This publication examines the relationship between K-12 and postsecondary education, calling for greater policymaker attention to inter-level issues. The document examines the growing relationship between K-12 and postsecondary education, citing some recent initiatives to connect these two levels of education; most importantly, it argues that such efforts must be intensified and broadened. The paper notes the importance of keeping both quality and quantity in mind, creating both a set of equity linkages to reduce the effects of economic and social difference and a set of content-based linkages to help students achieve at their highest possible level. Following the introduction, the discussion covers concerns specific to preschool (Head Start/poverty); early school (dropouts/links); middle school (absenteeism/standardized tests/ transience); and high school (school ranking/graduation rates/ college-going rates). This section also cites successful educational reform efforts in Texas and North Carolina, discusses co-registration and age-grading as useful bridges from high school to college, and notes some beginning K-16 initiatives. The discussion of transition from college to life after school covers such topics as proportional equity, distance learning, race and class, equal opportunity, and equity. In the summary section, the report reviews some major changes since 1985 and notes trends for the future. (Contains 40 references.) (CH)
ALL ONE SYSTEM: A Second Look

By Harold L. Hodgkinson
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A Second Look

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June 1999

PERSPECTIVES IN PUBLIC POLICY:
CONNECTING HIGHER EDUCATION AND THE PUBLIC SCHOOLS

A Series Published by
The Institute for Educational Leadership and
The National Center for Public Policy and Higher Education
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Foreword

We are pleased that The National Center for Public Policy and Higher Education, and The Institute for Educational Leadership are co-sponsoring this publication of Harold Hodgkinson’s *All One System: A Second Look*. As non-educators who have been actively involved in efforts to improve our schools and colleges, we have been mystified by the chasm that exists between K–12 and higher education in the United States—a chasm that is unique to our nation. Many others representing the private and political sectors share our mystification about the dysfunctional separation that historically has characterized the culture, governance and operations of these two levels of education. Despite their interdependence, K–12 and higher education appear to operate in separate universes.

Harold Hodgkinson’s seminal *All One System* was first published in 1985. As this important update reflects, there are growing indications that the long-neglected relationship between K–12 and postsecondary education is finally beginning to receive the attention it warrants. Unfortunately, the many initiatives that have been launched to connect these two levels of education represent fragmented and isolated attempts to resolve a pervasive problem. While we applaud these efforts, they must be intensified and broadened; government policymakers must pay far greater attention to inter-level issues like teacher education and remediation than they customarily have.

Mr. Hodgkinson lays out the issues succinctly and compellingly. He documents our collective stake in taking immediate action to identify and focus upon inter-level issues as a priority for policymakers throughout our system, from preschool through graduate programs in colleges and universities. We recommend strongly that our colleagues in the business, political and philanthropic worlds—as well as educators—read this volume. More importantly, we recommend that they take policy actions that will implement its findings.

*James B. Hunt Jr.*
*Governor of North Carolina*
*Chairman of the Board*
*The National Center for Public Policy and Higher Education*

*James J. Renier*
*Retired Chairman and CEO*
*Honeywell Corporation*
*Chairman of the Board*
*The Institute for Educational Leadership*
Acknowledgments

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Harold L. Hodgkinson
Washington, D.C.
June 1999
Introduction

Over a decade ago, this author published *All One System* (1985) which presented the argument that a nation’s graduate schools were dependent in part on the quality of its kindergartens, that there was a single system of education underlying all of the segments, and that only the students ever saw the whole thing. (Although it seemed a radical idea at the time, it had actually been developed earlier in a 1968 publication from the Education Commission of the States written by Michael Usdan and others: *The Politics of Elementary-Secondary Education*.) Both reports were based on a common view—people in one segment of the educational system existed in almost total disregard of the efforts of all the other segments. Mathematics professors cared not a whit for the efforts of elementary schools, even in math! No faculty member in higher education ever got tenure because of a concern for the linkage of higher education with "lower education."

As the 1990s come to a close, things are beginning to shift slightly. While public schools are still basically run by 14,000 locally elected school boards, and colleges by about 4,000 governing boards, there are any number of new linkage ideas which are starting to change the way Americans think about their investment in education, from K-16 councils to joint meetings of Chief State School Officers and State Higher Education Executive Officers. There are some new jurisdictional issues as well. While the U.S. Department of Education acts like a centralized ministry of education at times, it provides only 9 to 11% of all education funding, and states and localities are clearly not going to surrender their responsibilities to a federal system. However, who will establish and implement the new academic standards (between local, state and federal levels) is an open issue. Today, national standards, if not national tests, as well as state testing programs, are on the front burner and equity issues get less attention than in the past. Standards and equity are difficult to keep in balance, in that when one is up, the other is down. In the Sixties, equity received national, state, and local attention, while standards were openly shunned. Today, everyone is talking assessment and standards, while equity discussions are few and far between, and anyone in favor of affirmative action may be branded in some quarters as an enemy of quality. It is important to keep both quality and equality in mind, as we need a set of equity linkages that will help reduce the effects of economic and social differences, and a set of content-based linkages that will smooth students’ passage through the system and allow them to achieve at the highest levels they are capable of.

While public schools are still basically run by 14,000 locally elected school boards, and colleges by about 4,000 governing boards, there are any number of new linkage ideas which are starting to change the way Americans think about their investment in education.
Since the 1960s, we have achieved a set of equity linkages, from Head Start and Trio to Title One, Hope Scholarships, Upward Bound, and Pell Grants; we are today developing a set of content and standards linkages, through a comprehensive test package made up of the National Assessment of Educational Progress (NAEP), state achievement tests, the SAT, Iowa Tests of Basic Skills, etc. The current affirmative action discussion is one example of how far the equity agenda has been reduced compared to the 1960s, while the unthinking acceptance of standardized tests as the only major criterion for our educational system's success or failure shows today's problem of bringing the two sets of linkages together. (People often were called racist for advocating standards in the 60s and 70s; if you mention equity today, you're often criticized as being against quality! Both sets of linkages must be related simultaneously if the system is ever to work well.) It is premature to attempt to assess the impact of these American linkage ideas and practices; the major point of this report is simply to describe them. The age segments of our system will form the organizing structure of this report, which will conclude by providing a summary of changes and a look ahead.
I. Preschool

Long neglected by everyone, there is avid interest today in the education of very young children. This comes in part from several sources:

- the percentage of working women with preschool age children has jumped from 30 to 60% since 1960, meaning that day care or preschool has become a vital issue for millions of families;

- the new brain research has shown that half of what a person learns over a lifetime is learned before kindergarten, and that some learning opportunities are irreversible (e.g., if your two eyes have not fused the two images into a single one by age five you will never learn to do it); and

- the first goal of the National Education Goals Panel focuses on preschool—"By the year 2000, all children in America will start school ready to learn"—and assessments of how to implement this goal are now in place: see Principles and Recommendations for Early Childhood Assessments (National Education Goals Panel).

Regulation

While rhetorical recognition has previously been given to these years (ages 0–5), today we are seeing attempts to regulate the educational quality of day care/preschool, be it in someone’s living room or in a center. The education and training of day care workers, as well as the licensing of centers for young children, have been major topics for many governors and legislatures. The problems are severe: in California, the turnover rate among day care workers is about 80% per year, most workers have had no education past high school, and Head Start staff members make half as much as elementary school teachers, who are not exactly overpaid. Several reports on home day care suggest that the primary source of stimulation is a television set.

Benefits

The data on Head Start (a preschool program for 3–4 year olds) from the Children’s Defense Fund show a continuing gain from this program even when kids reach their 40s. Although programs like the Perry School and its assessment are quite expensive and probably cannot be widely used in other settings, the taxpayer does save about eight dollars in later services that aren’t needed for
every dollar invested in such Head Start programs. (Jails, detox centers, juvenile
detention centers, hospitals and morgues are very expensive, and the Head Start
kids don't need them very often compared to the control groups.) Although the
data are not complete, it appears that about half of the Head Start eligible kids are
actually in programs, and even President Clinton has never recommended fully
funding Head Start. Poverty is an amazingly good predictor of school success, as
we will see in the next paragraph. The linkage mechanism for joining preschool
with school is under development, but involves licensing, training and
credentialing preschool programs and staff, clarifying the goals of kindergarten
so that preschool programs can link with them, and new communication linkages
between preschool personnel and early elementary staff. If this linkage were to
succeed, the payoff for higher education would be spectacular.

Poverty—The Ultimate Handicap

There is a major problem right underneath all these developments. As reported
by the President of the Annie Casey Foundation, the poverty rate among U.S.
preschool children has been stuck at 21% for the past decade. The poorest age
group in the nation is the youngest children. No other advanced industrial nation
has a poverty rate remotely approaching ours. During a decade in which most
Americans advanced in economic status, lower income families actually
declined in purchasing power, as income differences between the top and
bottom of America’s households continue to widen. Because so many other
problems are predicted by poverty rates (low parental education, high school
drop-outs, teen pregnancy, violent teen deaths, and prison rates, just for
starters), it would appear that if the poverty rates for preschool kids remain at
their present levels, the programs that produce good results will be extremely
limited in their impact. Again, there has been no discussion in the federal
government of reducing the poverty rate among our youngest children,
although that condition is holding everything else back. As we learn in The
Forgotten Half Revisited, “In 1996, one-half of all young families headed by a high
school drop-out were poor, as were one-fourth of those headed by a high school
graduate, versus only one out of 40 families headed by a college graduate”
(Halperin, p. 14).

Tests?

While much of the public school reform movement has been concerned with
“high stakes” testing, standardized testing for very young children causes
many to be extremely and justifiably cautious. The panel for Goal I of the National Education Goals Panel has stated the issue very well:

Assessing children in the earliest years of life—from birth to age 8—is difficult because it is the period when young children’s rates of physical, motor, and linguistic development outpace growth rates at all other stages. Growth is rapid, episodic, and highly influenced by environmental supports: nurturing parents, quality caregiving, and the learning setting (National Education Goals Panel, p. 3).

Because of these inherent difficulties in assessing the performance of preschool children, it means looking extra hard at the environment in which the performance takes place. In this regard, Goal I represents the biggest failure of the whole set, as the environmental conditions that cause children to be at risk of school failure have not improved in the slightest. For instance, the following rates have been constant for at least a decade: poverty rates, children with single or no parents, those who hear no English spoken at home, those who have poorly educated parents, those who have no books and newspapers in the home, and those who do not get enough to eat (even with federal programs). Given that the reduction of these negative factors for the youngest children results in increasing school readiness (well supported by Head Start data), there is little reason to expect increased readiness until the negative factors are reduced.

The first goal, “Ready to Learn,” has three objectives:

- All children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school.
- Every parent . . . will be a child’s first teacher . . . and parents will have access to the training and support [that] parents need.
- Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies . . . and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems” (National Education Goals Panel, p. 1).

There has been some progress, nationally, on the three objectives above, but we have to expect progress to be slow! Today, it seems that a large part of the focus of the entire Goals efforts is involved with “high stakes” testing as a way of producing (not just measuring) educational improvements. Such testing is
The handoff from early childhood to kindergarten is perhaps the key educational linkage in our entire educational system. Although this linkage remains shrouded in much mystery and confusion, the Head Start results certainly point the way to what this linkage should be like. When will all eligible children be enrolled in a Head Start program? When will childhood poverty be cut in half? When will all preschool (day care) programs have standards for staff training, facilities, and learning experiences, as well as some agreement on desirable outcomes (along with much latitude as to how to attain such outcomes)? When can children with speech, hearing, and visual problems be safely diagnosed so that the handicapping conditions can be reduced or eliminated? Early diagnosis of preschool kids is fraught with peril: children assigned to special ed. programs almost never get out of them, and the handoff of such judgments from preschool programs to the K-12 system is seldom discussed. A non-English speaking student can easily be diagnosed as having a language “handicap” which can follow him/her long after English has become the primary language and is spoken well. In the immigration wave at the turn of the century, “standardized tests” were used to classify non-English speaking immigrants and their children as mental defectives—idiots, morons or imbeciles.

Oddly enough, most of the K-16 advocates never discuss this crucial transition from preschool to “K” and don’t consider it part of their agenda. (Similarly, the national leadership of pro-life and pro-choice groups have been singularly silent about the quality of life of the children who are born, another area that needs major linkages.) There are literally a hundred national groups representing the education and development of young children, their parents and communities, yet they seldom have joint meetings, although the PTA and Children’s Defense Fund provide a national stage for discussion of the issues. There is some general principle at work here—people’s loyalty to groups may be
greater than their loyalty to issues, which explains their reluctance to meet with other groups who value some of the same issues. It is amazing to see how often this happens.

II. EARLY SCHOOL (K–5, K–6, K–7, K–8)

One of the confounding dimensions of public schools is the amazing number of different age-graded systems from K to 12. This variation is based mostly on the broad range of “schools in the middle” as they have changed from junior highs (with connotations of being miniature versions of high schools) to middle schools (serving students who are considered to have their own separate development and achievement). Regardless of when this transition occurs by grade, early or elementary school generally means that a student stays with one teacher throughout the day, while in middle school the student encounters both a more diverse curriculum and contact with more teachers and other adults, who teach more specialized subjects. By middle school, however defined, “high stakes” testing is in full sway. “High stakes” generally means that students can be held back if they do not perform satisfactorily, even though the evidence is overwhelming that if a student is held back to repeat the third grade, you have doubled the chances that the student will drop out of school. Such tests are often given near the end of a transition point (like third grade) to determine who stays back; they are less often used earlier to load resources on the students who are most likely to fail, to guarantee that they have the best possible chance of “making it.”

Who Won’t “Make It?”

A drop-out is often a criminal waiting to be born—over 70% of our 1.5 million prisoners in the U.S. are high school drop-outs, and each prisoner’s upkeep cost was over $26,000 in 1997. California’s increase in its prison budget from 1996 to 1999 is roughly identical to the decline in California’s higher education appropriation for the same years. Early school is concerned about both basic skills—especially reading, writing and the basic operations of mathematics (arithmetic)—and socialization to some group norms and values, such as taking care of each other, playing together, valuing persons who are different from you in background, valuing skills others possess that you don’t have, respecting teachers, and obeying rules. This is where the at-risk factors—poverty, poorly educated parents, etc.—come into play, particularly with the pull-out of Title I and special ed. children, where many students are perceived as being different.
"Parents as first teachers" works very well with well educated, middle-class parents who read to their kids even in grade school, discuss their assignments, etc. In fact, middle-class kids generally show one month of subject matter gains on standardized tests for every month they are out of school, as they travel with parents to interesting places, learning new words and new concepts, and work on home computers. But by the end of early school and usually by grade three, students have been exposed to some standardized tests, especially reading and math, and most of the special ed. children have been selected. In fact, testing is the major linkage between early and middle education. Test results can be predicted by knowing only poverty and parental level of education.

III. MIDDLE SCHOOL

The creation of junior high school was a natural consequence of Americans' desire to increase mandatory education attendance from 6th to 12th grade, just as today the community college suggests some aspiration for a universal/mandatory K–14 or perhaps K–16 system. The handoff from early school to middle or junior high school is generally done in such a way that students begin middle school with a small range of teachers and subjects (like early school), and then move to a greater variety of classes and teachers, and even some electives. Kids are more conscious of differences in class and ethnicity. Most girls are capable of becoming pregnant in middle school, as menarche now occurs from 10 to 12 years of age. (One of the reasons for increasing numbers of pregnant teens a few years ago was that teens could get pregnant earlier. Your grandmother probably wasn't capable of getting pregnant until age 15-16, halfway through the teen years.) The fact that teen pregnancies have declined, even with an increase in the number of teens and an increase in the percentage of teens who could get pregnant, is a significant fact of the 1990s. It is not clear whether this change is due to school programs or a change in youth mores, or (more likely) a combination of several factors.

Drop-Out Rehearsal

An important factor in early and middle schools is absenteeism. Starting as early as grade 2, many students show a pattern of gradually increasing their absenteeism rate. In a study of Arizona school children done by this author, second grade kids would miss Monday, then see what happened: Did the
school immediately call the home? (Even if the school called, usually both parents or the one single parent were at work, and couldn’t reply.) Did the parents get angry upon the child’s return home? (No, because they hadn’t heard from the school clerks, who only call between 9 and 5.) If nothing bad happened, the next week the child would miss Monday and Tuesday. These kids are rehearsing to become high school drop-outs. We measure drop-outs as kids in grades 9 to 12 who aren’t in school, yet many kids are out of the system long before 9th grade and therefore are never counted as drop-outs, especially in a state as transient as Arizona. But the behavior (skipping school with no consequences) may have started as early as 2nd grade.

Playing the Game

By the end of middle school, most students are experienced standardized test takers and have taken some “elective” courses in math (algebra is often at the cusp of middle/high school), science (usually a general science course with some biology or ecology), and even some English and foreign language options. Sports are well organized; physical education is required. In some schools, kids are “going steady” in junior high; in others the kids tend to run in packs. It is probably clear to many in junior high who the “favored kids” are. Many low-income, ethnic minority and immigrant children do not get exposed to the folklore of “how you get into college” in junior high years, while “the favored” have brothers and sisters in college, parents who are college graduates, and lots of advice on how to get into college even during the junior high years, which may be the most important years in thinking about your chances of going to college. (Studies done in advance of the HOPE Scholarship program in Georgia showed that many low-income and rural youth in the state had never even considered going to college: it simply “wasn’t done;” no one in their family had ever even applied; no one knew how it was done; etc.) If the junior high years have passed before you even consider going to college, it may be too late. Algebra turns out to be a key course for college admission, whether taken in middle or high school, and many kids never learn that fact.

Transience

Given the fact that 43 million Americans change their address every year, the transition to high school often means a transition to a new school district or state as well for about 10 million of our 50 million public school students. Very little is known about the impact on public school students, at all grade levels, of
having their family move to another state, another country, or another school system even within the same county. Transience is pervasive—in every state you find teachers who report that they had 24 students in September and 24 the following May, but 22 of the 24 were different people. It would be hard to argue that transience improves student performance; as we will see, the five states with the lowest rates of high school graduation and college admission are the five most transient states in the nation.

IV. HIGH SCHOOL—TRANSITION TO COLLEGE OR WORK

During the high school years, a student is exposed to a variety of curricula, and in most American high schools, is assigned to one of three tracks—college preparatory, vocational, and general. College prep. obviously prepares you for college, vocational prepares you for a job, and general prepares you for nothing. Yet the National Center for Education Statistics reports that from 1982 to 1992, the percentage of high school seniors in the vocational track declined from 27 to 12%, the percentage in college prep. increased from 35 to 43%, and the percentage in the general track increased from 35 to 45% (see Figure 1). Almost half of all high school students were enrolled in a program that prepared them for neither a job nor college in 1992. Although there have been complaints about the general track and its courses—general math, general science, and communications (rather than English)—for four decades or longer, school boards, state boards and superintendents have been very slow to even consider eliminating it, even under the pressures of the reform movement. (It may be that the numbers in the general track have declined in the last half of the 1990s.)

The linkage functions between high school and college or work are best articulated in the form of people (guidance counselors, academic advisors) and tests (both SAT for college and a battery of vocational interest inventories, such as the Strong). More joint meetings are being held between high school counselors and college admissions staff, which has improved articulation between high school courses taken and entrance requirements of colleges and universities, a major step forward toward developing a seamless web of K–16
education. Organizations like the College Board and ACT do a major service in this regard.

What Has Changed?

Some of the best news around is the virtual elimination of the gap in high school graduation rates for blacks and whites, even though Hispanics lag behind both groups. (Even for Hispanics, graduation rates are increasing, though the differences between specific ethnic or national groups are very wide, as Cubans graduate from high school and attend college more often than Anglos do, while Mexican Americans are considerably behind.) While there have been major increases in the number of high school students taking AP courses, in the number of students taking tougher courses in math and science, and in better information being provided to students about college admission requirements and financial aid (with more "college nights"), the percentage of high school graduates going directly on to a four-year college program remains relatively unchanged at the national level, at about 30%. On the other hand, major increases in community college enrollments pushes the total college-going rate for high school graduates up to 47% in 1998, according to The Forgotten Half Revisited (Halperin).

The Ultimate Criterion

There is an astonishing difference between the states, however, in the percentage of 19 year olds who have: (1) graduated from high school, and (2) been admitted to college. As Figure 2 shows, the range is from 50 to 60% (in North Dakota, Iowa, New Jersey, Massachusetts, and Nebraska) to 25 to 30% (in Nevada, Alaska, Arizona, Florida, and Georgia). These differences are far greater than any differences between nations on TIMSS (Third International Mathematics and Science Study) or any other international testing program. Demographically, the states with the best rates of conversion of 19 year olds from high school graduation to college admission are some of the most stable state populations in the country, while those with the smallest percentages of kids who have done both (1) and (2) are the most transient state populations in the nation. Some states are very effective in producing high school graduates, yet less successful in getting them into college (Pennsylvania); others graduate fewer from high school but have a larger percentage of graduates going to college (New York).
This indicator transcends SAT scores, state achievement "high stakes" tests, and virtually all other measures. The indicator represents the American dream directly—graduating from high school and being admitted to college. It is, in reality, a test in itself, and shows how misleading national averages can be. A national testing system makes little sense with this much state diversity; a national system of educational goals and outcomes, with each state free to achieve the highest possible results for their population, and free to access these results in their own way, makes a great deal of sense. (Because state ranks on any educational achievement area are so predictable based on poverty and parent education alone, it would be easier and quicker to publish the results now and save the money and time being used to develop the first national standardized tests of subject matter!) What most people want to know is how the states rank, and that can be predicted even before the tests are given, with a high degree of accuracy, according to Jerry Bracey and others. There is also a "level of effort" measure that shows how states rank in terms of the chances that a low-income student will be able to attend college at age 19. The range from Puerto Rico, where 79% of low-income students made it to college, to Alaska, where only about 15% did so, is huge (see Figure 3).
Ranking and Rating

This insatiable desire to rank the complexities of American public education through using a single measure can be seen clearly in the change in policy on the SAT several decades ago. The Chief State School Officers had taken a strong (and accurate) perspective of not releasing state SAT score means, arguing that to do so would be an unprofessional use of the test, and would show some states at a disadvantage. We have had several secretaries of education proclaiming that the nation’s schools are getting better or worse based on a one or two point difference in national SAT scores! The National Assessment of Education Progress (NAEP), on the other hand, does provide some very useful national data, based on what students actually study, at three different grade levels, through time. Although the media have not been vigorous in its reporting, NAEP represents the best diagnostic for looking at the bridge points in our educational system.

Success Stories—Texas and North Carolina

Some of the best data on school reform come from a research report based on NAEP data from David Grissmer and Ann Flanagan at RAND in November of 1998, for the National Education Goals Panel. They found that from 1992 to 1996, the two states that have improved most on their NAEP and their own
state test scores are North Carolina and Texas. The improvements were not caused by increasing spending per pupil, reducing class size, or increasing teachers' degrees or experience. Bringing about change required leadership from the business community, political leadership at all levels, and stability of reform policies over a decade.

The policies that worked were: (1) creating statewide academic standards by grade, with clear teaching goals, (2) implementing the same standards for all students, with special ed. as an exception, (3) linking state assessments to the standards, (4) developing accountability systems that provide consequences for results, (5) increasing local flexibility for teachers and administrators to achieve these standards, (6) computerizing feedback systems for continuous improvement, (7) shifting resources to the schools with the most disadvantaged students, and (8) building the infrastructure to sustain the reforms over time. This study provides clear insight into how states can achieve major subject area gains (even for low-income and minority students) throughout the K-12 system. By establishing common standards and goals for everyone, it provides one of the best bridges of all—in that the elementary, middle and high schools are all singing the same song, with standards and (some) content calibrated from K to 12. The transition to college or work should become easier in North Carolina and Texas because of a new awareness of what high school graduates must know and be able to do.

Co-Registration and Age-Grading

Another very useful bridge from high school to college is co-registration, in which high school seniors can take community college courses as part of their senior year. There are several benefits that derive from this process: high school students can find out whether or not they can "cut it" in college, some of the pressure on higher education enrollments can be reduced, and some students with all graduation requirements completed early can use their high school senior year to complete college courses and spread out their college costs. While no accurate numbers exist, it is clear from a sample of states that thousands of high school seniors are now doing this. (Bard College/Simons Rock is an "early college" that has been admitting 15 and 16 year olds to the college freshman year for several decades, with good results. Age-grading policies in the U.S. hold many people back, at all levels of the system.)
K–16: First Steps

K–16, so far, is an idea: education should be a seamless web from kindergarten to college graduation. It almost always leaves out the crucial first five years of life, but has been very useful in some states in which the governors have supported educational standards that are calibrated across the grades and levels. Unfortunately, many in higher education assume that the only contact between their college and public schools will be through the school of education, not the most prestigious school within their college/university. In addition, a few metro areas have begun K–16 councils, and several meetings have been held in which the Chief State School Officers and state higher education executive officers of the same states have begun serious discussions, often for the first time. As of this writing, it is too early to see whether or not this idea will pervade all levels of the educational system. As with metro councils (involving comprehensive collaboration between a city and its suburbs), business/school collaboratives, health/education collaboratives, and the like, the practice of collaboration is seldom at the top of anyone’s priorities.

V. TRANSITION FROM COLLEGE TO “THE AFTERLIFE”

Before doing anything else, we must correct some misperceptions as to who is enrolled in higher education in the U.S. in the 1990s. If we are looking for Joe College—students from 18 to 22 years of age who are living in college housing and going to college full-time—fewer than 20% of all postsecondary students meet these three criteria. Of the 14.5 million students listed in the Chronicle of Higher Education Almanac (August 28, 1998): 6.3 million are male, 8.2 million female (a major policy issue in the future); 8.2 million are full-time and 6.3 million part-time; 8.9 million are in four-year institutions and 5.6 million in two-year institutions. While 35% of all 18 to 24 year olds were in higher education, 42.6% of all students were 25 or older. About 36% of whites, 27% of blacks and 20% of Hispanics were in college (data for Asian Americans were not provided). As Table 1 shows, if one looks at minority enrollments in higher education from 1976 to 1996, major increases can be seen.

Table 1

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<td>1,247,000</td>
<td>1,505,600</td>
</tr>
<tr>
<td>Hispanic</td>
<td>383,800</td>
<td>782,400</td>
<td>1,166,100</td>
</tr>
</tbody>
</table>

Proportional Equity

While more work needs to be done, it is clear (and important) that higher education has roughly kept pace with increases in the number of minority high school graduates (see Figures 4 and 5). Note that there is a southern tier of states with a large number of ethnic minorities: Hispanic in the southwest, black in the southeast. Yet all states have increased minority enrollments in higher education proportional to their minority increases in high school graduation—an important equity issue. While the existing bridges have many gaps, they also are functioning well enough so that access to higher education for all qualified students is increasing, regardless of ethnicity or sex.

Distance Learning

From Western Governors University to the wired dormitories on most campuses today, the physical separation of learner from teacher has proceeded for over a decade. Also, most libraries on campus are busier than ever, due to the new mission of helping faculty and students use the Internet and Web more effectively. A number of companies have sprung up that are in the business of designing courses entirely on the Web. Many, if not most, colleges are now requiring that freshmen bring a computer to school, with financial assistance for
those who need extra resources. (Indeed, one future issue will be the establishment of linkages between uses of technology in high school and those in higher education, which seem at the moment to be poorly coordinated.) If one looks at the investment of 8 million computers in our public schools for 51 million students (one computer for every seven students, according to the U.S. Census), plus the as yet unknown investment in technology for higher education, it would be a prodigious sum. At the moment, we have little data on how the entire system, pre-kindergarten to graduate school, has improved as a result. Even when NAEP shows improved math and reading scores, it is difficult to show a direct link to computerized instruction. It is clear, however, that we have done a better job in acquiring the hardware and software than we have in assisting faculty at all levels to maximize the impact of the new technologies. Only time will tell.

Race and Class

The impact of class and wealth has not diminished at all—students from low-income backgrounds are still far less likely to go to college, regardless of their race. They are also less likely to have a home computer, books and newspapers, and are less likely to have well educated parents. To the degree that blacks, Hispanics and Native Americans are more likely to be poor, they are disadvantaged. But remember that in 1997, 20% of black households had a
higher income than the U.S. average, and that the fastest growing household income category for Hispanics was households over $100,000 a year.) Being black or Hispanic is no longer a universally handicapping condition. However, being poor is a universal handicap—all poor children are born into a handicapping condition, and should become the focus of our efforts to increase equity in education and work.

Identity of Opportunity

However, a major shift in our views of equity has taken place. If equality of opportunity is defined as identity of opportunity (whereby everyone has exactly the same chance at opportunity), we have arrived as a nation. Gallup’s annual survey now shows that 99% of Americans agree that “blacks should have exactly the same chance as whites to compete for any job.” When Gallup began the survey in 1950, only 47% of Americans agreed. The affirmative action debate often masks this major attitude shift in America on equity issues, but as the emphasis shifts to put standards high on our concerns and equity further down (reversing the Sixties), affirmative action will probably continue to decline as a key national issue. (The fact that we agree on identity of opportunity is a major accomplishment on its own, but is seldom recognized as a national consensus.)

Equity Revisited

As Hispanic populations increase (there are now more Hispanic preschool children than black, and in 2020 there will be more kids of all ages (0–18) who are Hispanic than black, both because of fertility and immigration), we may need to reopen some “settled” issues. First, is Brown v. Topeka Board of Education equally applicable to Hispanics as well as blacks? (Hispanics have a higher poverty rate, and are in more segregated schools than blacks, yet there seems to be no national urgency on implementing Brown for Hispanics through desegregation, bussing, etc.) Second, the Historically Black Colleges (about 114 depending on how you count) were the major recipients of Title III, the Developing Institutions program, of the Higher Education Act. There are now about the same number of members of the Association of Hispanic Colleges and Universities, equally entitled to Title III support, but they are not getting it. Should Title III be expanded to enable the Hispanic institutions to take part? (The Native American Tribal Colleges are eligible.) In that Hispanics are the most rapidly growing group in the nation, and will soon be larger in numbers than blacks, shouldn’t their colleges and universities be entitled to Title III support? Third, the affirmative action issue is
now a major debate in higher education circles, but it is seen almost entirely as a
black/white issue. How should we enlarge the debate so that Hispanics, Asians
and American Indians can be included?

Black/White Won’t be Enough

As long as Hispanics and Asians comprise 68% of the change in American
populations through 2025 (according to the U.S. Census), we need to think of
new ways of dealing with diversity. Gallup tells us that most whites now have a
good black friend, and the same for blacks. But how many blacks have a good
Hispanic friend? How many whites now have a good Asian friend? We still
frame issues as if we were only black and white, while the reality moves on.
Similarly, our religious agenda of tolerance between Catholic-Protestant-Jew
needs to expand to include the worshippers at the 1,000 mosques in the U.S.
(as Islam is the fastest growing religion in the world), along with the increasing
numbers of Buddhists, etc.

How We Melt

Just as we begin to recognize this new diversity among Americans, another
reality that is changing is our understanding that only Europeans in America
have “melted.” Only about 15% of the U.S. population is made up of Germans
married to other Germans, Poles married to other Poles, etc. Hispanics and
Asians are now completing the same process, as over half of the children of
Asian immigrants are marrying non-Asians, and almost half of Hispanic
immigrant’s children are marrying non-Hispanics. Race is a powerful historical,
political and economic force, but is scientific nonsense. The next U.S. Census
will allow people to check as many race/ethnicity boxes as they wish, allowing
Tiger Woods to truly be a “Cablinasian.” (There are a minimum of 3 million
school children who are of mixed racial identity in the U.S.) So as race becomes
an even more important matter in the nation, the physical characteristics that
identify races are diffusing through marriage.

Who Graduates from College?

A word needs to be said about the deplorable fact that very little is known
about the most important indicator of all: the percentage of students entering
four-year colleges who actually graduate. We know more about the percentage
of community college students who transfer to four-year schools (about 20%).
and apparently they usually complete four-year programs as well or better than admitted freshmen. But certainly state legislatures, now aware of the attrition or drop-out rates in public schools, will want to know the college batting average as well. Very few colleges can tell them. Many students graduate from a second college (43 million Americans move every year). It appears that about 30% of students graduating from four-year programs graduate in another major from the one they first signed up for. While no good numbers exist, it also appears that a vast number of college graduates get jobs that require virtually none of the specific skills that they learned in their major. (A defense can be made in this area—many generic skills of writing, speaking, contextual analysis, and problem solving transcend specific disciplines.)

Degrees and Jobs

In terms of the “afterlife,” there is little doubt that a BA degree contributes mightily to lifetime income (see Figure 6); however, it does not guarantee high income. (It is more accurate to think of it as a necessary but not sufficient condition.) A recent report indicates that while high school drop-outs have had the most serious income declines since 1970, college graduates have seen income declines in constant dollars as well (Zemsky et. al.). Actually, a community college degree in the health technology fields is almost as good a guarantee of higher income, given the increasing demand for health technology in an aging population. And in many fields like air conditioning equipment repair, demand far exceeds the supply of trained workers, and income levels are good. In Education for What?, Carnevale and Rose find that the office economy produces many good jobs that require only a community college degree.

One of the major difficulties higher education faces is a misunderstanding about the nature of the job structure in America (see Table 2). Several groups (e.g., the Carnegie Commission on Education and the Economy, 1994) have been pointing out for the last five years or more that the nation is not creating
### Employment Projections, by Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment 1996</th>
<th>Employment 2006</th>
<th>Change Number</th>
<th>Change Percent</th>
<th>Education and Training Category</th>
</tr>
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<tbody>
<tr>
<td><strong>Largest Job Growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cashiers</td>
<td>3,145</td>
<td>3,677</td>
<td>530</td>
<td>17</td>
<td>Short-term on-the-job training</td>
</tr>
<tr>
<td>Systems analysts</td>
<td>2,071</td>
<td>2,887</td>
<td>816</td>
<td>40</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>General managers and top executives</td>
<td>3,210</td>
<td>3,677</td>
<td>467</td>
<td>15</td>
<td>Work experience plus bachelor's or higher degree</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>1,971</td>
<td>2,382</td>
<td>411</td>
<td>21</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Salespersons, retail</td>
<td>4,075</td>
<td>4,411</td>
<td>336</td>
<td>10</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>Truck drivers light and heavy</td>
<td>2,719</td>
<td>3,123</td>
<td>404</td>
<td>15</td>
<td>Short-term on-the-job training</td>
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<tr>
<td>Home health aids</td>
<td>495</td>
<td>873</td>
<td>378</td>
<td>76</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Teachers aides and educational assistants</td>
<td>981</td>
<td>1,352</td>
<td>370</td>
<td>38</td>
<td>Short-term on-the-job training</td>
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<td>Nursing aides, orderlies, and attendants</td>
<td>1,312</td>
<td>1,645</td>
<td>333</td>
<td>25</td>
<td>Short-term on-the-job training</td>
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<td>1,074</td>
<td>1,392</td>
<td>318</td>
<td>30</td>
<td>Short-term on-the-job training</td>
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<td>Teachers, secondary school</td>
<td>1,406</td>
<td>1,718</td>
<td>312</td>
<td>22</td>
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<tr>
<td>Child care workers</td>
<td>830</td>
<td>1,129</td>
<td>299</td>
<td>36</td>
<td>Short-term on-the-job training</td>
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<td>Clerical supervisors and managers</td>
<td>1,369</td>
<td>1,630</td>
<td>261</td>
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<td>Database administrators, computer support specialists</td>
<td>212</td>
<td>461</td>
<td>249</td>
<td>118</td>
<td>Work experience in a related occupation</td>
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<tr>
<td>Marketing and sales worker supervisors</td>
<td>2,315</td>
<td>2,852</td>
<td>537</td>
<td>23</td>
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<tr>
<td>Maintenance repairers, general utility</td>
<td>1,362</td>
<td>1,608</td>
<td>246</td>
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<td>Food counter, fountain, and related workers</td>
<td>1,720</td>
<td>1,963</td>
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<tr>
<td>Teachers, special education</td>
<td>407</td>
<td>648</td>
<td>241</td>
<td>59</td>
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<tr>
<td>Computer engineers</td>
<td>215</td>
<td>451</td>
<td>235</td>
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</tr>
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<td>Food preparation workers</td>
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<td>1,847</td>
<td>394</td>
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<td>Hand packers and packagers</td>
<td>985</td>
<td>1,208</td>
<td>223</td>
<td>23</td>
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<td>Guards</td>
<td>955</td>
<td>1,175</td>
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<td>General office clerks</td>
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<td>3,326</td>
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<tr>
<td>Waiters and waitresses</td>
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<td>2,163</td>
<td>206</td>
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<tr>
<td>Social workers</td>
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<td>1,636</td>
<td>249</td>
<td>19</td>
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<tr>
<td>Adjustment clerks</td>
<td>401</td>
<td>584</td>
<td>183</td>
<td>46</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Cooks, short order and fast food</td>
<td>804</td>
<td>978</td>
<td>174</td>
<td>22</td>
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<tr>
<td>Personal and home care aides</td>
<td>202</td>
<td>374</td>
<td>172</td>
<td>85</td>
<td>Bachelor's degree</td>
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<tr>
<td>Medical assistants</td>
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<td>391</td>
<td>169</td>
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<td>Bachelor's degree</td>
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<td><strong>Fastest Growing</strong></td>
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<td></td>
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<tr>
<td>Database administrators, computer support specialists</td>
<td>212</td>
<td>461</td>
<td>249</td>
<td>118</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Computer engineers</td>
<td>216</td>
<td>451</td>
<td>235</td>
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</tr>
<tr>
<td>Systems analysts</td>
<td>506</td>
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<td>Personal and home care aids</td>
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<td>372</td>
<td>183</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Physical and corrective therapy assistants and aides</td>
<td>84</td>
<td>151</td>
<td>66</td>
<td>79</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Home health aids</td>
<td>495</td>
<td>873</td>
<td>378</td>
<td>78</td>
<td>Bachelor's degree</td>
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<tr>
<td>Medical assistants</td>
<td>225</td>
<td>391</td>
<td>166</td>
<td>74</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Desktop publishing specialists</td>
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<tr>
<td>Occupational therapy assistants and aides</td>
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<td>26</td>
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<td>Paralegals</td>
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<td>Occupational therapists</td>
<td>57</td>
<td>95</td>
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<tr>
<td>Teachers, special education</td>
<td>407</td>
<td>648</td>
<td>241</td>
<td>59</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Human services workers</td>
<td>178</td>
<td>276</td>
<td>98</td>
<td>55</td>
<td>Bachelor's degree</td>
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<tr>
<td>Data processing equipment repairers</td>
<td>80</td>
<td>121</td>
<td>42</td>
<td>52</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Medical records technicians</td>
<td>87</td>
<td>132</td>
<td>45</td>
<td>51</td>
<td>Bachelor's degree</td>
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<tr>
<td>Speech language pathologists and audiologists</td>
<td>87</td>
<td>131</td>
<td>44</td>
<td>51</td>
<td>Bachelor's degree</td>
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<tr>
<td>Dental hygienists</td>
<td>133</td>
<td>197</td>
<td>64</td>
<td>48</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Amusement and recreation attendants</td>
<td>288</td>
<td>426</td>
<td>138</td>
<td>48</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Physician assistants</td>
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<td>47</td>
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<tr>
<td>Respiratory therapists</td>
<td>82</td>
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<td>37</td>
<td>46</td>
<td>Bachelor's degree</td>
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<tr>
<td>Adjustment clerks</td>
<td>401</td>
<td>584</td>
<td>183</td>
<td>46</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Engineering, science, and computer systems managers</td>
<td>343</td>
<td>498</td>
<td>155</td>
<td>45</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Emergency medical technicians</td>
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<td>45</td>
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<tr>
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<td>62</td>
<td>19</td>
<td>45</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Bill and account collectors</td>
<td>269</td>
<td>381</td>
<td>112</td>
<td>42</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Residential counselors</td>
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<td>254</td>
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<td>41</td>
<td>Bachelor's degree</td>
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<tr>
<td>Instructors and coaches, sports and physical training</td>
<td>303</td>
<td>427</td>
<td>124</td>
<td>41</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Dental assistants</td>
<td>289</td>
<td>374</td>
<td>85</td>
<td>30</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Securities and financial services sales workers</td>
<td>263</td>
<td>363</td>
<td>100</td>
<td>38</td>
<td>Bachelor's degree</td>
</tr>
</tbody>
</table>

*Includes all other computer specialists.


One issue that may surface soon in higher education is the accountability question now being asked of the public schools: what should every graduate with a bachelor’s degree know and be able to do? That is a devastating question for higher education, one that has been evaded for half a century. This author remembers Ralph Tyler, dean of educational researchers in the 1950s, stating that entering freshmen at some colleges and universities knew more at entry than

jobs that require college graduate skills as rapidly as we are producing college graduates! If one looks at the largest number of new jobs projected to be added to the economy from 1996 to 2006, one finds cashiers, systems analysts, general managers, registered nurses, retail sales, truck drivers, home health aides, teacher aides, nursing aides, receptionists. Only two of these heavy hitters require a BA degree. When we look at the fastest growing jobs in terms of percentage change, we see mainly computer technology and health and personal care aides, but the total number of new jobs created in these fields is very small. For instance, for every new job for a computer programmer in 1997, the U.S. generated six new jobs for janitors. There are many very serious shortages for computer technologists, but they amount to about 100,000 workers in a workforce of over 100 million people. Most workers with a BA degree are doing something totally unrelated to their major area of study. Higher education has no systematic bridge to the workforce, and it may be a good thing. But there should be some awareness that we are overproducing college graduates and underproducing jobs that require college graduate skills.

Job Generation

One of the major debates in educational policy concerns whether a well educated workforce will attract new jobs to that area, or whether new jobs will attract a well educated workforce to those jobs. There is a crystal clear answer to that question: both are true in some way. The question of job generation is seldom asked in America, yet it is key to state economic development. (When one worker moves to Florida, 1.2 new jobs are created in that state. How is that accomplished? How good are the new jobs?) Tourism has been a major factor in the migration to the southeast and southwest, resulting in a growth in low-income, low-skill jobs. How could we deliberately create more of the good jobs we would like our sons and daughters to have? The question remains not unanswered but unasked.

The BA as Quality Control?

One issue that may surface soon in higher education is the accountability question now being asked of the public schools: what should every graduate with a bachelor’s degree know and be able to do? That is a devastating question for higher education, one that has been evaded for half a century. This author remembers Ralph Tyler, dean of educational researchers in the 1950s, stating that
graduating seniors from others. That was "higher education's dirty little secret," far more serious than today's debate over remediation, which indicates an awareness of the necessity of aligning elementary, secondary and higher education standards. Remediation suggests the necessity to provide some answer to the first question of this paragraph, which is an improvement over the view in the 1950s and 1960s that what each institution demanded of its graduates (if anything) was nobody else's business—certainly not employers, nor parents who were paying the students' bills, not even the students themselves. In fact, for many years some colleges would change their admission requirements without even informing school superintendents and guidance counselors of the changes!

Gradually, higher education is being drawn into a system of linkages and accountability that could extend from day care to postdoctoral study. While there are many benefits to such a system, it may homogenize much of the useful diversity of American higher education. This diversity has allowed such different places as Antioch, Reed, Oberlin, Haverford, Bob Jones, Slippery Rock, Colorado College, Sonoma State—hundreds and hundreds of campuses, each with a clear sense of style, a campus feel, a sense of priority, a view of teaching and learning, that defined the place. Each campus had its own version of standards. (When the author was at Bard College as Dean, it was said that "you wrote your way out of Oberlin and talked your way out of Antioch.")

Links to Life

It is also important to see the new significance of the concept of education throughout one's life. One of the most radical transformations in education can be seen in the amazing growth of Elderhostel, a concept that involves providing "seniors" over age 55 with a sustained intellectual experience for one to three weeks in a new setting. Elderhostel now engages 260,000 seniors in such experiences throughout the world each year. The program has touched a vital chord, and has become a bridge that eventually may have to be recognized by higher education, which is where it began. Where is it written that higher education must only provide degree-awarding programs, and only to post-pubescent adolescents? Many institutions—Regents College, Fielding Institute, Empire State College, Walden University, University of Phoenix—are the leading edge of hundreds of institutions that realize the enormous and barely tapped educational needs of people at all stages of life. Lifelong education will undoubtedly be the growth industry in education for the foreseeable future, and higher education could contribute significantly to this development.
Summary and Conclusions

Clearly, things have changed since the author wrote *All One System* in 1985. Some of the major changes include:

- Increased awareness of the vital importance of the early years of life (preschool) for successful intellectual and social performance in school and college.
- Use of an assessment system to create educational change, not just to record it.
- Far greater awareness of state and local political leaders of the realities of the segments of the educational system, without much awareness of the bridging function between the segments. It is hoped that this paper may help state and local policy staff to understand these linkage functions in programs, assessments and policies at all levels.
- More and better collaboration between teachers, administrators and boards. (The idea of a superintendent/school board *leadership team* is an interesting new wrinkle.)
- Some K–16 councils and committees have been established, along with a number of associations between the Chief State School Officer in a state and the State Higher Education Executive Officer of the same state. It is more likely that these consortia will increase calibration of public school curriculum and assessment with collegiate admissions standards than that teaching and learning in higher education will change.
- Diversity cannot be defined as black and white only, in today’s world, yet race is becoming increasingly complex and ambiguous, through immigration and intermarriage.
- While *racial* desegregation has not been entirely successful, there is some interest in *socioeconomic* desegregation at the state level. (The Kentucky decision of a decade ago provided for a “common floor of money” under every student in Kentucky.)
- Intermediate service agencies—like New York’s Board of Cooperative Educational Services (BOCES)—are everywhere.
- The system is tightening up, with more “inspectors on the education assembly line.” More students are taking tougher courses, more are
(probably) being held back, accumulating seat time is no longer enough to move ahead, and students must demonstrate that they can pass a standardized test, even for high school graduation. (Yet none of this is true for higher education!)

- We now have 8 million computers in our schools for 51 million kids—roughly one for every 7 students. Districts brag that "our hard drives are bigger than yours," but so far there is little evidence that computers in the classroom have transformed (or even improved) student learning of the basic skills of reading, writing and computation. For an excellent review of what is known, see *Does it Compute?* (Educational Testing Service, 1998). Now that we have our 8 million computers, we are finally beginning to train our 2 million teachers in how to use them in teaching situations!

- One thing that is unchanged: 21% of children are still below the poverty line. No major national plan has been developed to reduce this number, since President Johnson's War on Poverty in the 1960s. (If President Reagan had looked at the facts before he pronounced "we had a war on poverty and poverty won," the nation might have seen it differently.) With the enormous and increasing differences in wealth between the very rich and very poor, you would think we should see some creative suggestions for reducing the effects of poverty, if not poverty itself, but that will have to wait until the equity/standards dichotomy moves toward a greater national interest in equity.

Some trends for the future:

- An inevitable push toward content standards for college degrees as we have seen at the state level for high school diplomas. (National tests or national standards is a key question for K–12 education, with implications for higher education as well.)

- As minorities increase in southwestern and southeastern schools, proportionate increases in minority enrollments in higher education are, and will continue to be, the result.

- While the nation’s youth will have no majority race by 2025, most of this diversity will be contained in about 200 of our 3,000-plus counties. No kind of diversity is, or will be, evenly spread across the nation—not race, wealth, religion, or age.
• New awareness that higher education has miserable data on the basics of student progress, including: drop-out rates and graduation rates, especially for minorities; what happens to students after graduation; assessment of quality of teaching; and student grading practices. In addition, there is no satisfactory explanation for why the costs of higher education continue to increase faster than the cost of living. Increased awareness of these problems on the part of state legislators and governors could reduce state funding for higher education.

• New evidence that state NAEP scores can improve over time (Texas and North Carolina), even for low-income and minority students. The requirements are: achieving consensus on the goals to be attained; attaining long-term support from business and political leadership for a decade; providing regular feedback (with consequences) to teachers and local administrators; and shifting resources to the districts with the highest percentage of at-risk (low-income) students. It is likely that other states will imitate this formula, as it works! (See report by David Grissmer and Ann Flanagan.)

• The number of public school students from mixed ethnic ancestry will jump from the current 3.5 million to about 6 million by 2010.

• The predicted Tidal Wave II increases in public school students will be confined to only six states which will have an increase in secondary school enrollments of 20% or more from 1997 to 2007: California, Nevada, Arizona, North Carolina, Massachusetts, and Rhode Island. Eight will show actual declines: North and South Dakota, Nebraska, Minnesota, Iowa, Wisconsin, Oklahoma, and Maine. Teacher shortages will also be highly targeted to the rapidly expanding "ring 3" suburbs and certain specialties like special and bilingual education. Higher education enrollment will increase from about 14 million to 16 million, with varying increases by state during the same years (Chronicle of Higher Education Almanac, August 28, 1998).

• It is not clear how long standards will continue to dominate the national discourse on education and equity will remain as a shunned topic, but a good guess might be another decade. By then, we may have a much more homogenized educational system, calibrated from pre-K to 12 and some states to 16, plus some attempt at national subject matter examinations. However, given that the federal government provides less than 10% of education funding, it seems likely that state and local educational leadership will not wither away. The Golden Rule
is that “those who provide the gold make the rules,” and it applies to all levels of our educational system.

- It is sad but true that there is no reason to think that youth poverty rates will decline in the next decade, meaning that low-income children from families in which the parents are not well educated will be at about the same disadvantage we find today. It is unlikely that computers, per se, will be able to alter this reality, meaning that the talent and contributions of 20% of tomorrow's youth will not be fully available to higher education nor to the nation.
Sources

——. "What Should We Call People?" Phi Delta Kappan, October 1995.


ABOUT THE AUTHOR

Harold Hodgkinson, Director of the Institute for Educational Leadership’s Center for Demographic Policy, is widely known as a lecturer and analyst of demographic and educational issues. He has been a fellow of the American Council on Education and President of the National Training Laboratories. He has published 12 books, three of which have won national awards, and over 200 articles. His research has been sponsored by a wide range of prominent foundations and government agencies at the federal, state, and local levels. His consulting assignments have included over 600 colleges and universities, numerous public and private schools and school systems, state and federal agencies, as well as many corporations.
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