table 2 shows a comparison of key components in the traditional and YWLCS student assessment systems.

# Table 2

|   | Traditional System  | YWLCS System   |  |
|---|---|--|--|
| Unit of Assessment  | Letter grades (A, B, C, D, F)   | Proficiency ratings<br>( <i>High Performance - HP</i> ,<br><i>Proficient - P</i> ,<br><i>Not Yet Proficient - NY</i> )                               |  |
| Basis of Assessment   | Entire course content   | Specific course outcomes   |  |
| Academic Calendar<br>Structure                                    | 2 semesters + summer school   | 3 trimesters + summer school   |  |
| Formal Reporting of Student<br>Achievement                        | Grade reports each quarter,<br>permanently recorded at end<br>of each semester  | Grade reports each trimester,<br>ongoing real-time updates of<br>progress  |  |
| Unit of Course Credit   | Carnegie Unit   | Credit unit  |  |
| Basis of Unit for Course<br>Credit                                | Seat time, as measured by<br>standard Carnegie unit<br>(120 hrs = 1 credit).<br>Learning, as measured by<br>grade of $D$ or above | Learning, as measured by % of<br>course outcomes met (proficiency<br>in 70% of course outcomes for<br>one-year course = 1 credit)                    |  |
| Minimum Passing<br>Performance                                    | Grade of <i>D</i> or above  | Demonstrated proficiency in at<br>least 70% of course outcomes   |  |
| Point in Time for Awarding<br>Course Credit                       | End of semester in which course was taken   | End of school year in which<br>course was taken, or credit<br>awarded retroactively for past<br>courses once student meets 70%<br>of course outcomes |  |
| Student Transcripts   | Permanent record of point-in-<br>time achievement in each<br>course   | Dynamic record of best<br>achievement to date in each<br>course  |  |
| Basis of Quantitative<br>Achievement Measure on 4-<br>Point Scale | Grade Point Average (GPA):<br>Letter grades converted to<br>4-point scale, averaged for all<br>high school courses                | Grade Point Equivalent (GPE):<br>Formula based on total % of<br>outcomes achieved and % of<br>High Performance rankings                              |  |
| Criteria for Promotion to<br>Next Grade                           | Carnegie units earned   | Credit units earned plus<br>cumulative proficiency<br>percentage across all classes  |  |

# Comparison of Structural Components of Two Systems of Student Assessment

Our basic premise is that the traditional structure of academic achievement is a stratifying model designed to spread achievement across a range from success to failure. When referring to the "structure" of academic achievement in the traditional high school model, we include these historical components: classroom grading practices, semester marking periods, permanent letter grades and grade point averages, Carnegie units/course credits, and high school transcripts.

Much of this structure is the legacy of the standardization of college admissions guidelines in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. In 1899, the National Education Association's Committee on College Entrance Requirements recommended that a standard unit be developed to assess high school curricula so that colleges could reasonably determine the adequacy of a student's preparation for higher education,<sup>10</sup> even though only a small fraction of the students who attended public schools would actually attend college.<sup>11</sup> The Carnegie unit set the national standard, with one unit equal to 120 hours of instructional time. In response, secondary school calendars were divided into semesters, and courses were configured into 60-hour instructional blocks per semester. At the end of each semester, students were given examinations to evaluate their learning, and grades were assigned to designate their achievement. All students received the same instruction and instructional time was controlled, so the dependent variable was achievement. Students generally distributed themselves along a normal bell-shaped curve from success to failure.<sup>12</sup> Each student's level of achievement was then permanently recorded on his or her official transcript, designated initially by percentile scores which were eventually replaced by letter grades A to F.<sup>13</sup> If the student earned a passing grade at the end of the semester, he or she was awarded "credit" for the course in the form of half a Carnegie unit. If the student failed to achieve a passing grade, the student would need to retake the course in order to earn the credit.

From the viewpoint of the creators of this structure of achievement, the American educational system was intended as a pyramid, with elementary schools forming the broad base and colleges and universities at the narrow peak. That the size of the K-12 school population shrank in each subsequent grade level did not particularly worry the proponents of this system. Indeed, that was largely the purpose of the upper elementary and secondary schools, to winnow out the "laggards"<sup>14</sup> and the "dull-minded" and to let the cream rise to the top. Rather than being elitist, advocates of this position saw it as inherently democratic.<sup>15</sup> Most believed that American children should be given equal access to a common elementary education, and that students would persist according to their interests and abilities.<sup>16</sup> The view of these educators was wholly meritocratic: If students of all backgrounds and abilities were sent through the school system, the system would sort out the wheat from the chaff. When a 1903 study of California high schools found that almost a third of students statewide left school because of failing grades, with the number exceeding 50% in some schools, the study's author regarded this as a natural process, concluding that "undoubtedly many failures were due to want of ability; for the incompetent and unfortunate will always be with us."<sup>17</sup> This sorting function of education is likewise evident in a teacher training textbook from the 1920s, which advised that "nothing that education can do will enable a non-selected group of individuals to approach equality either in ability or in achievement. Indeed, it may be confidently asserted that the net result of education is to magnify differences rather than eliminate them."<sup>18</sup>

Within this system, educators sought to facilitate the transition from high school to college for those elite few who had proven themselves worthy of higher education, while providing a tool for college admissions personnel to identify students who were bona fide

"college material." Semesters, letter grades, grade point averages, Carnegie units, and transcripts were the essential components in a structure that fostered this winnowing process.

Together these components structured the developing concept of "academic achievement" in the new American secondary schools of the early 20<sup>th</sup> century. In the decades that followed, this conceptual structure became the cornerstone of the modern American high school. The percentage of Americans who attend postsecondary institutions has never been more than about 65% of the eligible population of high school graduates,<sup>19</sup> and hovers around 35% of the total population ages 20-24.<sup>20</sup> Meanwhile, most American youth attend some high school, but the outcomes of those who do not graduate are relatively dire.<sup>21</sup> Yet, achievement in high school is still structured to facilitate the selection of the few from the many.

#### A New Model of Student Assessment

Prior to opening YWLCS in 2000, the faculty and administrators sat down to devise a new system of student assessment. As a charter school, we had autonomy to design our own curriculum, set our own school schedule, and create our own means of assessing students.<sup>22</sup> As a college-preparatory school, we needed to hold high standards for student performance. We recognized, however, that if high standards were enforced with the mechanisms of the traditional letter-grade system, students who were academically ill-prepared to meet those standards would likely fail courses. This leaves educators with a serious dilemma: whether to lower standards in order to give "a break" to some hard-working (but low-achieving) students, or to maintain high standards and fail those students. Neither of these two options had much appeal at YWLCS.

We wanted to design a system of student assessment that would use a variety of measures of student learning, provide meaningful feedback to students and their families on their academic progress, motivate students to achieve and persevere, track student progress over time, raise expectations as students built skills, and allow students to accumulate knowledge at varying rates of speed and without penalty. We also wanted to center conversations with students and parents on learning rather than on marks or grades; we wanted an assessment system that made learning objectives and evaluation visible, explicit, and social, altogether something very different from the traditional approach to student assessment.

We also recognized that the African American and Latino families we intended to serve were looking for a good school for their children; they were not necessarily looking to participate in a grand experiment. As one small school in a large public system, we also needed to comply with certain standardized practices at points where our school interacted with other institutions. Specifically, to achieve our mission of preparing and sending students to college, we needed to produce transcripts that would provide usable information for college admissions decisions (and that other high schools could interpret if students transferred out of YWLCS prior to graduation). These external expectations required us to utilize some common structural mechanisms, such as maintaining distinctions between students along traditional grade levels (freshmen, sophomores, etc.), dividing our school day into multiple class periods focused on traditional disciplines, awarding standard credits for successfully completed courses, and issuing high school transcripts. Our challenge was to transform these structural mechanisms to avoid the traditional pitfalls we describe below.

While the YWLCS model shares many similarities with the traditional letter grade system, the underlying philosophy of student assessment is fundamentally different. The two key structural differences are these: (a) Student achievement is based on demonstrated proficiency in course outcomes, regardless of time; and (b) Student records always reflect the student's best work to date, rather than preserving snapshots of past failure or inadequacy. We created a system whereby students are evaluated, awarded course credit, and promoted to the next grade based on demonstrated proficiency on specified learning outcomes for each course they take. We intentionally reframe inadequate performance as being "Not Yet Proficient" on course outcomes, a predicament that implies the need for further work toward a learning goal, rather than a summary judgment of failure with its accompanying consequences.

# How the Traditional Achievement Model Ensures Failure and

#### How YWLCS Restructures Achievement to Ensure Success

Turning to a closer examination of the key components of the traditional structure of high school achievement – letter grades, grade point averages, Carnegie units, and transcripts – allows exploration of their function and their implications for underachieving students in urban high schools. After our critique of each element of this traditional structure, we describe the corollary feature of the YWLCS student assessment system and discuss its implications for students. Table 2 (p. 11) shows a comparison of the structural components of the YWLCS model and the traditional system of student achievement.

### Letter Grades

The traditional structure of student achievement relies on the use of letter grades, whereby the totality of one's learning within a semester course is reduced to a single letter, Athrough F. While students, parents, and educators think they understand the significance of one letter versus another, in fact a letter grade gives no information whatsoever about a student's individual strengths or weaknesses, or about the material she has mastered or failed to master.<sup>23</sup> Letter grades simply reflect the student's course performance relative to the teacher's expectations, which can be vague and unspecified. Letter grades in and of themselves do little to either communicate or record interpretable information about the achievement of specific learning goals or academic standards. Furthermore, wide variability in teacher grading practices, even where the content focus is the same, calls into question the real meaning of any particular letter grade. How clearly or objectively does a *C-minus* in geometry or a *B-plus* in English Literature describe the extent of any one individual's understanding of a complex content domain?

If the purpose of grades is to communicate clearly the achievement of specific learning objectives, then teachers need to be clear and explicit about what the learning objectives are and how students are graded relative to those objectives.<sup>24</sup> Two of the most common grading schemes – dividing the number of points a student earns by the number of points possible, or taking an average of all letter grades a student earns – while they may be straightforward mathematically, do not provide students with feedback at the level of individual learning objectives. To learn from a failing grade and to try again, a student needs to feel that his grades are within his control and result from his own efforts. Studies repeatedly show that, where students receive specific feedback on their efforts and understand how their work compares to a standard, student performance significantly improves.<sup>25</sup> Unfortunately, these elements are often missing in the traditional structure of achievement which relies on opaque letter grades in place of useful feedback on learning.

Furthermore, in the traditional system, grades are officially reported to students and parents four times a year, after they have been permanently recorded. While a student hopefully takes whatever information can be gleaned from these quarterly grade reports and applies it toward his or her efforts on future work in a subsequent quarter, by the time grade information is reported it is already too late to be of any formative value. If a student earns a *D* on the Civil War unit in the third quarter of history class, the reporting of that *D* is of little practical value to her in improving her understanding of the Civil War.

Finally, while grade data is generally the only classroom achievement data that schools track and record, it is of little instructional use to teachers or administrators. While states and districts disaggregate standardized achievement data to reveal differences in performance for student subgroups, schools have no way to disaggregate classroom data to reveal what any individual student has or has not learned. Because classroom grading practices are not organized around student performance on specific learning objectives, schools have no way to capture meaningful classroom achievement data.

The YWLCS system improves upon the traditional approach to grading by providing much more detailed information on student learning, by structuring a process for students to use this evaluative information to go back and improve their performance on the assessed material, and by providing instructionally useful data to teachers and school administrators. First, rather than relying on one letter grade to communicate complex information about student learning in a given course, the YWLCS system specifies learning objectives in the form of "academic course outcomes." Course outcomes specify the content students should know and the skills they should possess upon successful completion of a course. Based on evidence of student learning, teachers rate students as *High Performance (HP), Proficient (P),* or *Not Yet Proficient (NY)* on each course outcome. Rather than getting a *C-plus* in biology, then, a student would receive individual ratings (*HP, P or NY*) reflecting her achievement of biology course outcomes, such as "Describe and model the genetic processes of transcription and translation" or "Compare and contrast the structures of prokaryotic and eukaryotic cells." At YWLCS, students and parents are

regularly provided with specific information about the learning a student has successfully completed and the material or skills that still need to be mastered within each course.

Formal report cards are issued three times a year (at the end of each trimester), but students are evaluated throughout the year on new material. All outcome ratings are available to students and parents online on an ongoing basis, updated as teachers do new assessments. Students with an initial rating of *Not Yet Proficient (NY)* on any course outcome are expected to do additional work to provide subsequent evidence of proficiency. When the teacher is satisfied through multiple pieces of evidence that the student understands the material or can reliably demonstrate the skill in question, the teacher will change the original outcome rating to reflect the student's new mastery (changing an initial *NY* rating to a *P*, for example). Grading then becomes a system for focusing student effort and increasing learning, rather than a system for categorizing immutable past achievement along an *A* to *F* continuum.

#### Grade Point Averages

Grade point averages (GPAs) are another standard feature of the traditional system of student assessment. As the name implies, GPAs merely average a student's earned letter grades, generally converted to a 4-point scale. For a student who shows academic progress over time, her grade point average is inherently unforgiving. The "theory of action" in the current accountability movement is that increased pressure on schools and teachers will force instructional improvements that will in turn bring underperforming students "up to standards." But even if this happens, it happens over time. Students entering high school in the bottom quartile do not immediately perform to standards. Instead, they frequently fall short of the mark, at least in their early high school coursework. However, their initial substandard performance is permanently recorded on their transcripts and calculated against them in their grade point average.

Take the hypothetical case of a student who enters 9th grade without clear future goals, without strong academic skills, or with a relative lack of maturity. Her initial performance mirrors that of a sizable percentage of urban youth at entrance to high school: she fails or barely passes freshman courses.<sup>26</sup> Let us imagine that accountability pressures and reform efforts are working at this student's high school, and that she responds to newly improved instruction and effective curriculum by improving her academic performance. She works hard in school and takes advantage of educational opportunities to build the skills and knowledge she lacked. Her grades move from D's and F's in freshman year to A's and B's by her senior year. Upon graduation, her initial underperformance would be averaged together with her eventual academic success, effectively nullifying her hard-won achievement. Her resultant GPA would likely be too mediocre to qualify for merit-based scholarships and admission to selective colleges. In a second hypothetical case, another student exhibits the opposite pattern. After two strong years of high school, he falls apart in his junior and senior years, barely passing classes and just squeaking by to earn enough credits to graduate. A third student earns solid C's in every class every year. Of course, looking only at the grade point averages of these three students, it would be impossible to distinguish one from the other.

By definition, GPAs average together success and failure, and make them look like consistent performance at the mean. Grade point averages were designed for a specific purpose, and that they do well: they clearly identify those students whose performance is consistently stellar (or consistently poor). For the student with a consistently stellar performance, a GPA has bankable value. Researchers have found that having a high GPA matters more than a high ACT score in gaining access to college.<sup>27</sup> Where a student's GPA is not high, however – where the student has experienced past academic failure or significant underperformance – GPA has no benefit to the student and directly limits the student's future opportunities. Eligibility for colleges, trade schools, or scholarships is often determined in large part by a student's grade point average.

The use of GPAs to predict college and work success is well documented.<sup>28</sup> Because of its predictive value, it serves well its primary audience, college admissions officers. GPA lies at the heart of the meritocratic system of opportunity and functions exactly as intended. But there is a fundamental contradiction between meritocracy and "leaving no child behind." Acknowledging the predictive value of GPA, one must question the implications of a structural mechanism that discriminates between those who need four years to bring themselves up from underachievement and those who come into high school already performing in the top stanines. Since initial academic performance is largely influenced by socioeconomic status and parental education levels,<sup>29</sup> GPA reinforces privilege and effectively bars upward academic mobility by averaging a student's academic starting point with what he or she ultimately achieves. GPA is an integral component of the structure implemented for the sake of colleges and the college-bound, with little inherent value, and much potential harm, to the rest of the high school population, even to those students who successfully make the transition over time from underperformance to solid achievement.

YWLCS does not use traditional grades and, therefore, students do not have grade point averages. This proved to be a liability when the first graduating class began applying for colleges and scholarships. To provide a tool for outside parties to assess the achievement of our students on a traditional scale, the school developed an alternative measure, the *grade point*  *equivalent* (GPE). GPE reports student achievement by calculating the percentage of outcomes a student has met at *High Performance (HP)* and *Proficient (P)* levels and converting this to a 4-point scale.<sup>30</sup> Students who consistently earn *High Performance* ratings would have a GPE of 4.0, students with strong but somewhat less stellar performance would have a GPE of approximately 3.0, and so on. In this way, GPE very closely mimics GPA. A student's GPE only appears on official YWLCS transcripts sent to outside parties. It has no internal use or value. GPE allows the YWLCS system to interface effectively with outside institutions without negative repercussions for students. Because students can go back to improve their performance on past course outcomes, even to raise an initial *Proficient (P)* rating to *High Performance (HP)* by doing additional work and providing evidence of further mastery, every student is always eligible for a 4.0 GPE, regardless of past performance.

#### Carnegie units/Course Credits

Today, under the structure of high school achievement defined by the Carnegie unit, a student's goal is to accumulate enough course credits to graduate. The Carnegie unit equates the amount of instructional time with credit value, where one course credit represents 120 hours of instruction (generally equivalent to a year's course). State boards of education or state legislatures specify minimum graduation requirements in terms of course credits derived from the Carnegie unit formula, as do individual school districts and high schools. Students who do not pass classes (i.e., who earn F's) become "credit deficient" relative to their peers and the expected path of their progress. After spending 60 hours in a semester course, a student who earns a grade of F has nothing to show for her time spent or for any learning she has in fact achieved. If she falls short of the teacher's expectations for a better grade (meaning at least a D), the student falls behind by half a credit for each semester F. While "conventional wisdom" may

tell us that receiving an F is a "natural consequence" for students who do not put forth sufficient effort in a class, research warns us to be cautious. First, the literature on academic motivation makes it clear that failure is very unlikely to *increase* motivation, particularly for students who struggle academically.<sup>31</sup> Secondly, the structural repercussions of receiving an F put the failing student at a significant disadvantage for future achievement.

One failing grade can result in credit deficiency, which seriously reduces the probability that a student will eventually graduate from high school. In a study of Chicago high schools, students who were missing one or more course credits and who had accumulated more than one semester grade of F in a core subject by the end of freshman year were found to be much more likely to leave school without a diploma.<sup>32</sup> Nationwide, freshmen who fail to earn enough credits for promotion to 10th grade run a significantly increased risk of dropping out of high school.<sup>33</sup> One researcher, using data from 26 states, predicted that seven out of every ten students retained in 9th grade would drop out.<sup>34</sup> Clearly, early course failure reduces the likelihood of high school graduation. We argue that recovery from this precarious position is rare exactly because the traditional high school structure of grading and credit accumulation provides no satisfactory avenue for such recovery.

Students who wish to graduate in four years must keep pace by accumulating a set portion of the total required credits each year. If they get "off track," their misstep can be insurmountable. Researchers at the Consortium on Chicago School Research found that students who fall off pace in their accumulation of Carnegie units in the first year of high school have tremendous difficulty in ever catching up. System-wide, of Chicago Public School students who were credit deficient at the end of 9<sup>th</sup> grade (missing more than one credit), only 15.6% were able to graduate in four years, as compared with 78% of students who had accumulated sufficient credits in their freshman year.<sup>35</sup> This confirms similar findings from earlier studies.<sup>36</sup>

A large body of evidence on high school dropouts consistently implicates the Carnegie unit and its pivotal role in structuring high school success or failure. In Oregon, students leaving high school before graduation cited credit deficits more than any other single factor as their primary reason for dropping out.<sup>37</sup> In Ontario, under a similar high school system, the "vast majority of dropouts left school because they were so far behind in credit accumulation that the likelihood of graduation was too remote."<sup>38</sup> In another U.S. study, high school graduates had earned an average of 7 credits per year of attendance, as compared to earning an average of only 3 credits per year for students who left school without graduating, leading the researcher to note "a very distinct relationship between average credit accumulation and graduation." <sup>39</sup>

A high school student failing a required class generally has three options: (a) repeat the course in summer school, (b) repeat the course the following year or semester (in addition to a full load of new courses), or (c) attend night school to make up the credit (in addition to full-time day school). If a student fails two classes, the burden doubles, and so on. A significant increase in student effort is one necessary condition for successful credit recovery, but often the reasons that led to the initial failure prevent the student from exerting the additional effort needed for recovery. In tracking the math coursework of 9<sup>th</sup> grade students in the Chicago Public Schools, researchers found that almost a quarter of entering freshmen (23%) who took algebra in fall of 2000 failed the first semester. The vast majority of the failing students also took algebra in the spring semester, and close to three-fourths of them failed the second semester as well. Of all first-time freshmen who failed algebra in the fall, only one out of every five enrolled in algebra in summer school. Twenty-one percent of students in this 9<sup>th</sup> grade cohort who initially

attempted algebra in the fall of freshman year still had not earned one full algebra credit by the end of their third semester of high school (midway through their second year).<sup>40</sup>

Tracking the course-taking patterns of individual students in this way reveals the snowball effect of course failure. The student who emerges from a course having neither course credit nor the requisite knowledge to succeed at more advanced work is set up for subsequent failure. The traditional system is inherently punitive for students who need to make up missing credits and puts many already marginal students at a considerable disadvantage for future academic achievement.

The system of credit accumulation has another significant drawback. In most American high schools, students earn credits for classes they "pass" where the minimum passing grade is a D. Students who pass classes with low grades proceed through high school without the requisite knowledge and skills to succeed in subsequent classes. This situation is not isolated to a few individuals, but rather appears as a systemic problem. In the Chicago Public Schools, for example, *including* selective college-preparatory and magnet high schools, over a third of all high school graduates in 2002 and 2003 finished high school with a grade point average below 2.0 (*C-minus* or less). Well over half of CPS graduates had grade point averages of 2.4 or below (*C-plus* or less).<sup>41</sup> A familiar refrain for urban teachers at semester's end is the plea by struggling students, "Can't you just give me a D?" Academic performance at a D level does not equip students for success in future coursework or for success in college or career, and yet it does earn them credits toward a high school diploma. Research findings such as these prompted the Association for Supervision and Curriculum Development to call for a move away from the "outdated" Carnegie unit structure and toward an organization of "learning according to each student's needs in mastering an academic subject."<sup>42</sup> In the traditional system, by structuring

achievement around *credit accumulation* rather than *learning*, high schools virtually guarantee not only that a large percentage of students will drop out due to their credit deficiency, but also that a large percentage of the graduating students will lack the skills and knowledge necessary for productive adult functioning.<sup>43</sup>

The fundamental difference between the YWLCS assessment system and the traditional system is that course credit at YWLCS is awarded on the basis of demonstrated proficiency on specific learning objectives, regardless of *when* proficiency is demonstrated, rather than on the basis of one's grades at the end of the semester. To use a sports analogy, the traditional system is like a basketball game where the winner is determined by the score at the final buzzer. The YWLCS system is more akin to baseball: you have to finish the requirements for all nine innings, regardless of how long it takes. The game is not over until the student has done what she needs to do. YWLCS students are initially eligible for course credit at the end of the year (June) when all coursework has been completed and evaluated. As explained earlier, teachers rate students' performance on each course outcome as either *Proficient (P), High Performance* (HP), or Not Yet Proficient (NY). To receive credit for a course, students must demonstrate their proficiency (P or HP) in at least 70% of the course outcomes for the year. When a student falls short of the 70% requirement because of too many Not Yet Proficient (NY) ratings, the student must learn the material or develop the skills specified in those unmet outcomes. Once the student is able to demonstrate proficiency in enough previously unmet course outcomes (NY's) to meet the 70% threshold, the student is awarded credit for the course.

To illustrate, Daphne has completed her 9<sup>th</sup> grade math course but has met only 17 of the year's 25 course outcomes at a level of *Proficient* or better. Her *proficiency percentage* for the class as of June is therefore only 68%, slightly below the level of proficiency she needs to earn

course credit. To do additional work, Daphne focuses on one unmet outcome, "Create and interpret algebraic expressions using variables." She may do that work in the summer, or she may wait until the fall. Daphne would likely contact her 9<sup>th</sup> grade math teacher for guidance and for additional work to help her build a deeper understanding of how to create and interpret algebraic expressions using variables. Once Daphne completes this additional work and provides the teacher with evidence of her new understanding, the teacher would change the rating on that outcome from *Not Yet Proficient (NY)* to *Proficient (P)* or possibly even *High Performance (HP)*, depending on the quality of the evidence Daphne presents. Daphne has now met 18 of the 25 course outcomes, or 72%, and would then be awarded credit for the course.<sup>44</sup>

The YWLCS system has two distinct advantages over the traditional system for awarding course credits. First, it allows most students who initially fail a class to eventually receive credit without retaking the full course. (Students who perform poorly when taking the course a first time may well have to repeat the class. See Endnote 43 for a more detailed explanation.) Allowing students to earn credits without retaking whole classes makes it more likely that they will eventually catch up in credits and graduate. While the empirical evidence of this is still preliminary, early indications are that this feature of the YWLCS system is a chief contributor to the school's relatively high graduation rate. Secondly, by awarding credit on the basis of proficiency, rather than rewarding even low grades as in the traditional system, the school ensures that students have learned at least 70% of the key material in every class they pass. But YWLCS does not stop there. Recognizing that students will not succeed in college unless they develop both skills/knowledge *and* perseverance, the school takes a developmental approach to academic achievement.

To this end, YWLCS requires students to show evidence of increased academic success over time. Promotion from one grade level to the next is determined by both course credits and what we term a student's *cumulative proficiency percentage*. The cumulative proficiency percentage indicates what percentage of total outcomes, from all her high school courses combined, that a student has met at a level of *Proficient* or better (P or HP). To move from 9th to 10th grade, a student needs a cumulative proficiency percentage of 70%. If she passed all of her classes at the minimum 70% level, she would achieve the overall level necessary to move into 10<sup>th</sup> grade. But to get from 10<sup>th</sup> to 11<sup>th</sup> grade, she needs to increase her cumulative proficiency percentage to at least 75%. If she had passed all her classes only at the minimum 70% level, she would need to go back to demonstrate further learning, even in classes she had already passed, in order to raise her overall level to at least 75%. She would do this by addressing previously unmet (NY) outcomes from her 9<sup>th</sup> and 10<sup>th</sup> grade classes. To move into senior year, her cumulative proficiency percentage must be at least 80%, and to graduate from YWLCS, students must demonstrate proficiency in 85% of the material they have encountered in high school.<sup>45</sup> This is a much higher standard than the traditional system where students can graduate with only a D average. Yet YWLCS still graduates more of its students than traditional Chicago high schools. Currently, in order to graduate from YWLCS, students need 26 course credits, a number slightly higher than that generally required in the Chicago Public Schools, demonstrated proficiency in 85% of all high school course outcomes, and successful presentation of a Senior Project.

When school leaders adopted this graduation requirement early in the history of the school, we were making a huge leap of faith. If our goal was to graduate as many students as possible, it would seem counterintuitive to raise the bar for graduation. But we were confident

that, by changing the way students earned course credits – on the basis of demonstrated evidence of their learning rather than "seat time" – we had restructured the system to allow our students to meet this higher standard. The structure of achievement in the YWLCS model is built on the notion that success breeds success. At no point does a student "fail." Rather, she is *Not Yet Proficient* in a system that encourages learning as an ongoing developmental process. By providing a structural mechanism for students to make up missing credits without retaking entire courses and by building in an accountability mechanism for students to demonstrate increased achievement over time, YWLCS increases graduation rates and ensures that students acquire higher levels of requisite knowledge and skills before leaving high school.

#### **Transcripts**

A transcript is the official and permanent record of a student's high school achievement. In the traditional system, once a course grade is entered on a transcript, the student's level of achievement in that subject matter is fixed in time. Because course grades are permanent, the student has no incentive to learn more of the course content once a course is completed. If the student received a low but passing grade, he gains nothing *structurally* by going back and learning whatever material he had not yet mastered when the grade was issued. The credit has already been earned, and learning more of the "old" material would do nothing to improve the grade on the transcript. Furthermore, short of retaking the entire course, structurally there is no opportunity for a passing student to learn what was left unlearned at semester's end. If a student fails a course, that failure is permanently recorded. If the failing student retakes the course in the future and earns a passing grade, her original failing grade would in most cases still remain a permanent feature on her academic record. Some argue that, because grades are permanently recorded on the transcript and forever factored into the calculation of one's GPA, students develop a fear of failure that motivates them to work harder and earn higher grades.<sup>46</sup> That may be true for some students. However, for students who enter high school with an established history of failure or underperformance, the permanency of low grades, as recorded on high school transcripts and reflected in depressed GPAs, has only deleterious effects, both psychologically and materially.<sup>47</sup>

Beyond their negative effects on individual students, transcripts also fall short as an administrative tool. The information provided on a transcript – students' grades in each class – is generally the *only* classroom-level student achievement information stored in most school (or district) data systems. School-level systems for student achievement data do not, as a rule, include detailed information as to a student's classroom performance on specific learning objectives. Rather, the only data recorded and reported are students' summative letter grades for each marking period. As teachers, schools, districts, and states seek higher-quality data about student performance relative to state standards, the only classroom-level data schools keep are remarkably unhelpful. Transcripts in the traditional system, then, serve to document students' scores "at the buzzer" for every class taken, provide no incentive or mechanism for improving one's performance on past courses, and provide nothing in the way of useful achievement data on student learning.

As in the traditional system, each student's transcript at YWLCS is the official record of her course taking and academic achievement. The transcript displays course information for all the student's past and current courses as well as the percentage of outcomes the student has currently met in each course at *Proficient* and *High Performance* levels. However, as the teacher evaluates new outcomes or changes ratings on previously evaluated outcomes, these percentages change accordingly. Unlike traditional transcripts then, YWLCS transcripts are dynamic records of students' best achievement to date. As a student increases her level of proficiency in a subject, her transcript changes to record her new learning.

If a student has met at least 70% of the outcomes in a course by year's end, her transcript records the awarded credit. If she falls short of the 70% minimum proficiency level, her transcript displays a zero in the credit column until she provides sufficient evidence of additional learning. Once her teacher updates outcome ratings sufficient to reach the 70% level, course credit appears on the student's transcript. Students can continue to work for this retroactive course credit, as necessary, for any course they took in high school until they graduate. They are prevented from procrastinating much by strict promotion requirements which include a minimum number of course credits a student must earn each year and the progressive cumulative proficiency percentage requirements, as described earlier.

While teachers can set deadlines for given assignments, outcomes themselves do not have deadlines. At any point while the student is still actively enrolled in the school, she can do further work on past outcomes, even those from previous years. The only time a student's record becomes permanent and immutable is upon her graduation (or transfer) from the school.

#### **Special Needs Students**

Like most urban high schools, a significant portion (15%) of YWLCS students has special educational needs. All of the components of the school's student assessment system apply equally to special needs students; the primary point of modification to the system is at the level of outcomes.<sup>48</sup> The regular classroom teacher, in consultation with the special education teacher, has the option to either leave a particular outcome *unrated*, in which case the student is not held accountable for meeting that outcome, or the teacher can modify an outcome directly and use the modified outcome to rate the student's performance. This puts special needs students on an equal footing to pass classes, get promoted to the next grade level, and make honor roll, in accordance with students' Individual Education Plans.

#### The YWLCS Model and College Admissions

While the YWLCS assessment system structures student achievement in a fundamentally different way than the traditional high school system, it is crucial that the model interface effectively with external systems such as college admissions offices. To this end, YWLCS students earn course credits, have transcripts, and can report grade point equivalencies (GPEs). In addition, the school works extensively to educate college and university admissions officers about its assessment system and to make sure they understand how to read YWLCS transcripts. College admissions personnel give the school high praise for its system and are able to use the data it provides to make well-informed admissions decisions. With the first graduating class, state colleges and universities requested that YWLCS translate its outcome ratings into a GPE, which now appears as a standard feature on the official transcript.

To date, over 95% of YWLCS graduates have been admitted to college by over 40 postsecondary institutions, both public and private, within the State of Illinois and across the country. By multiplying the high school graduate rate and college attendance rate of YWLCS and comparing that figure to the equivalent rates from CPS, we see that almost 7 in 10 (68%) of students entering YWLCS as freshman in 2000 graduated high school and went on to college. In contrast, only 3 in 10 (31%) of students entering other CPS high schools in the same year graduated high school and attended college.<sup>49</sup>

While we recognize the life-changing differences these numbers represent, we believe the true test of success will be found in the college persistence and college graduation rates of

YWLCS graduates. As of May 2008, 67% of our first graduating class of 2004 was still enrolled in college after four years, with 23% of college attendees earning bachelors degrees in spring 2008 and a significant number of remaining students anticipating an undergraduate degree within the next two years.<sup>50</sup> As more of our graduates finish college, we hope to demonstrate that schools do not have to be configured around a hundred-year-old model of seat time and Carnegie units in order to prepare students for admission to and success in postsecondary institutions.

#### **Online Assessment Database**

Educators at the Young Women's Leadership Charter School believe that one of the primary benefits of our student assessment system is that it provides accessible, real-time, classroom-based student learning data that can serve as the basis for academic decision-making. The key tool enabling the YWLCS system to function is the database that supports it.<sup>51</sup> In 2002, Database Designs in Chicago worked with YWLCS to create EASE (Equity and Achievement in a Standards-based Environment) ©, a web interface enabling the school to create secure individual accounts for all students, parents, and teachers so they may check on student progress from any computer terminal with Internet access.<sup>52</sup> Students and parents are able to view and print: (a) a graphical display of the student's performance in current classes, (b) a listing of course outcomes for current classes, (c) a real-time unofficial transcript, and (d) an individualized listing by department of all outcomes from current and past courses on which the student received a NY [Not Yet Proficient] rating. Students refer to this as their Not Yet list. Because students can easily access their own Not Yet list in school or at home, they can be proactive in addressing their unmet outcomes. This involves the student making a plan for working on unmet outcomes, contacting her teacher(s) to find out the kinds of evidence of proficiency she needs to supply, following through on completing work and turning it in, and

monitoring her progress as teachers update outcome ratings based on the additional evidence the student supplies.<sup>53</sup>

The assessment database allows each teacher to (a) check on the academic progress of his or her advisory students (with screens similar to those accessible to individual students and parents); (b) rate current students on the teacher's current course outcomes; (c) see the *Not Yet* list for each current student from past classes in the teacher's content area (e.g., the sophomore math teacher can look at his student's freshman math *Not Yets*); and (d) change past or current students' outcome ratings from the teacher's own or other teachers' courses. When a teacher enters student achievement data into the system, the updated information appears online and on the student's transcript the following day.

The success of our student assessment system has expanded the use of EASE to numerous schools around the country and beyond. As of 2007-2008, EASE was supporting assessment in two small (non-charter) CPS high schools within Little Village Lawndale High School in Chicago as well as one school in Boston, and was being piloted in multiple sites in Philadelphia and one New York City high school. Two additional schools in Chicago and Pennsylvania will be implementing EASE in 2008-2009, as well as the new High/Scope high school in Indonesia.<sup>54</sup> Faculty and administrators from YWLCS currently serve as trainers and partners for new EASE schools. Plans are currently underway to develop an independent organization to support the development and expansion of the EASE system to schools around the country and to support the professional development of educators using outcomes-based assessment.

The YWLCS student assessment system not only provides instructionally-useful data to key stakeholders, but it also makes public and explicit the criteria by which students are evaluated. At YWLCS, students are evaluated on published, teacher-created academic course outcomes. The EASE system itself, however, is agnostic as to *what* a student should learn. Educators, parents, school board members, and state and local communities can and should decide on appropriate learning outcomes for their children. Within the EASE system, a school could use state academic standards directly as their course outcomes, could choose broader "competencies" or "habits of mind," or could identify specific content knowledge and discrete skills as the basis for awarding high school credit.

#### Using Course Evaluation Data to Tailor Instruction to Student Needs

In addition to tracking and calculating student-level data, the EASE database allows teachers and school administrators to use student achievement data to directly inform instruction and plan supplemental services. For example, at the end of a curriculum unit during which a teacher assessed and rated multiple outcomes, the teacher can query the database to find out the number of students with *NY* ratings on each outcome. The teacher can then decide whether to reteach certain content to the whole class or to target particular students for remediation (by getting a list of students with *NY* ratings on the related outcomes from the database).

Teachers and administrators plan supplementary Saturday or after-school "mini-courses," as well as tailor summer school instruction, by querying the outcome data to see which students need remediation in which areas of instruction. For example, a Spanish teacher regularly holds "Not Yet parties" after school. He selects an outcome with a high number of *NY* ratings, sends a personal invitation to each student with a *NY* rating on the selected outcome, and then designs an afternoon of work to help students become more proficient. Likewise, the assessment database allows administrators to design summer school classes to target specific students for remediation in specific outcomes. In a traditional system, there are no data to indicate which parts of the

course material students have not learned, so summer school teachers blindly try to condense a semester's material into six weeks, or night school teachers re-teach everything all over again. Because YWLCS teachers and administrators know exactly what each student in the school still needs to learn in any given course, they are able to target remediation opportunities and summer instruction accordingly. Usually, YWLCS students only need to attend one or two weeks of focused summer instruction to pass a course, rather than six weeks of random coverage that may or may not address their particular areas of need.

The detailed level of student achievement data collected in our student assessment system allows educators to target resources to students' demonstrated academic needs. Rather than recording letter grades to represent some particular designation of overall learning, teachers have instructionally useful data on specific student achievement. The indicators of student achievement are direct records of what a student knows and is able to do. As the student learns more and demonstrates her new learning, her percentages and accumulated credits go up. She and her parents immediately see the results of her efforts. Her past mistakes or academic struggles are erased by *learning more*, and replaced by evidence of success.

#### **Some Policy Recommendations**

High schools in America are largely structured by a 100-year-old philosophy that paces instruction and defines achievement such that only the best and the brightest endure to graduate. As social expectations and economic demands in the United States have shifted over time, making it necessary for all young people to complete high school with adequate preparation for further education or training, the traditional structures have become a barrier to widespread academic achievement in secondary schools. In an era of standards-based accountability, high schools do not have internal systems in place to track student achievement, as defined by the development of specific skills and content knowledge. The structures that do exist are punitive to students who do not get it right the first time and, thus, they create barriers to future academic success.

The YWLCS system of student assessment provides an alternative model for addressing and overcoming major structural barriers to academic achievement inherent in the traditional system. Rather than presenting a series of opaque point-in-time snapshots of student performance, often preserving evidence of student failure, the YWLCS model captures a student's best efforts to date, while also recording instructionally useful data on student learning. While students can and do get "off track" in this system – falling behind in accumulated credits and requisite knowledge and skills – the system is inherently forgiving, not only allowing but structuring the opportunity for students to catch up with their peers en route to graduation.

We conclude with four key policy recommendations derived from our experience at YWLCS: 1) Redesign high school assessment systems with a focus on learning outcomes; 2) Support innovation and experimentation with alternative models of classroom assessment and school-level data tracking systems; 3) Fund small-scale implementation of alternative student assessment models, and 4) Invest in research on implementation, evaluation, and mechanisms for disseminating new knowledge.<sup>55</sup>

#### Recommendation #1: Redesign High School Assessment

Our primary recommendation is that educators and policymakers should commit themselves to remaking high school assessments to meet the demands of the 21<sup>st</sup> century. The traditional structure of achievement places a premium on accumulated course credit rather than real learning. Indeed, unreliability in classroom grading practices and the awarding of course credit and diplomas to students with few high school-level skills is what precipitated the national effort to raise academic standards and to impose accountability measures as a check on student learning.<sup>56</sup> Although the move to standards-based education has shifted the focus to student outcomes and has located problems in educational underachievement at the school level, there is very little focus on restructuring high schools themselves to become truly standards-based in their approach to teaching, learning, grading, reporting or tracking student achievement.<sup>57</sup> Researchers have identified a "conceptual gap between classroom assessment and system accountability" and theorized about the need for a system of "coherent assessment...that places the assessment work of classroom teachers and system administrators within the same conceptual framework."<sup>58</sup>

A recent review of the new generation of assessment data systems available to schools and districts lamented that, even now, "various technology applications are still fragmented and education has yet to realize the full potential of using technology to integrate instructional activities, assessment, and data-informed decision making."<sup>59</sup> Even the most state of the art, commercially-available student data systems limit their focus either to non-achievement data (attendance, student demographics) or to student achievement data tied to standardized test-prep packages.<sup>60</sup> The rapid development of computer technology and electronic storage capacity makes it possible to track large volumes of data on student learning outcomes and to organize such data to be instructionally useful. Such systems would provide educators with one of the necessary tools to apply "a laser-like focus on data at the classroom level to make daily instructional decisions for individual students," identified as one of the common characteristics of high-performing high schools.<sup>61</sup>

Determining what students ought to learn is a political, cultural, and social question as much as it is an educational one. Tracking whether or not they have learned it is a structural and technical matter. The national trend in education is to hold states, districts, schools, teachers and students accountable for learning outcomes, but within traditional high schools themselves, there is no structure for explicating what the important outcomes are at the classroom level or whether students are meeting them. We recommend focused investment in transparent and instructionally-useful student data systems that will support the development of explicit classroom learning objectives and track real student progress. Such systems will be invaluable to schools seeking to increase academic rigor and focus instruction.

#### #2: Support Innovation and Experimentation

To realize the development of new systems, states and school districts should create policies and conditions that support and promote innovation and experimentation with alternative forms of classroom assessment and school-level data tracking systems. YWLCS was able to develop its own student assessment system because, as a charter school, it had the autonomy to experiment outside the bounds of many state and district regulations. Supporting policies that grant schools more autonomy to innovate would encourage the emergence of other new models of student assessment and classroom-level data tracking, areas that at present are largely undeveloped.

While encouraging innovation at the school level, it is equally important to foster policy environments at the state and district levels that are receptive to local school innovations. The YWLCS model was designed to be compatible at key points of contact with external systems by mimicking traditional structures of credits, transcripts, and GPA. The model is also flexible enough to fit the varying organizational needs of different schools. But while the YWLCS assessment system and EASE database are highly compatible with existing structures in many ways, schools in regular systems that are currently using EASE are encountering conflicts with school district rules on grades and data-tracking.<sup>62</sup> Thus, encouraging flexibility and creating room for experimentation with new models within existing systems is crucial.

#### #3: Funding Small-Scale Implementation

The YWLCS student assessment system and the EASE database now have an eight-year track record at one school, and adapted systems utilizing EASE are currently being implemented in other schools and classrooms around the country. The next step for the YWLCS student assessment system is to fund expansion of EASE on a limited scale in additional school sites. Our own work with schools around the nation convinces us that are many new, existing, or inthe-pipeline high schools focused on improving outcomes for low-achieving students; many are chafing against the limits of the traditional assessment structure and actively looking for alternatives to traditional grading and assessment systems. We advocate, therefore, a model of high school reform "by example," with selective scale-up of EASE (and other alternative systems as they are developed). Presently, there is unprecedented political will and financial support directed at "transforming" the American high school.<sup>63</sup> One of the biggest barriers to high school transformation is the traditional structure of achievement and the mechanisms that reify it: Carnegie units, letter grades, and classroom grading practices. Those most focused on high school reform lack clear models of what such transformation might look like in regard to classroom assessment and student assessment systems. Reform efforts to date have shown that both school structure and classroom instruction are crucial elements of successful high schools.<sup>64</sup> We suggest that a third key ingredient is a system of student assessment that supports broad structural and instructional improvements. Further development of EASE and other alternative student assessment models through demonstrations projects around the country would make a greatly needed contribution to current high school reform efforts.

#### # 4: Investing in Research and Dissemination

Finally, we recommend that states, districts, and foundations invest in research to document implementation processes of EASE or other next-generation assessment systems across school sites, identify positive outcomes and barriers, and describe conditions that best support new models. We further recommend active support in creating mechanisms for disseminating "best practice wisdom" and research findings on alternative student assessment models. The regular convening of educational practitioners, model developers, researchers, and policymakers would be a significant contribution both in improving the effectiveness of such models and expanding their adoption by more schools and districts. As we construct knowledge about the conditions that best support alternative student assessment systems, we can better address issues of capacity building in implementing such alternative structures.<sup>65</sup>

Much of the debate over standards and accountability measures has centered on concerns about the potentially punitive nature of such policies and their effects on marginal students. By providing structural mechanisms for urban students to regain their academic footing after early school failure – in fact by eliminating course "failure" from the high school lexicon – the YWLCS system of student assessment offers one structural model that equips schools to better support vulnerable youth to achieve academic success, build skills and knowledge, and graduate from high school prepared for the future. <sup>2</sup> Chicago Public Schools, *High School Scorecard* (2005). Available at <u>http://www.cps.k12.il.us/Schools/scorecard/</u>.

<sup>3</sup> Based on freshman cohort entering CPS high schools in 2000. Elaine Allensworth, *Graduation and Dropout Trends in Chicago: A Look at Cohorts of Students from 1991 through 2004* (Chicago: Consortium on Chicago School Research, January 2005), p. 60. Available at: <u>http://ccsr.uchicago.edu/content/publications.php?pub\_id=61</u>.

<sup>4</sup> Chicago Public Schools Office of New Schools, *CPS Charter Schools Performance Report for 2006-2007*. As a public charter school, YWLCS draws students from all over the city, making it difficult to make straight comparisons between charter and neighborhood public schools. To address this, CPS uses a statistical calculation to create a "virtual" school that closely approximates the student body of the charter school. The graduation rate of the "neighborhood comparison school" is a statistical calculation created by weighting the average graduation rate of students within each census tract in which YWLCS students reside.

<sup>5</sup> Data from 2005-2007 available from Chicago Public Schools Office of Research, Evaluation and Accountability, School and Citywide Reports: <u>http://research.cps.k12.il.us/export/sites/default/accountweb/Reports/AllSchools/</u> <u>website\_cohort\_all\_schools\_1999through2007.xls</u>. 5-Year Cohort Graduation Rates are calculated by following an entering 9<sup>th</sup> grade cohort for 5 years through the Chicago Public Schools system. The 2005 data for YWLCS includes students who entered 9<sup>th</sup> grade at YWLCS in fall 2000, compared with students who entered 9<sup>th</sup> grade in all CPS high schools in fall 2000. 2006 and 2007 data are based on entering 9<sup>th</sup> grade cohorts in 2001 and 2002, respectively. The CPS rates are based on large cohort populations of over 30,000 students in all CPS high schools. The YWLCS rates are based on much smaller cohorts of approximately 75 students, and are therefore much less stable from year to year. YWLCS data from 2008 was calculated from school enrollment data; published numbers are not yet available for 2008.

<sup>6</sup> Illinois State Board of Education, Illinois School Report Card for Young Women's Leadership Charter School. <u>http://webprod.isbe.net/ereportcard/publicsite/getReport.aspx?year=2007&code=150162990007C\_e.pdf</u>.

<sup>7</sup> Standardized test scores of 7<sup>th</sup> grade students in their first year at YWLCS are very similar to test scores of 7<sup>th</sup> graders in Chicago Public Schools generally. In 2006-2007, 38.3% of YWLCS 7<sup>th</sup> graders scored below reading standards on the Illinois Student Achievement Test (ISAT), compared with 37.1% of all CPS 7<sup>th</sup> graders. In math, YWLCS 7<sup>th</sup> graders performed slightly worse than the CPS average, with 42.6% below math standards as compared to 34.1% in the district. Science scores were very similar, with 34.8% of YWLCS 7<sup>th</sup> graders falling below science standards, compared with 37.5% of CPS 7<sup>th</sup> graders. Data taken from the Illinois State Board of Education School and District Report Cards. Chicago Public Schools district data available at http://webprod.isbe.net/ereportcard/publicsite/getReport.aspx?year=2007&code=150162990\_e.pdf.

http://webprod.isbe.net/ereportcard/publicsite/getReport.aspx?year=200/&code=150162990\_e.pdf. Young Women's Leadership Charter School data available at http://webprod.isbe.net/ereportcard/publicsite/getReport.aspx?year=2007&code=150162990007C\_e.pdf.

<sup>8</sup> Educators have long been aware of the deleterious effects of time-limited learning opportunities. See for example B. S. Bloom, "Learning for Mastery." *Evaluation Comment*, *1*, no. 2 (1968): 1-5; J. Carroll, "A Model of School Learning." *Teachers College Record*, *64* (May 1963): 723-733.

<sup>9</sup> C. W. Eliot, "Educational Reform and the Social Order." *School Review, 17*(April 1909): 217-22; C. A. Farrington, "Pressure for and Resistance to Standardization in Early 20<sup>th</sup>Century American High Schools: The Case of the Carnegie Unit," Presented at the Annual Meeting of the American Educational Research Association, Chicago, Illinois (April 12, 2007); D. B. Tyack, *The One Best System: A History of American Urban Education* (Cambridge, MA: Harvard University Press, 1974).

<sup>&</sup>lt;sup>1</sup> Chicago Public Schools Office of Research, Evaluation and Accountability, School and Citywide Reports: <u>http://research.cps.k12.il.us/export/sites/default/accountweb/Reports/AllSchools/website\_cohort\_all\_schools\_1999th</u> <u>rough2007.xls</u>.

<sup>10</sup> National Education Association, *Report of the Committee on College Entrance Requirements*, presented at the 38<sup>th</sup> Annual Meeting of the National Education Association, San Diego, California (July 1899).

<sup>11</sup> A study of the schools in 46 cities in 1896 found that 50% of the relevant school-aged population was enrolled in public elementary school, 6% was enrolled in public high schools, and only half of 1 percent graduated from a public high school. Statistics cited in "Hot Day for Educators: Lively Row at the National Council at Milwaukee," *Chicago Daily Tribune*, July 6, 1897, p. 4. Historical enrollment data cited by the U.S. Department of Health, Education, and Welfare, Office of Education in 1960 showed a slightly higher graduation rate at the turn of the century. The *Biennial Survey of Education in the United States* reported that 6.7% of persons aged 14-17 were enrolled in high school in 1889-90, and that 3.5% of persons 17 years of age had graduated from public and nonpublic high schools in that year. Statistics cited in *Secondary Education: Origins and Directions*, eds. Robert O. Hahn and David B. Bidna (New York: Macmillan, 1965), 84-85.

<sup>12</sup> B. S. Bloom, "Learning for Mastery." *Evaluation Comment, 1,* no. 2 (1968): 1-5; J. Carroll, "A Model of School Learning." *Teachers College Record, 64* (May 1963): 723-733.

<sup>13</sup> S. M. Brookhart, *Grading* (Upper Saddle River, NJ: Pearson Education, Inc., 2004).

<sup>14</sup> A term used by Leonard Ayres in 1909 in reference to the students who progressed more slowly through school than one grade per year. Ayres, however, did not share the view that schools were intended to winnow out such students. Instead, he drew attention to the large numbers of students over age for grade or eliminated entirely from the system with each passing year. He saw this as a sign of the mismatch between the structure of schools and the needs of many students. L. P. Ayres, *Laggards in our Schools: A Study of Retardation and Elimination in City School Systems* (New York: Charities Publication Committee, 1909).

<sup>15</sup> V. E. Dickson, "Classification of School Children According to Mental Ability," in L. M. Terman (Ed.), *Intelligence Tests and School Reorganization* (Yonkers-on-Hudson, NY: World Book, 1922), pp. 32-52.

<sup>16</sup> At the turn of the century, the conception of "all children" was still confined to include only white children, including recent European immigrants. African-American, Native American and Latino children were generally relegated to segregated schools which were most often focused on vocational training and social acculturation.

<sup>17</sup> A. C. Barker, "Extent and Causes of Pupils Dropping Out of the High School," *High School Association* (December 13, 1903): 17-21. Reprinted in R. O. Hahn & D. B. Bidna (Eds.), *Secondary education: Origins and directions* (New York: Macmillan., 1965), p. 80.

<sup>18</sup> G. D. Strayer & N. L. Engelhardt, *The Classroom Teacher at Work in American Schools* (New York: American Book Company, 1920), quoted in W. J. Reese, *America's public schools: From the Common School to "No Child Left Behind"* (Baltimore, MD: The Johns Hopkins University Press, 2005), pp. 155-56.

<sup>19</sup> J. Jacobson, C. Olsen, J. K. Rice, S. Sweetland, & J. Ralph, *Educational Achievement and Black-White Inequality* (NCES 2001-061) (U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office, 2001).

<sup>20</sup> J. Wirt, S. Choy, P. Rooney, S. Provasnik, A. Sen, & R. Tobin, *The Condition of Education 2004* (NCES 2004-077) (U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office, 2004).

<sup>21</sup> S. Baum & K. Payea, *Education Pays 2004: The Benefits of Higher Education to Individuals and Society.* (New York: College Entrance Examination Board, 2004); R. W. Rumberger, "Why students drop out of school," in G. Orfield (Ed.), *Dropouts in America: Confronting the Graduation Rate Crisis* (Cambridge, MA: Harvard University Press, 2004), pp. 131-155; U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2005* (NCES 2005-094) (Washington, DC: U.S. Government Printing Office, 2005).

<sup>22</sup> By law, YWLCS students must take state-mandated achievement tests which are used for accountability purposes in annual reviews by the district and in renewing the school's charter.

<sup>23</sup> W. Spady, "On Grades, Grading and School Reform," in J. A. Laska & T. Juarez (Eds.), *Grading and Marking in American Schools: Two Centuries of Debate* (Springfield, IL: Charles C. Thomas, Publishers, 1992), pp. 67-76; W. L. Wrinkle, "School Marks – Why, What and How?" *Educational Administration and Supervision*, 21 (1935): 218-225.

<sup>24</sup> R. J. Marzano, *Transforming Classroom Grading* (Alexandria, VA: Association for Supervision and Curriculum Development, 2000); W. J. Popham, *Modern Educational Measurement: Practical Guidelines for Educational Leaders*, 3<sup>rd</sup> ed. (Boston: Allyn and Bacon, 2000); R. W. Tyler, *Basic Principles of Curriculum and Instruction* (Chicago: University of Chicago Press, 1949); R. W. Tyler, "A Rationale for Program Evaluation," in D. L. Stufflebeam, G. F. Madaus, & T. Kelleghan (Eds.), *Evaluation models: Viewpoints on educational and human service evaluation*, 2<sup>nd</sup> ed. (Boston: Kluwer Academic Publishers, 2000), pp 87-96.

<sup>25</sup> Assessment Reform Group, *Testing, Motivation and Learning* (Cambridge, UK: University of Cambridge Faculty of Education, 2002); P. Black & D. Wiliam, "The Formative Purpose: Assessment Must First Promote Learning," in M. Wilson (Ed.), *Toward Coherence Between Classroom Assessment and Accountability.* 103<sup>rd</sup> Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press, 2004), pp. 20-50; A. K. Kluger, & A. DeNisi, "The Effects of Feedback Interventions on Performance: A Historical Review, a Meta-analysis, and a Preliminary Feedback Intervention Theory," *Psychological Bulletin,* 119(1996), 254-284.

<sup>26</sup> M. Roderick, & E. Camburn, "Risk and Recovery from Course Failure in the Early Years of High School," *American Educational Research Journal*, *36*(1999): 303-343.

<sup>27</sup> M. Roderick, J. Nagaoka, & E. Allensworth, "From High School to the Future: A First Look at Chicago Public School Graduates' College Enrollment, College Preparation, and Graduation From Four Year Colleges" (Chicago: Consortium on Chicago School Research, April 2006).

<sup>28</sup> S. Geiser & R. Studley, "UC and the SAT: Predictive Validity and Differential Impact of the SAT I and SAT II at the University of California," *Educational Assessment*, 8(2002): 1-26; W. V. Slack & D. Porter, "The Scholastic Aptitude Test: A Critical Appraisal," *Harvard Educational Review*, 50 (1980): 154-175.

<sup>29</sup> G. Farkas, "Racial Disparities and Discrimination in Education: What Do We Know, How Do We Know It, and What Do We Need To Know?" *Teachers College Record*, *105*(2003): 1119-1146; V. E. Lee & D. T. Burkam, *Ineuality at the Starting Gate: Social Background Differences in Achievement as Children Begin School* (Washington, DC: Economic Policy Institute, 2002).

<sup>30</sup> The formula for calculating the *grade point equivalent* for an individual class is Point Value = %P + 2(%HP), where %P is the percentage of course outcomes students met at a *Proficient (P)* level, and %HP is the percentage of course outcomes students met at a *High Performance (HP)* level. Grade points are then awarded on the following point scale: Point value = <70, GPE = 0; point value = 70-125, GPE = 2.0, point value = 126-145, GPE = 3.0, point value = >145, GPE = 4.0. A student's overall GPE is calculated by averaging the GPE's for each individual course she has taken at YWLCS.

<sup>31</sup> See for example Martin V. Covington, "Goal Theory, Motivation, and School Achievement: An Integrative Review," *Annual Review of Psychology, 51* (2000): 171-200; M. V. Covington, & K. J. Müeller, "Intrinsic versus Extrinsic Motivation: An Approach/Avoidance Reformulation," *Educational Psychology Review, 13* (2001): 157-176; T. J. Crooks, "The Impact of Classroom Evaluation Practices on Students," *Review of Educational Research, 58* (1988): 438-481; S. Harter, N. R. Whitesell, & P. Kowalski, "Individual Differences in the Effects of Educational Transitions on Young Adolescent's Perceptions of Competence and Motivational Orientation, *American Educational Research Journal*, 29 (1992): 777-807; D. S. Kaplan, B. M. Peck, & H. B. Kaplan, "Decomposing the Academic Failure-Dropout Relationship: A Longitudinal Analysis," *Journal of Educational Research, 90* (1997): 331-343; W. P. Vispoel, & J. R. Austin, "Success and Failure in Junior High School: A Critical Incident Approach to

Understanding Students' Attributional Beliefs," *American Educational Research Journal, 32* (1995): 377-412; B. Weiner, "A Theory of Motivation for Some Classroom Experiences," *Journal of Educational Psychology, 71* (1979): 3-25.

<sup>32</sup> E. M. Allensworth & J. Q. Easton, *The On-Track Indicator as a Predictor of High School Graduation* (Chicago: Consortium on Chicago School Research, 2005).

<sup>33</sup> R. C. Neild, S. Stoner-Eby, & F. F. Furstenberg, "Connecting Entrance and Departure: The Transition to 9th Grade and High School Dropout," Paper presented at the first conference on Dropouts in America, Cambridge, MA, January 2001; M. Roderick, & E. Camburn, "Risk and Recovery from Course Failure in the Early Years of High School," *American Educational Research Journal*, *36*(1999): 303-343.

<sup>34</sup> W. Haney, "The Myth of the Texas Miracle in Education," *Education Policy Analysis Archives*, 8 (August 19, 2000), available online <u>http://epaa.asu.edu/epaa/v8n41/</u>.

<sup>35</sup> S. R. Miller, E. M. Allensworth, & J. R. Kochanek, *Student Performance: Course Taking, Test Scores and Outcomes: The State of Chicago Public High Schools 1993 to 2000.* (Chicago: Consortium on Chicago School Research, May 2002), available online <u>http://www.consortium-chicago.org/publications/pdfs/p52.pdf</u>.

<sup>36</sup> R. S. Brown, A Follow-up of the Grade 9 Cohort of 1987, Every Secondary Student Survey Participants, Report No. 207 (Toronto Board of Education Research Dept, Ontario, Nov 1993); R. L. Marshall, *The Pivotal Year: How Freshman Can Become Sophomores*. (Lanham, MD: Scarecrow Press, 2003); M. Roderick & E. Camburn, "Risk and Recovery from Course Failure in the Early Years of High School," *American Educational Research Journal*, *36*(1999): 303-343.

<sup>37</sup> Oregon State Department of Education, *Dropout rates in Oregon High Schools: 1998-99, State Summary Report* (Salem, OR: OSDE, April 2000), available online <u>www.ode.state.or.us/stats</u>.

<sup>38</sup> A. J. C. King, W. K. Warren, C. Michalski, & M. J. Pearlt, *Improving Student Retention in Ontario Secondary Schools* (Toronto: Ministry of Education, 1988), p. 3.

<sup>39</sup> R. S. Brown, *A Follow-up of the Grade 9 Cohort of 1987, Every Secondary Student Survey Participants*, Report No. 207 (Toronto Board of Education Research Dept, Ontario, Nov 1993), p. 10.

<sup>40</sup> E. Allensworth, [Course paths and success of students failing 9th grade Algebra] unpublished data (Consortium on Chicago School Research, 2006).

<sup>41</sup> M. Roderick, J. Nagaoka, & E. Allensworth, "From High School to the Future: A First Look at Chicago Public School Graduates' College Enrollment, College Preparation, and Graduation From Four Year Colleges" (Chicago: Consortium on Chicago School Research, April 2006).

<sup>42</sup> Association for Supervision and Curriculum Development, *High School Reform Proposal*, (Washington, DC: Author, 2006). Available from <u>http://www.ascd.org/ASCD/pdf/newsandissues/High%20School%20Reform</u> %20One%20Page%20Summary.pdf.

<sup>43</sup> While these arguments can apply broadly to high schools in general, our focus here is primarily on urban high schools and the students they serve. The traditional structural mechanism of achievement in high schools is most salient when it is compounding issues of race, poverty, lack of community resources, and low quality educational opportunities in the primary grades that contribute to chronic underperformance. The existing system of course credits serves some students well. Students who are at lower risk for academic course failure are by definition less likely to suffer the academic consequences of credit deficiency and therefore less likely to experience the negative effects of the current system of awarding course credits.

<sup>44</sup> For students who end the year having met less than 50% of the outcomes in a course, the teacher makes a judgment as to whether to recommend summer school or to recommend that the student repeat the course the following year. This judgment is based on a well-documented assessment of the student's strengths and weaknesses with the course material as well as an assessment of whether the student is likely to be successful learning the material in summer school and through subsequent independent work, or whether the student would most benefit from another year of exposure to course material. Students who repeat a course at YWLCS will be credit deficient in the same way as would students in a traditional system. The primary difference is that *most* students who fail courses are able to earn course credits retroactively without repeating the course. Most YWLCS students who *do* repeat a course are able to *avoid* repeating multiple courses, even if they had originally failed multiple courses, by making up unmet outcomes rather than repeating the courses.

<sup>45</sup> Because students need a cumulative proficiency percentage of 85% in order to graduate, they are encouraged to meet that level of proficiency in every course starting in freshman year. However, students are able to pass classes at the minimum 70% level if they compensate by passing other courses at higher levels of proficiency, or if they go back to learn more in earlier classes as they progress through school.

<sup>46</sup> R. L. Ebel, "The Failure of Schools Without Failure," *Phi Delta Kappan, 61* (1980): 386-388.

<sup>47</sup> M. V. Covington & K. J. Müeller, "Intrinsic Versus Extrinsic Motivation: An Approach/Avoidance Reformulation." *Educational Psychology Review*, *13* (2001):157-176; T. J. Crooks, "The Impact of Classroom Evaluation Practices on Students," *Review of Educational Research*, *58* (1988): 438-481; B. Weiner, "A Theory of Motivation for Some Classroom Experiences," *Journal of Educational Psychology*, *7* (1979): 3-25.

<sup>48</sup> Teachers also modify instruction or assignments for special needs students and make assessment modifications, such as allowing additional time on tests, according to students' Individual Education Plans (IEPs). The structural components of the overall system, however, apply equally to special education students and regular education students.

<sup>49</sup> These figures are calculated by multiplying the YWLCS 2005 graduation rate of 78.6% and the college attendance rate of that same cohort (87%), and comparing it with the CPS graduation rate of 52% multiplied by the CPS college attendance rate of 60% for that cohort. CPS college attendance rates can be found in M. Roderick, J. Nagaoka, & E. Allensworth, *From High School to the Future*.

<sup>50</sup> These figures are based on internal data, tracking our own students through their post-secondary years. The school is currently updating this study by contacting all of its graduates from 2004 to the present to determine who is still in college, the kinds of institutions they are attending, their current academic goals, and likely college completion dates.

<sup>51</sup> Peggy Baker of Database Designs created the database system for YWLCS and continues to be the primary technical support for our school and for the other schools around the country who are now using this model. Ms. Baker and YWLCS staff have also provided ongoing professional development for schools implementing EASE.

<sup>52</sup> Further information on EASE is available at <u>http://ease-equity.org/</u>.

<sup>53</sup> The next generation of the database, currently being tested, includes a mechanism for teachers to upload course materials and assignments tied to each course outcome so that students can directly access this material online.

<sup>54</sup> As of 2007-2008, EASE was in use in The Multicultural Arts School (MAS) and Infinity High School for Math, Science, and Technology in Chicago; Boston Day and Evening Academy, a Boston Public Schools charter school; and was being piloted in the Quakertown (PA) Community School District at Strayer Middle School and Quakertown High School and at Bronx International High School, New York City Public Schools. 2008-2009 will see two new schools adopting EASE: Academy of Communication and Technology (ACT) Charter High School in Chicago (planning year), Bensalem (PA) High School (pilot year), and the new High/Scope high school in Indonesia.

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<sup>55</sup> Recommendations 1, 3 and 4, particularly, are in line with the philanthropic strategies for supporting high-quality public schools as detailed in *A New Bet for Better Schools: Diversifying Philanthropic Strategies to Improve Student Learning* (Portland, OR: Grantmakers for Education and Washington, DC: The Philanthropy Roundtable, 2004). Available at <a href="http://www.edfunders.org/downloads/GFEReports/better\_schools.pdf">http://www.edfunders.org/downloads/GFEReports/better\_schools</a>.

<sup>56</sup> P. W. Airasian, "State Mandated Testing and Educational Reform: Context and Consequences," *American Journal of Education, 95* (1987): 393-412; P. W. Airasian, "Symbolic Validation: The Case of State-Mandated, High-Stakes Testing," *Educational Evaluation and Policy Analysis, 10* (1988): 301-313; National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform* (Washington, DC: U. S. Department of Education, April 1983); A. C. Ornstein, "The Evolving Accountability Movement," *Peabody Journal of Education, 65* (1988): 12-20.

<sup>57</sup> P. Black & D. Wiliam, "Inside the Black Box: Raising Standards through Classroom Assessment," *Phi Delta Kappan* (October 1998) online <u>http://www.pdkintl.org/kappan/kbla9810.htm</u>; Commission on Instructionally Supportive Assessment, *Building Tests to Support Instruction and Accountability*. Washington, D.C.: AASA, NAESP, NASSP, NEA, and NMSA, 2001); National Education Association, *Balanced Assessment: The Key to Accountability and Improved Student Learning* (Washington, DC: NEA, 2003).

<sup>58</sup> M. Forster & G. Masters, "Bridging the conceptual gap between classroom assessment and system accountability," in M. Wilson (Ed.), *Toward Coherence between Classroom Assessment and Accountability.* 103<sup>rd</sup> *Yearbook of the National Society for the Study of Education* (Chicago: University of Chicago Press, 2004), p. 64.

<sup>59</sup> G. D. Haertel, B. Means, & W. Penuel, "Technology Tools for Collecting, Managing, and Using Assessment Data to Inform Instruction and Improve Achievement," in L. Smolin, K. Lawless, & N. C. Burbules (Eds.), *Information and Communication Technologies: Considerations of Current Practice for Teachers and Teacher Educators, 106<sup>th</sup> Yearbook of the Naitonal Society for the Study of Education, Part II (Malden, MA: Blackwell, 2007)*, p. 103.

<sup>60</sup> Ibid.

<sup>61</sup> International Center for Leadership in Education, *America's Most Successful High Schools: Case Studies and Resources on Best Practices* (New York: Successful Practices Network of the International Center for Leadership in Education, 2004), p. I-13.

<sup>62</sup> Two small (non-charter) high schools in the Chicago Public Schools are currently using the EASE system for student assessment. Unresolved issues between the schools and the district involve student transcripts (whether the "official" transcript should be the school-created EASE transcript or the district-mandated transcript) and which system of granting credits will be used for determining graduation eligibility. Ironically, in YWLCS's experience over the past several years, colleges are much more flexible with regard to transcripts and alternative assessments than are school districts.

<sup>63</sup> Bill and Melinda Gates Foundation, "Redefining the American High School: The Facts," retrieved April 6, 2006 from <u>http://www.gatesfoundation.org</u>; J. Harvey & N. Housman, *Crisis or Possibility: Conversations about the American High School* (Washington, DC: National High School Alliance/The Institute for Educational Leadership, May 2004). Available from <u>http://www.hsalliance.org/resources/docs/Crisis%20or%20Possibility.pdf</u>; National Association of State Boards of Education, "Study Group of Restructuring High Schools: Rethinking the Institution" (2002), available from <u>http://www.nasbe.org/Research\_Projects/Restructuring.html</u>; National Governors Association, "NGA, Achieve to Host National Education Summit on High Schools," Press release, October 10, 2004, available from <u>http://www.nga.org/portal/site/nga/menuitem</u>; R. Pear, "Governors of 13 States Plan to Raise Standards in High Schools," *New York Times*, February 28, 2005, p. A11. <sup>65</sup> The issue of capacity building when trying to restructure existing schools was emphasized by J. Harvey & Naomi Housman, *Crisis or Possibility*.

<sup>&</sup>lt;sup>64</sup> B. Brand, *Enhancing High School Reform: Lessons from Site Visits to Four Cities* (Washington, DC: American Youth Policy Forum, November 2005); *High Schools for the New Millennium* (Seattle, WA: Bill & Melinda Gates Foundation, 2004).