

## CHAPTER VI

Nationally, there has been a renewed interest in career and technical education programs and more internship and work-study programs:

The key to our nation's success won't come from channeling an indiscriminate mass of students along one track toward college, especially when we lose 30 percent of them along the way. It will come by combining demanding academics with other educational opportunities, and by creating a class of high school graduates who leave with skills to succeed both in a technical job and in the realm of higher education. It will come by graduating classes of students who have something invested in their own success, and who arrive in the world with a vision and the know-how to achieve it." <sup>180</sup>

State leaders in Kentucky believe that rigorous career/technical courses—ones that integrate academic skills and industry-developed end-of-program exams—have improved the academic achievement of students. Since the courses were redesigned, Kentucky's career and technical students have improved more than other students on the state accountability test.<sup>181</sup> Some states, following the Kentucky pattern, maintain multiple tracks, some headed for the workplace, some headed toward high education, and some preparing for both. Other states are attempting to integrate more career and technical education into traditional academic coursework. Regardless of the instructional approach, all students must complete a rigorous curriculum.

Whether students enter the workplace from high school or from postsecondary education, their individual instructional programs should be closely tied to the theoretical and practical knowledge and skills needed to be successful in the workforce. Emphasis on real world applications of curriculum content does not diminish the critical importance of mastery of core academic subjects. This is not about "dumbing down" traditional curriculum, as has been charged by the critics of Physics First. It does suggest a need for reevaluating curriculum content and establishing a balance appropriate for our times.

### Chapter Summary

Keeping Illinois competitive requires the learning standards and graduation requirements to be aligned with the needs of the economic infrastructure of the state. Even though the traditional aspects of the *Illinois Learning Standards* have received above average national ratings, the "Applications of Learning" sections of the standards, which reflect the additional 21st Century skills and knowledge, and the alignment of the standards to workplace expectations are not assessed at the state level. Little is known about the extent to which the Applications are implemented in the classrooms. In fact, assessment of the Applications at the local level may be more appropriate and more practical.

## STANDARDS, ASSESSMENT, AND INSTRUCTION

National research on instructional practices advocates a rethinking of the traditional U.S. organization and delivery of instruction. The major focus at this time is on redesigning high schools to be more engaging for students; to use more authentic, problem-solving and hands-on approaches; and to be aligned with the expectations of postsecondary education and the workplace. Illinois has made some headway in addressing the high school problems, most notably with the Chicago initiatives and through isolated projects receiving Comprehensive School Reform grants and *High Schools That Work*.

For all levels of education, research indicates that cross-disciplinary approaches focused on deep levels of understanding and the opportunity to solve new problems result in higher levels of student academic performance. There are isolated projects across Illinois implementing this type of approach.

Illinois has several underutilized mechanisms in place that could be useful in aligning the standards and instructional programming across high school and postsecondary education and to the needs of business and industry. The current high school graduation requirements, which are comparatively low and are focused on "seat time" not alignment with standards, need to be the subject of ongoing discussion.

The success of graduation standards is necessarily tied to the ways in which instructional programming is structured. Nationally, there is a renewed interest in career and technical education as a way to provide multiple pathways for students to achieve the same rigorous preparation for postsecondary education and the workplace. At the college level, increased emphasis is being placed on ensuring the instructional programs provide students with practical, applied knowledge and skills as well as theoretical knowledge. These approaches require collaborative relationships among education, economic development, and business and industry professionals.

*No matter what the curricula is for high school or how rigorous the graduation requirements, if only slightly more than half of all 8th grade students are meeting the Illinois mathematics and science standards, they are not "high-school ready."*