In recent years, the deeply-embedded chasm that separates K–12 from postsecondary education in the United States has received unprecedented attention. Major foundations such as the Lumina Foundation, the Bill and Melinda Gates Foundation, and the Carnegie Corporation, influential governmental organizations such as the National Governors Association, and important entities such as the Southern Regional Education Board, Achieve, and Education Trust have focused national efforts on bridging the dysfunctional divide that exists between the educational levels.

While it is encouraging that this salient issue is receiving attention, it is far from clear that the work being completed will be more effective than past efforts in the states in building student transitions from high school to college. This is not to say that the efforts ought not be taken, for they should be, and more as well. We are suggesting, rather, that they be understood in historical context, so as to move beyond the historical barriers to K–16 reform that are so powerfully entrenched.

This historical review, as well as examining the barriers to K–16 articulation, seeks to offer insights into the possibilities for improved inter-level integration. We will examine the K–16 dichotomy through the following major developments that have helped to cement the divide between K–12 schools and higher education in the United States:

- Disjointed curricula for grades 10 to 14;
- The evolution of teacher preparation programs;
- The detachment of community colleges from high schools;
- Divided governance and finance; and
- A lack of inter-level organizational relationships.

In the final sections of this chapter, we summarize some state efforts to coordinate across sectors before offering our concluding thoughts about lessons to draw from this historical analysis. The authors also address these issues in a chapter of *Minding the Gap* (Kirst and Usdan 2007).
DISJOINTED CURRICULA FOR GRADES 10 TO 14

The origin of the divide between K–12 and postsecondary education in the United States stems, in part, from the laudable way the nation created education systems to deliver curricula for both K–12 and higher education. In the late 1800s there were no common standards for college admission, nor was there an organized national system for college entrance examinations. Nearly half the colleges had either low entrance requirements or none at all (Ravitch 2000, p. 41). Some colleges accepted students from preapproved secondary schools or used their own exams. High school educators wanted a more uniform and less haphazard system.

Within this context, the National Education Association in 1892 appointed the nation’s first blue ribbon education commission to recommend academic standards for secondary schools. The commission included five college presidents, a college professor, the U.S. Commissioner of Education, as well as other members (Ravitch 2000). This “Committee of Ten” was chaired by Charles W. Eliot, president of Harvard University.

The committee envisioned that only a tiny proportion of high school graduates would be going on to college, but its report recommended that all pupils be prepared for any path in life by “melding the objectives of liberal education (that is, a curriculum of rich content) and mental discipline (that is, the training of the mind)” (Ravitch 2003, p. 43). In support of this recommendation, the Committee of Ten proposed that high schools add to their curricula subjects such as history, the sciences, and classical languages (for example, Latin). The committee also proposed that these courses, in order to make them more accessible to larger numbers of students, be taught through active learning instead of memorization. The report was attacked for its support of an academic education for all students, and some critics praised the European approach of different schools based on career choices of pre-teens. Nonetheless, the Committee of Ten’s report influenced education policy and led to the development of the College Entrance Examination Board (now the College Board), with its common college examination.

During this period, U.S. colleges and universities played an important role in influencing high school curricula. In 1900, for example, the College Entrance Examination Board established uniform standards for each academic subject and issued a syllabus to help high school students prepare for college entrance subject-matter examinations. Soon thereafter, the University of California began to accredit high schools to ensure that their curricula were adequate for university preparation. As the number of high schools grew rapidly, however, the university could no longer meet the need for high school accreditation, and had to stop performing this function. Eventually, as the number of postsecondary institutions expanded greatly, the regional high school accrediting associations split with the higher education accreditation associations, in order to lessen the workload. This division also deemphasized K–16 alignment.
By 1918, a new report, “Cardinal Principles of Secondary Education,” offered a very different vision from that of the Committee of Ten. At this time, high school enrollments were expanding and many students were viewed as incapable of learning the traditional academic curriculum (Tyack and Cuban 1995). The Cardinal Principles were envisioned as a blueprint for supporting social efficiency through differentiated high school curricula. The report proposed that high schools provide, as well as academic preparation for some students, vocational training and courses on family life, good health, citizenship, ethical character, and the worthy use of leisure. Students were given intelligence tests to place them in the appropriate academic track. The overall purpose of the expanded and differentiated curricula was to retain broader numbers of secondary students in high school, and help them adapt more effectively to a changing society.

In many ways, this influential report helped to spawn the development of comprehensive high schools, which are designed to address many—often conflicting—educational purposes, while offering high-quality college preparation only to a minority of students in a track of challenging courses (that now feature Advanced Placement and honors classes). As traditional academic subjects and pedagogy were being deemphasized in high schools, course offerings multiplied to provide subjects that were designed to be more practical and engaging for large numbers of students; but this has led to the creation of shopping mall high schools that lack curricular coherence (Powell, Farrar, and Cohen 1985).

In the years after World War II, the notion of academic standards shared across K–12 schools and higher education vanished. “Aptitude” tests like the SAT replaced subject-matter standards for college admission, and secondary schools placed more emphasis on elective courses in nonacademic areas. As early as the 1950s, national groups began trying to push the high school curriculum closer to the vision of the 1893 Committee of Ten, with only mixed results (Kirst and Venezia 2004). Over time, the chasm between secondary and postsecondary education in the United States has grown greater than that in many other industrialized nations (Clark 1985).

Today, K–12 teachers and college faculty may belong to the same discipline-based professional organizations, but they rarely meet to discuss curricular alignment. Policymakers in the K–12 and higher education sectors cross paths even less frequently. It was not until 1982 that the Carnegie Foundation organized the first national meeting ever held between K–12 state school superintendents and college presidents to discuss the growing chasm between them (Stocking 1985, p. 258). Many groups mediate between high schools and colleges, but they have competing agendas that tend to work against curricular alignment. The number and influence of mediating groups, such as the College Board, Educational Testing Service, and American College Testing Program (ACT), is, according to Stocking, an indicator of the “amount of disorder and confusion that has grown through the years in the relationship between the school and the university in America” (p. 263).
Over the past decades, the Advanced Placement (AP) program has been the nationally aligned standards effort between K–12 and higher education—but the program is a stalactite that extends down to K–12 schools from universities, which dictate the course syllabus and exam. The International Baccalaureate (IB) program attempts to align high school and college curricula, but its scope is limited. These programs help those who attend selective colleges and universities, but not the 80% of high school students who attend nonselective or open-access institutions, such as community and technical colleges. In many high schools, there is a chasm between the academic rigor of AP and IB programs on the one hand, and regular college preparation courses on the other. In addition, some of the fastest growing courses in high school are college courses such as AP—while some of the fastest growing courses in college are remedial education classes. This disparity suggests that the better high school students are becoming more closely aligned with higher education through AP and IB, while the students who are less academically advanced are becoming more disconnected.

Beyond the AP and IB programs, there were until very recently no major efforts to provide curricular coherence and sequencing across secondary schools in the United States (Conley 2005). The National Governors Association and the K–12 Council of Chief State School Officers, however, with the support of Achieve, are currently developing common core standards for college preparedness. But there has been no traction in conceiving postsecondary liberal education in a way that relates the academic content of the secondary schools to the first two years of college. Instead, students face an eclectic academic muddle during their high school years and first years of college (grades 10 to 14), until they select a college major (Orrill 2000).

Thus, the high school curriculum remains unmoored from the freshman and sophomore college curriculum—and disconnected from a consistent vision of liberal arts education that would help students prepare for college coursework. For example, in California high schools, “literature” is the focus of English coursework for those students preparing for college. In community colleges, however, the initial English courses focus on grammar and writing. Meanwhile, the University of California and California State University emphasize rhetoric.

National policymaking for K–12 and postsecondary education has been more concerned with increasing access to college than with developing aligned, rigorous curricula that can better prepare large numbers of students for success at the college level. Access, rather than preparation, is also the theme of many of the professionals who mediate between the high schools and the colleges: high school counselors, college recruiters, and college admissions and financial aid officers. Improving educational opportunity requires both access and better preparation, so that students gain the skills and knowledge they need to succeed in college and earn their certificates or degrees.
TEACHER PREPARATION AS A FUNCTION OF MULTIPURPOSE UNIVERSITIES

The development of teacher preparation programs as a function of large, multipurpose universities has also played an important role in the evolution of the disjuncture between K–12 schools and higher education.

In the United States, the first widespread teacher preparation programs for prospective elementary teachers were called normal schools, which were two-year postsecondary institutions. The schools were called “normal” because they sought to establish norms or models—that is, they sought to develop and communicate common standards for teaching. In 1910, there were 264 normal schools enrolling 132,000 students in the United States (Dunham 1969). Later in the 20th century, many normal schools were transformed into teachers colleges, partly to better accommodate the preparation of secondary teachers as well as elementary teachers. Normal schools and teachers colleges had many links to K–12 schools, and interactions among those working at elementary, secondary, and postsecondary levels were frequent.

As demands for undergraduate education increased, however, teachers colleges expanded, both in function and enrollment, and became multipurpose state colleges or universities. At first, these campuses were often governed, like normal schools, by K–12 state boards of education. Their expansion required the recruitment of a wide variety of arts and sciences professors, who typically sought traditional forms of academic prestige characteristic to research universities rather than to colleges devoted to teaching. The preparation of teachers at these state universities was separated from other undergraduate teaching functions through the creation of schools or departments of education. These education departments, which originally had been the central reason for the institution’s existence, were typically viewed by the colleges’ other faculty members as having low academic prestige. In addition, these broader colleges and universities placed a low priority on linkages with K–12 teachers and students—so that typically, the only interactions with K–12 educators were through the school of education, and even these interactions declined.

Western Michigan University provides an example of this institutional evolution. Founded in 1903 as a normal school, it became Western State Teachers College in 1927, Western Michigan College of Education in 1941, and then Western Michigan University in 1957. Its first doctoral degrees were conferred in 1968, and the university had 18,500 students and 900 faculty members in 1969 (Dunham 1969).

One effect of these trends is that many former normal schools have become broad-access colleges and universities. These institutions typically admit all qualified applicants, but use placement assessments to preserve standards. That is, first-year students take placement tests to determine if they are prepared to take credit-bearing courses. Most high school students know that it is easy to get in to these colleges, but they typically know little about placement tests and the curricular demands of college-
level academic work (Kirst and Venezia 2004). An historical irony of this evolution of teacher preparation programs is that normal schools—those postsecondary institutions established to prepare teachers to follow standards—no longer communicate their own standards to K–12 teachers or students at all.

THE DETACHMENT OF COMMUNITY COLLEGES FROM HIGH SCHOOLS

As the numbers of high school and college students increased rapidly during the Baby Boom generation, many states developed community or junior college systems to accommodate the increased demand for higher education. Between 1950 and 1970, the number of community colleges more than doubled and enrollment increased from 217,000 to 1,630,000. Between 1969 and 1974, community college enrollment increased by 174%, compared with 47% for four-year institutions (Callan 1997).

Today, over 45% of undergraduates in the United States attend a community college, an increase of 10% in the last decade (Marcus 2005). The percentage attending community colleges has been increasing primarily because many of the fast-growing states—such as California, Texas, and Florida—rely heavily on community colleges. California, for example, enrolls two-thirds of its college freshmen in the community college system (Hayward, Jones, McGuinness, and Timar 2004).

Originally, community colleges were funded like public schools with mostly local support, state supplements, and no tuition. In California, for example, community colleges originated as part of the local K–12 system and were considered the 13th and 14th grades. During the 1950s, as community colleges began to expand across the nation, they also began to be given their own local governing boards separate from the K–12 system. For some community colleges, however, four-year college and university systems dictated large parts of their curricula for transfer students (Callan 1997).

Much as teachers colleges moved away from K–12 education, community colleges have distanced themselves from secondary schools as well (Brint and Karabel 1989). As community colleges sought to maintain growth during and after the Baby Boom generation, they expanded their mission to include vocational education and community service. New and neglected populations beyond recent high school graduates were added, including housewives, immigrants, older adults, and laid-off industrial workers. As the community colleges focused increasingly on the needs of these new students, there was an accompanying loss of interaction with and focus on high schools. As a result, community colleges sent fewer and less clear signals to high school students about the academic preparation and skills needed to earn college credits toward their vocational certificates or associate degrees.

The impact of this detachment from secondary education has been profound, with many students entering community college unprepared for its demands. For example, 95% of first-time students enrolled in Baltimore City Community Colleges (BCCC) in
fall 2000 required remediation in math, English, and reading. Nationally, about 60% of students entering community colleges require remediation, which is a major risk factor for not completing a degree or certificate program (Adelman 1999). Of all the English and math courses offered at community colleges, 29% and 32%, respectively, are remedial (Cohen and Brawer 2003). The majority of students enrolled in these remedial courses (60%) are of traditional college age and enter college directly after high school. This suggests that the high level of remediation is not simply a result of having to refresh the skills of those who have been out of school for a while, but also of having to teach skills that were not received in high school. Increasingly, four-year institutions transfer their remediation to community colleges. At least ten states discourage four-year universities from offering remedial education by not providing state funding for such purposes (Jenkins and Boswell 2002).

Compounding this remediation problem is the fact that many community college students today, compared with their peers at four-year institutions, are less likely to have the information and preparation they need to succeed in college. Community colleges serve a large proportion of low-income, ethnic minority, and first-generation college students. According to Stanford University’s Bridge Project, these student populations are less likely to receive college counseling, be placed in college-preparation courses, and obtain information about college admissions and placement (Kirst and Venezia 2004).

The lack of college preparation and information possessed by students entering community college is reflected in low transfer and degree-completion rates. Although 71% of beginning community college students plan to obtain a bachelor’s degree, only about 25% transfer to a four-year school (Bradburn and Hurst 2001). Several studies demonstrate that students who enter community colleges and seek a four-year degree have much lower completion rates than students who initially enroll in a four-year college or university (Fry 2004; Cabrera et al. 2005). Whereas 63% of students attending a four-year institution earn a bachelor’s degree, only 18% of those who begin at a community college do so (Wellman 2002).

Despite low transfer and completion rates, community colleges continue to be an attractive option because of their low enrollment fees, close proximity to students’ homes, and “open door” policies that admit students with few entrance standards. Unfortunately, students often mistake the “open door” policy to mean that the college has few academic standards. Many high school students believe that once they enroll in a community college, they are free to take any entry-level credit-bearing courses they choose (Rosenbaum 2001). However, most community colleges use assessments to place students in course levels in core subject areas. The Bridge Project found that most high school students going to community colleges were unaware of college placement standards, and thought that their minimal high school graduation standards were adequate preparation for college (Kirst, Venezia, and Antonio 2004).
Many high school students view community colleges as souped-up high schools, and most do not even learn that they need to take a placement exam until they enter the community college (Kirst and Venezia 2004; Bueschel 2004). High school counseling for prospective community college students is particularly weak. Students typically are not told that their level of high school achievement will affect the amount of time it will take to finish transfer requirements, thus decreasing their chances of completing college.

Meanwhile, community colleges, which must align their courses to meet the transfer standards of four-year institutions, have distanced themselves from K–12 schools, despite the prevalence of remedial education on their campuses (McGrath and Spear 1991). In addition, most state data systems remain separate for each level and do not examine the flow of students across K–14. With respect to communicating with high schools about effective academic preparation of students, the colleges that are closest to high school students generally have stepped far away from them—as far away as any four-year college or university.

DIVIDED GOVERNANCE AND FINANCE

Statewide agencies and coordinating bodies that govern educational functions within states have evolved along with the educational institutions themselves. As public colleges and universities grew dramatically from the end of World War II to 1980, the need for increased statewide coordination became a priority. In response to this need, many states created new statewide coordinating or planning boards for higher education. For example, in 1940 the majority of states did not have a higher education governing, coordinating, or planning agency with responsibility for all public higher education. By 1979, all states had such an agency (Richardson et al. 1999). In 1940, 70% of public campuses had their own governing board, but by 1976, only 30% did.

During this reorganization of higher education governance, many states developed community or junior college systems, often with their own governance mechanisms. Others developed multiple branch campuses of major public universities, which in some cases involved shifting the governance structures of the former normal schools from K–12 state boards of education to higher education governance systems. One result was large variation in state higher education governance across the United States. For example, some states, such as California, have multiple statewide systems of higher education (California has a separate board for its research universities, its state universities that generally do not offer doctoral degrees, and its community college system). Other states, such as Georgia, have a single Board of Regents governing community colleges through research universities.

Despite the variation in the new higher education governance mechanisms, there was one constant: These agencies sought to coordinate the functions of higher education
statewide, but they were not linked with K–12 governance or policymaking. As regulations of K–12 schools and higher education expanded from 1960 to 1980, the new higher education state agencies operated largely in isolation from their K–12 counterparts. As Richardson, Bracco, Callan, and Finney (1999) state, “A 1969 study of 12 large states found little political or budget conflict between K–12 and postsecondary education. The two levels basically ignored each other and proceeded in their separate ways” (p. 9).

Similarly, finance and oversight of education by state legislatures also evolved primarily in two separate spheres, one for K–12 and another for postsecondary education. Although the history and context of each state’s funding stream for education is unique, funding for K–12 schools and for postsecondary education has derived—or seemed to derive—from different sources. Schools have been funded primarily through property taxes, whereas financing for higher education has come from a variety of fees and charges (such as tuition), federal grants, gifts, and appropriations from state general funds. When finance and budget levels are under consideration by state legislatures for the two educational sectors, they typically have been handled separately.

Likewise, the structure of state legislative committees responsible for education varies across states, but the development of legislation has typically evolved separately for K–12 and higher education. Many state legislatures, such as Georgia and New York, have separate subcommittees to handle K–12 and higher education issues. Other states, such as Oregon and Florida, have committees that oversee both sectors. Particularly in Florida, which has recently created some K–20 committees, it will be important to examine the extent to which their committee structure can help to drive cooperation across the sectors. In general, however, legislatures have approached K–12 schools and higher education as completely different spheres. Consequently, state policies are inadequate to hold K–12 and postsecondary education accountable for college readiness. No powerful interest groups exist on the scene between K–12 and postsecondary education to enhance the success of students as they transit from school to college.

**INTER-LEVEL RELATIONSHIPS VIRTUALLY NONEXISTENT**

In examining the organizational relationships as well as the governance structures that have evolved, the findings of a 1969 study called *Education and State Politics* are useful in illuminating the historical nature of the divide between K–12 and higher education. Given the rapid growth in enrollments and the changes that were emerging, the authors

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1 The New York Board of Regents, created long before this in 1784, provides an exception in being responsible for K–16 education. See “The New York Regents” later in this chapter for more information. Another exception is the Idaho Board of Education, which has overall responsibility over higher education institutions, as well as public and community colleges.
sought to understand the ways that conflict or cooperation between K–12 schools and colleges and universities appeared to be taking shape (Usdan, Minar, and Hurwitz 1969).

In most cases in the 12 states studied, the authors found that areas of coordination or disagreement between K–12 and postsecondary education were virtually nonexistent. Open political conflict between the sectors of education was scarcely noted on any broad scale in any state, though in a few instances there was some friction over specific regional or local issues. To the extent that there was cooperation between sectors, it tended to be ad hoc and focused upon special events or functions. Only a handful of efforts were being made to institutionalize any relationships across the levels within state policy structures or processes.

Most respondents in 1967\(^2\) tended to see education as discrete batches of K–12 and postsecondary issues that were only accidentally connected to one another and that were therefore best handled separately. Little thought was given to relations between the levels of education. For example, when asked four decades ago about the future of educational finance in the states or the prospects for expanded vocational-technical education, many respondents were generally aware of the ways that these issues spanned K–12 and postsecondary education. However, in relation to solving common issues such as these, they pointed to political difficulties and lack of stakeholder interest in proactively seeking methods to improve inter-level coordination. However tangible the problems that spanned the two levels, they tended to be addressed as isolated events rather than as parts of a broad pattern of issues.

**Emergent Areas of Inter-Level Relationships in 1967**

Nonetheless, the study found that three sources of social pressure were bringing some attention to the divide between K–12 and postsecondary education. One was the expanding cost of education at all levels, which was the result of population growth, heightened aspirations, new technologies, and generally mounting prices. A second was the tendency during the 1960s to question all established forms and procedures, including educational bureaucracies and systems. A third pressure was a rising demand for educational services that extend beyond high school but do not include a baccalaureate degree—that is, grades 13 and 14. This last factor was related to the need for new occupational skills for new and existing workers, the availability of more leisure time among housewives and others, and delays in finding jobs among young people.

The authors also identified the following emerging areas of interest in relation to the divide between K–12 and postsecondary education: potential conflicts over educational finance, contested control of grades 13 and 14, and a lack of responsibility for career and technical education.

\(^2\) The study was conducted in 1967 and published in 1969.
Potential Conflicts over Educational Finance

At the time of the study, there were minimal disputes between K–12 schools and higher education over finance. This was partly because state legislative processes for making budgetary decisions were separate for the two sectors, and partly because of the luxury of the boom years of the post–World War II period, when the United States enjoyed unprecedented economic hegemony. Nonetheless, Education and State Politics emphasized that educational finance was the most important area of potential conflict between K–12 schools and higher education.

The fiscal challenges that faced education in the late 1960s, of course, are different from those today. During that decade, education leaders and policymakers needed to accommodate large increases in enrollments during a time of prosperity; today, states have similar needs to increase the educational attainment of their residents, yet they are facing the worst fiscal crisis since the Great Depression and serving much broader student populations, in terms of ethnicity, income, English language ability, and age. In these conditions, the long-prevalent arrangement—under which finances for the two sectors are considered in isolation of each other—will be under growing pressure, both from increased demands for funds and from dissatisfaction with the adequacy of revenue sources to meet those demands. For example, as the movement for property tax abatement has grown and persisted for several decades, most states have periodically revised school revenue formulas and drawn more support for K–12 education from their state general funds—which also support state appropriations to public colleges and universities. From 1989 to 2009, state funding has been reduced more severely for higher education than for K–12 education. Almost a half century ago, in the hopes of increasing collaboration among K–12 schools and higher education, Education and State Politics alluded to the need to create new coordinative structures across K–16 to screen and reconcile claims on the state treasury. This alternative, needless to say, has gained little or no traction.

Contested Control of Grades 13 and 14

A second issue identified in Education and State Politics as a potential area of conflict in inter-level relations was the control and orientation of education in the 13th and 14th grades. Three general patterns had evolved in the 12 states studied. Some states developed community or junior college systems; some invested in branch campuses of state universities; and some used a combination of the two or had not settled on an approach. Today, many states still do not appear to have a systematic approach for handling the first two years of postsecondary education.

Even in those states that have developed a coherent plan for grades 13 and 14, there have been some continuing controversies between K–12 and higher education stakeholders. In California, for example, junior colleges were originally part of K–12 school districts, but state policy later declared community colleges to be a part of the
higher education system—and the community colleges have distanced themselves from secondary education. As the rapid expansion of community colleges continues and their importance to the nation’s economy becomes more visible, the possibilities for inter-level conflict remain alive in many states—and the evidence of cooperation is primarily localized.

In addition, in most states there is not a cohesive voice articulating and addressing the needs of students in grades 13 and 14. Even in those states with strong community college systems, the community colleges have rarely developed consistency and solidity among themselves. Their staffs have tended to divide between those with an orientation to local and vocational community services and those oriented to the academic transfer function. They also tend to be divided between those who favor state finance and control and those who wish to see local control predominant. As a result, it has been difficult historically for community colleges to present a coherent policy agenda to the state legislature and governor. This is not to say that community colleges do not have political power, for their mission has a wide and practical appeal among legislators, the private sector, and local constituents. *Education and State Politics* speculated decades ago that the community colleges may well gain sufficient identity to make themselves a “third force” in educational politics. But these colleges still seem—despite their huge enrollments and increased visibility—to be some distance from achieving the status and leverage commensurate with their potential or size.

**Lack of Responsibility for Career and Technical Education**

In contrast to finding areas of engagement in grades 13 and 14, the authors of *Education and State Politics* found a void in leadership in both K–12 and higher education for career and technical education. Despite the obvious social and economic importance of vocational education over the past decades, historically it has not been a central educational priority for either of the two levels of education.

In the states, statewide departments of education have tended to oversee career and technical education, with local programs offered in secondary schools, community colleges, state colleges, and, in some cases, special technical schools. In general, four-year institutions have displayed little interest in career-technical training, as distinct from professional training. Meanwhile, the diversity of the community college mission—spanning from community issues to academic transfer—combined with scarcity of resources, has diluted these colleges’ ability to address vocational training issues. Likewise, the high schools, with their comprehensive missions, have had difficulty addressing the needs of career and technical education, particularly in maintaining industry standards during periods of budget restraint. Except in the agriculture field, historically there has not been much organized interest in promoting technical programs across K–16 education. Much of the impetus has been supplied by federal grant-in-aid funding.
Historically, the result has been a no-man’s land of educational politics and policies for career and technical education. There has been a lack of responsibility within states for programs that span K–12 and higher education. Generally speaking, articulated technical programs between K–12 schools and community colleges continue to suffer from lack of coherent direction and commitment despite the emergence of STEM (science, technology, engineering, and math) and other national initiatives. Career and technical programs in secondary schools are rarely linked to postsecondary education in terms of credits or articulated instruction. Federal initiatives like “Tech-Prep” have not made much difference in adding coherence.

Some attribute the historical confusion to decades of federal bureaucratic intervention. The issue of global economic competitiveness and the current fiscal downturn may finally trigger the emergence of technical education as a national and state priority. But without an accountability structure or way to develop and finance programs more consistently between K–12 schools and higher education, it is not clear that prioritizing the issue will resolve the challenges faced by existing career and technical programs.

Potential for New Inter-Level Relationships

The findings from Education and State Politics conducted over four decades ago remain distressingly germane to the contemporary situation regarding organizational relationships between K–12 and postsecondary education. In a world in which social, technological, economic, and demographic change has been the only constant, fundamental educational governance structures remain bifurcated, ossified, and seemingly immune from transformation. In essence, 40 years of profound and transformational history have passed with little change in governance structures or patterns of operation.

During this period, however, there have been many important attempts to improve coordination across K–12 and higher education. In 1969, Education and State Politics identified three particular organizational structures: those that governed elementary-secondary education, those that governed higher education, and those that have evolved to bridge the two. At that time, coordinating bodies designed to bridge the levels of education were rare and varied substantially in function and structure from state to state. With one exception, the New York Board of Regents, they were recent creations and for the most part proved to be ephemeral and ad hoc, with limited staying power. As a result, their effectiveness was extremely difficult to gauge. Except in studying the New York Regents, the study authors did not have an historical basis for examining the effectiveness of these coordinating bodies. However, the authors recognized that these bodies were important and suggested that overall K–16 coordinating mechanisms might help to increase cooperation and reduce conflicts between K–12 and postsecondary education. Over the past few years, a number of states have experimented with the development of
K–16 coordinating bodies; the next section summarizes several efforts, many of which have been spurred by funding from the Gates Foundation. The recent burgeoning of state-level K–16 councils, as we will discuss shortly, reflects the continuing and even more urgent contemporary need for inter-level coordinating mechanisms.

**STATE EFFORTS TO COORDINATE ACROSS SECTORS**

In examining state efforts to coordinate education from kindergarten to postsecondary education, it is useful to begin with the most far-reaching education policy structure in the United States—the New York Board of Regents. After providing a summary of the evolution of the Regents, we examine other state efforts beginning in the 1970s.

**New York Board of Regents**

The New York Board of Regents was created in 1784 to provide K–16 integration, and it is the broadest educational governance body in the nation. The Regents’ scope of authority includes elementary, secondary, and higher education, both public and private; the licensed professions, including medicine, nursing, law, and accounting; libraries, museums, historical societies; and public television and radio stations. Regents are selected by the state Legislature for five-year terms, with each legislator having one vote. Consequently, the Regents are not an integral part of the governor’s executive branch and lack independent fiscal powers. The selection of Regents through the Legislature provides some political insulation for the body, but also a remoteness and inaccessibility from the rest of state government. In many ways, the Regents are a fourth branch of New York State government.

The creation of the State University of New York (SUNY) system in the late 1940s led to a dramatic decline in the Regents’ attention to, and impact on, higher education. All colleges and universities outside the City University of New York (CUNY) system in New York City—public, nonprofit independent, and for-profit proprietary—are members of the SUNY system; SUNY has dominant budget authority over the state’s public higher education appropriations. Every eight years, the Regents develop a Higher Education Plan that is subject to the governor’s approval, but the plan did not link CUNY and SUNY effectively—and lately the Regents have not been viewed as a K–16 policy entity that connects K–12 schools and postsecondary education (Bracco and Sanchez-Penley 1997).

Even with its disproportionate focus on K–12 issues, the Board of Regents has retained one mechanism that aligns secondary and postsecondary education: the New York Regents Exams. When these high school end-of-course-based exams were first developed in the 19th century, student scores were a factor in university admission and financial aid eligibility. Over time, however, as New York’s student financial aid became need-based, and as the independence of the SUNY system increased, the exams were
used less frequently for SUNY admissions. The purpose of the Exams evolved to certifying minimum standards for high school completion. Currently, SUNY uses the SAT instead of the Regents Exams as an admissions factor, but the Regents Exams still provide high school students across New York State with information about academic content standards for postsecondary education. For example, Regents Exams include essays and open-ended questions that are closer than multiple-choice exams to requiring college-level standards of academic work. In addition, Regents’ syllabi provide a college- and university-oriented underpinning to high school course content throughout the state. Moreover, CUNY uses the K–12 Regents Exams as its own admission exam, a policy that can reduce remediation by sending clear signals about college standards to high school students. One important lesson from New York’s experience is that a consolidated K–16 governance structure can help align K–16 academic content standards.

Other State Efforts to Coordinate K–16 Education

In the 1970s, several states, including Idaho, Massachusetts, Pennsylvania, South Dakota, and Virginia, tried to connect K–12 and postsecondary education through the creation of governor-appointed secretaries of education responsible for both levels. The positions were created with the expectation that centralized, state-level leadership for K–12 and higher education could better coordinate and integrate education policy, including such areas as teacher education. After almost three decades, however, none of these states’ K–16 system goals and policies are as aligned as they were originally intended to be. For example, note the following disconnected current policies in states that have attempted to coordinate governance through secretaries of education:

- In Idaho, strong public concern for the quality of K–12 education monopolized the attention of the secretary of education and Board of Education, which led to greater independence and less scrutiny of higher education.

- In Massachusetts, higher education leaders increased academic requirements and decreased remedial courses at public colleges—without significant involvement of the secretary of education or K–12 educators.

- In Pennsylvania, student performance on the high school exit exam does not relate to any postsecondary standards. Tying performance on these exams to postsecondary admissions and/or placement can help address students’ low motivation to perform well, as well as providing clearer signals to students about the skills needed for college-level academic work.

- In Virginia, compulsory 11th grade end-of-course exams contained relevant content to assess higher education readiness, but there has been no serious discussion of using Virginia’s K–12 standards of learning for postsecondary admission or placement.
In the wake of the failure of attempts to integrate the sectors through imposed systemic reform in the 1970s, several states established more voluntary structures in the 1990s to improve collaboration among K–12 and postsecondary institutions and stakeholders. These initiatives have made some incremental progress, and some of the most ambitious of these efforts are the Maryland and Georgia P–16 councils (Kirst and Venezia 2004). The goal of these councils is to transform the ways in which schools and colleges operate, not just to add new programs or initiatives. While still evolving, Maryland and Georgia’s P–16 councils have put much more effort into improving teacher education than improving student pathways from secondary to postsecondary education. Recently, however, the Georgia council began developing academic content standards for the first two years of college that are linked to the state’s K–12 standards.

While it is too early to reach a final verdict on the effectiveness of voluntary alliances, there are two major questions that arise, one concerning sustainability and the other impact. First, can these voluntary structures survive the statewide leaders who created them, when they depend for longevity on the commitment of the next generation of leaders from both levels of education? Both the Georgia and Maryland councils changed their focus and structure after new governors were elected. Second, can ad hoc, voluntarily adopted approaches lead to institutional changes that will improve rates of postsecondary success? Richardson et al. raise the essential issue about whether governance structures will be effective apart from specific leaders:

Certainly, leaders matters, but even good leaders should not be expected to achieve consistent results in the presence of a system design that inhibits institutional collaboration and system synergy. Leadership can make a system perform better or worse than its structural design, but it cannot compensate for badly designed systems or mismatched policy environments (Richardson et al. 1999, p. 17).

Over the past two decades, states have also experimented with other ways to coordinate K–12 and higher education, including through legislation. For example, in Florida the Legislature passed a bill which the governor signed into law in 1999 that sought to establish a “unified, seamless K–20 education system” in the state. This included creating a new, single, statewide K–20 Board of Education with broad authority that reached far beyond voluntary efforts. Meanwhile, a restructured state Department of Education has been implementing a unified K–20 accountability system, and the state has integrated its extensive student-unit record systems for K–12 and postsecondary education. There is some evidence that these changes in state governance and information sharing may be improving policy analysis in the state. Using centralized student-unit records, the state board identified school districts where a disproportionately low number of students were enrolling in the state’s four-year colleges or were needing remedial education upon enrollment. The state analyzed high school and middle college course-
taking patterns and determined that students in these low-performing districts were not enrolling in a rigorous sequence of high school courses (Venezia et al. 2005).

It is too soon to know the results of these efforts in Florida—particularly their effects on educational performance over time. However, Florida’s experience and recent studies suggest that if K–16 coordinating councils (whether voluntary or otherwise) are to have impact over time, they need access not only to key leaders but also to several important state policy levers, including: alignment of curricula and assessments; fiscal incentives; linked data systems; and accountability that reaches across sectors (Callan et al. 2006).

The three case studies described later in this report—concerning P–16 and P–20 councils in Arizona, Kentucky, and Rhode Island—reveal that states are increasingly using a range of structures to try to improve the coordination of education between K–12 schools and higher education. Given the escalating efforts to develop state educational structures that span the junctures from preschool to college, it appears that many states are recognizing the deep and abiding problems of this historical divide. Unfortunately, the evolution of these governance structures leaves unanswered the question of what types of state and regional structures will enhance K–16 deliberations, interaction, policy integration, and student outcomes. So far, no state has yet found a lasting way to facilitate deep interactions and linkages between K–12 schools and higher education.

LESSONS FOR THE FUTURE

It is clear from this brief history that the divide between K–12 and higher education derives from long-lasting structural developments that are diverse and deep-rooted, and that continue to separate the education levels today. These developments include: disjointed curricula for grades 10 to 14; the evolution of teacher preparation programs; the detachment of community colleges from high schools; divided governance and finance; and inter-level relationships that were virtually nonexistent 40 years ago.

Over the past four decades, many states have sought to create better linkages across education from kindergarten to college. In many cases, state efforts at consolidated governance structures and voluntary alliances have been unfruitful. Even in those cases that have been more promising, vast divides remain between the education levels.

If governance alone cannot bridge the divide between K–12 and higher education, what can? Based on historical precedent, we should not expect change to be effected spontaneously from within education. The two educational levels have so little contact among faculty and administrators that substantive pressure to bridge the current divide is unlikely to derive from these sources. Even the development of K–16 governance and accountability mechanisms, such as in Florida, have not yet brought K–12 and postsecondary education together to create an aligned curriculum or integrated finance policies.
States’ most promising approaches may be a combination of governance reform and better use of key state policy levers and incentives that reach across sectors, including curriculum alignment, fiscal incentives, linked data systems, and accountability. But there are substantial challenges in each of these areas. For example:

- **Alignment.** The No Child Left Behind (NCLB) law encourages states to develop K–12 assessments with low standards that do not link with the high-level skills needed for college. By having low-standards tests, some states hope that more students score higher, which can avoid federal/state interventions.

- **Finance.** State fiscal processes do not consider K–16 as one continuum, but rather as two distinct systems.

- **Data Systems.** Our historical legacy does not include longitudinal data systems in the states for tracking students across K–16, so it is difficult to measure progress.

- **Accountability.** Accountability systems are separate for K–12 and higher education, so there is not much historical encouragement for the systems to develop and implement K–16 policies.

As this history demonstrates, K–12 and postsecondary education are not natural allies in the work to improve student transitions between the sectors. The current disjuncture evolved through different historical paths, splintered governance structures, separate faculty and professional associations, and a variety of curriculum standards. P–16 councils have brought disparate K–12 and postsecondary partners together for initial useful deliberations, but in-depth policy impact and long-run sustainability remain challenging. The historical divide has created political constituencies that focus on each level rather than on what they can accomplish together.

In sum, the historical record is daunting when considering the prospects for success of P–16 councils. What is promising within this record, however, is the increased attention by states and national organizations, including foundations, to develop better linkages between K–12 schools and higher education. Whereas 40 years ago inter-level relationships in education were virtually nonexistent, there are now many local, regional, state, and national efforts to build K–16 transitions for students. As the states and nation find themselves in the midst of the worst fiscal crisis since the Great Depression, it is imperative that these efforts move beyond superficial discussions and engage education stakeholders in concrete inter-level reforms that can improve student readiness for college, student transitions into college, and college completion rates. Should some of these efforts succeed, the states can begin to write a new page in the educational history, one that is populated by students progressing through an integrated system spanning from preschool to higher education.
The Reformation, considered by some to be the most significant historical event after Christ’s birth (Kienel), produced great church leaders such as Luther, Calvin, Knox, Wycliff, Huss, Tyndale, Melanchton, and Zwingli. These men were strong advocates of Christian schools and Bible-centered learning for their basic purpose of preserving the integrity of the gospel of Christ (Kienel, p. 167). This historical review, as well as examining the barriers to K-16 articulation, seeks to offer insights into the possibilities for improved inter-level integration. We will examine the K-16 dichotomy through the following major developments that have helped to cement the divide between K-12 schools and higher education in the United States: Disjointed curricula for grades 10 to 14; The evolution of teacher preparation programs; The detachment of community colleges from high schools; Divided governance and finance; and A lack of inter-level organizational relationships. In the final s... The divide between technical and vocational education/training continues to be ill defined and confused. No concerted effort was made to integrate/assimilate aspects of technical education into secondary education—the first real attempt was in the late 1970s and 1980s, namely the Technical Vocational Education Initiative (TVEI). No one can refute that the education system is central to any society and that its effectiveness is reflected in a country’s strengths and weaknesses both domestically and abroad. Education and training is a fundamental element of society and key to its ultimate success in competing economically in the world. Equality between the delivery systems has been well documented over decades for adult learners, and while much less research exists focusing on K-12 learners, the results tend to agree. By the time they reach higher education, most adults have acquired a degree of autonomy in learning, but younger students need to be scaffolded as part of the distance education experience. Virtual school teachers must be adept at helping children acquire the skills of autonomous learning, including self-regulation. Only one of the recent meta-analyses in distance education focused on K-12 learners, and it included web-based programs along with the analog conference and broadcast programs. no longer in common use in today’s virtual schools. Closing the K-12 digital divide in the age of distance learning. Across the United States, even before the onset of the novel coronavirus pandemic, there was a significant digital divide between K-12 students with and without access to high speed internet and computing devices at home, known as the homework gap. A new analysis by Common Sense and BCG finds that the nature of the homework gap has changed in this period. This is an important distinction in the context of today’s distance learning environment, to ensure equitable access to technology resources. To reduce learning loss and continue education gains for K-12 public school students in...