UPDATE: Many of our readers are familiar with Jobs for the Future, but some may not be. Could you summarize what the organization does and some of the many programs and initiatives that it offers?

Dr. Hoffman: Jobs for the Future (JFF) is a national policy and advocacy nonprofit located in Boston, established in 1983. JFF works across the country on education and workforce development issues with a goal of doubling the number of low-income young people and adults who complete a postsecondary credential and attain a family-supporting career. JFF has satellite offices in Washington, DC and in Worcester, MA where we have a very successful school that serves low-income students. This school functions as a clinical site, the University Park Campus School Institute, where we bring practitioners to learn about preparing all students for success in college.

JFF’s vision is:
- That all young people make a successful transition to adulthood by obtaining a strong high school education and an advanced educational credential.
- That all adults have the education and skills they need to get and keep a job—and to advance in family-supporting careers.
- That our nation has a workforce that meets the demands of a changing global economy.

Major initiatives of JFF include Achieving the Dream: Community College Counts, a national initiative that promotes change to improve student success at community colleges; Breaking Through: Helping Low-Skilled Adults Enter and Succeed in College and Careers, a collaboration between JFF, the National Council for Workforce Education (NCWE), and the Mott Foundation; and the Early College High School Initiative, funded by the Bill & Melinda Gates Foundation and others. JFF also works on new models and polices to support the success of older adolescents who have dropped out of high school or are not progressing at an appropriate rate.

UPDATE: The Early College High School (ECHS) Initiative is a very innovative program, taking the idea of dual enrollment and expanding it much further. What is the idea behind the program, and how does it work?

Dr. Hoffman: JFF is lead coordinator and policy advocate for the ECHS Initiative that has created more than 200 small high schools nationwide—with more schools in the pipeline. They currently serve 42,000 students. (For more detail, see JFF’s Early College High School Web site: [http://www.earlycolleges.org](http://www.earlycolleges.org)) ECHS blends high school and college in a rigorous, yet supportive program, compacting the time it takes to complete high school and the first two years of college. The schools are designed so that...
low-income youth, first-generation college students, English language learners, students of color, and other young people underrepresented in higher education can simultaneously earn a high school diploma and an Associate’s degree or up to two years of credit toward a Bachelor’s degree—tuition free. From the beginning, the goal of ECHS has been to accelerate rather than remediate young people who were not prepared for postsecondary education. This idea was a hard sell at first because this idea seemed counter-intuitive. As we moved along, however, the results were positive and people began to believe it could be done.

In terms of how ECHS schools operate, a mix of schools and colleges can be involved, including charter schools, two-year colleges, and four-year universities. Thirteen intermediaries such as the Center for Native Education (http://www.centerfornativeed.org/), and the Woodrow Wilson National Fellowship Foundation (http://www.woodrow.org/fellowships), and public private partnerships between nonprofits and the state such as the North Carolina New Schools Project and the Texas High School Project take the lead in starting early college schools. All schools adhere to a set of core principles developed by the intermediaries. JFF acts as the glue to the network as well as its advocate in developing national and state policy to support the early college movement. JFF and its intermediary partners play an integral role in guiding the vision, mission, and overall strategy for the ECHS Initiative nationwide.

This interview comes at a great moment for the schools. We have been carefully gathering data on what we call “the early college movement” and finally, we have a graduating class big enough to make us confident that this movement—regarded with great skepticism by many (“How can underprepared students accelerate when they need remediation?” “You must be taking only the most gifted kids”)—is producing terrific results. Of our first 2258 graduates who have been in high school just four years, 40% graduated with more than a year of college credit, 11% graduated with a high school diploma and an Associate’s degree, and 81% immediately enrolled in additional postsecondary education (two- and four-year college/university). The schools have an eye-catching 92% graduation rate (calculated using the US DOE cohort methodology.)

**UPDATE:** What are the biggest challenges facing underserved populations when it comes to accessing college? What promising practices help to reach these populations?

**Dr. Hoffman:** The students we’re dealing with need three major things: a rigorous academic program; a promise by middle school or at least 9th grade that financial aid is available for college; and a supportive community, family, and school. Our schools are small, so they provide most of these elements.

The fact that ECHS offers up to two years of free college and support to accelerate students’ educational experiences from secondary to postsecondary is motivating. Students attending an ECHS are encouraged to develop their academic identity early on, so they begin to see themselves as college students. Attending a College 101 course, having a college ID, and engaging in activities on a college campus and meeting professors helps to demystify the college-going process for students. Interestingly, some ECHS students who take courses at college campuses don’t want professors to know they’re high school students—and they often do better than regular college students!

A major challenge for this population is that students are often two, three, or even four years below grade level when they enter early college schools. They require extensive catch up work in reading, writing, math, and other fundamentals. More and more of our schools are starting in 6th or 7th grade and using the middle years for intensive catch up—this is the model of our clinical site at University Park. A positive feature of small schools, such as those affiliated with ECHS, is the strong interpersonal relationships that students form with professionals. These relationships often lead to a level of maturity that is needed for students to be successful at the college level.

**UPDATE:** In Illinois, we are in the second year of implementation of pilot projects associated with the College and Career Readiness (CCR) Act. A key assumption underlying the CCR Act is that high schools and colleges share responsibility for making sure that students transition seamlessly from high school to college. In your article, *College Credit in High School: Increasing College Attainment Rates for Underrepresented Students*, you discuss student transition. Based on your research and experience, what should educators and policy makers in Illinois and elsewhere do to create successful transition programs?

**Dr. Hoffman:** As far as aligning curriculum to improve transition, rigorous high school programs are essential. We particularly like David Conley’s work on college readiness which characterizes habits of mind needed for successful college work. We’ve been following Conley’s advice at University Park by modeling the senior year in high school more like a year in college. For example, students take classes three days a week instead of every day; they work from a college syllabus; they learn to take notes in lectures, and they audit or enroll in classes at Clark University, UPCS’s neighbor and partner. Lack of familiarity with these kinds of college expectations trip students up, so we simulate them so that they work toward improving their transition.

Other factors that contribute to a successful transition are a combination of rigorous high school programs and social supports. We help students understand what independence is about by providing supportive settings for learning. Across many urban communities, we still have a long way to go in helping students to not see college financing as a major barrier. Beginning in 9th grade, we help students understand what funding is available for college so they know that they will get support.

**UPDATE:** A big component of ECHS is collaboration with higher education partners to develop an integrated academic program. Likewise, one of the main purposes of the CCR Act here in Illinois is curriculum alignment. Could you elaborate on what an integrated academic program of ECHS looks like?
What steps should high school and postsecondary institutions take to ensure that curriculum alignment is as fruitful as possible?

**Dr. Hoffman:** One very good example of integrated curriculum is in the City University of New York (CUNY) network. The New York City public schools and CUNY are very well connected, and they have set up a very good long-term program. The CUNY early college network prepares students for college by providing college courses and pre-college courses in high school and earlier grades, and they have a very good understanding of how to do this. Students have a 7-year academic plan in which they complete all their Regents exams as well as the general education requirements for the first two years at CUNY. College and high school faculty work very closely together.

In some other sites in the ECHS network, high school teachers know what is required in college courses and some are co-teaching courses with college instructors so they understand college course requirements. But in all our schools, there is still much work to be done to ensure that courses are aligned, that students get the supports they need, and that college teachers have the opportunity to learn from high school teachers some of the pedagogical techniques that are particularly engaging and successful with 17- and 18-year-olds.

In general, people are concerned about math and English. Under dual enrollment, we are urging states to enable students to take the gatekeeper academic courses (e.g., math, English) because success in these courses is a predictor of future success in postsecondary education.

Math is relatively well aligned in most schools, but there is still the question of what is the correct math course—should it be statistics instead of algebra? An additional question is: are the college standards high enough? Some institutions appear to have “dumbed down” college math to lower the need for remediation. That is not a good thing.

English, on the other hand, is not well aligned—since the first college English course is usually English composition. But high schools focus on literature courses and have a long way to go to prepare students for expository writing and the demands of college texts. So there is still a great deal of work to be done there.

**UPDATE:** Another core principle associated with ECHS relates to student supports, including the notion of a comprehensive network of supports. For a school that is lacking human and capital resources (as many high schools are), what supports are essential?

**Dr. Hoffman:** One of the most significant things to do is to make sure there are consistent reading, writing, and literacy practices offered throughout the school—in every classroom. These subjects can be taught in many different ways in different classrooms within the same school, which is very confusing for students. Schools need to make a decision about how to approach literacy, requiring every teacher to take responsibility for being consistent and avoiding a chaos of approaches.

**UPDATE:** In a 2008 report entitled, *On Ramp to College: A State Policymaker’s Guide to Dual Enrollment*, you and your colleagues devote a section to the importance of developing state-wide data systems. Why are longitudinal data systems important? Can you think of any examples of states that have done a good job of creating and using data systems?

**Dr. Hoffman:** Without a data system, there is no feedback to help implement programs and improve students’ performances in high school and college. The high school/college divide is of particular concern since there are not many data systems linking secondary and postsecondary student-level data. Right now, we obtain data about early college graduates from the National Student Clearinghouse, but it is still difficult to match student identifiers across systems to tell us about success rates, persistence, etc. Florida has one of the best systems because its tracking system follows kids through high school, the postsecondary level, and even into the workforce. President Obama’s new economic stimulus package provides funding for states to build data systems, so it will be interesting to see what happens as a result.

**UPDATE:** Finally, collaboration between partners is mentioned frequently in the core principles of ECHS. How important is collaboration, and how can partners achieve better collaboration at the local level?

**Dr. Hoffman:** Educators have been working on school/college partnerships for a long time, and there is not a great track record of success. A lot of good work is going on now. But often, it is happening at the individual faculty level rather than as an institutional commitment. So when the faculty project is over, the collaboration disappears. Of course, there are many exceptions, and they often occur in places where schools and colleges are dependent on each other because there are not many other options available. One is the closed-loop system in El Paso, Texas where El Paso Community College faculty trains the teachers who teach in the public schools. Then, the public schools send their graduates to the community college and the university so each sector has feedback about how well they have prepared students for the next step. El Paso also has strong and long-lasting leadership in higher education, the school system, and in the community.

Ultimately, an important lesson that we have learned is that if the postsecondary sector is vested in the process, the partnership is more likely to be sustainable. In other words, if a postsecondary institution is giving college credit to high school students, it has to be concerned about quality, grade point averages, money being used efficiently, and joint decision making. So, the ECHS model requires that postsecondary institutions be committed partners—they must have a real stake in the students’ outcomes that, in turn, affects their bottom line and reputation.

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Moving Forward with College and Career Readiness

by Jessica Barrientos and Brian Durham

INTRODUCTION

Community colleges are the state of Illinois’ leaders in the delivery of developmental/remedial education. From 2003–2007, community college students in Illinois earned an average of 385,772 credit hours in developmental education (Illinois Community College Board [ICCB], 2008). Further, the percentage of first-time, full-time students in Illinois required to take developmental/remedial coursework averages 50 percent, with some districts as high as 80 percent (Illinois Board of Higher Education [IBHE], 2008). These statistics suggest that graduates will immediately encounter academic obstacles. The College and Career Readiness (CCR) Pilot Program was designed to combat this problem by making students’ transition from high school to college more seamless and by reducing the need for developmental/remedial education.

The CCR Act, Public Act 095-0694, became effective in November of 2007. Sponsored by Senator Edward Maloney and Representative David Miller, the legislation was funded in the amount of a $750,000 appropriation to the Illinois Community College Board (ICCB). The program grants funds to Moraine Valley Community College, South Suburban College, Southwestern Illinois College, and a partnership between John A. Logan College and Shawnee Community College. These colleges were selected to participate based on a number of criteria, including demographics, geographic diversity, and partnerships with local high schools. The response to the CCR Pilot Program has been overwhelmingly positive. Faculty members, counselors, and administrators from both secondary and postsecondary institutions, along with civic and business leaders, are discussing the needs of their respective communities and collaborating to develop effective interventions.

The five CCR Pilot Programs are to meet five specific objectives specified in the legislation:

1) Diagnose college readiness through the development of a system that aligns ACT scores to specific community college courses in developmental and freshman curriculum;
2) Reduce the need for remedial coursework in math, reading, and writing at the college level;
3) Align high school and college curriculum;
4) Provide resources and academic support to enrich students’ senior year of high school; and
5) Develop an appropriate evaluation process to measure effectiveness of intervention strategies.

DIAGNOSING COLLEGE READINESS

ACT has been a committed partner through this process. As a part of the diagnosis of college readiness, the colleges submitted developmental and general education transfer courses to ACT’s Course Placement Service. This service assesses a college’s cutoff test scores for entry into courses. In addition to working with ACT, all sites utilized a local college placement exam to determine student placement in their interventions. In the second year of this pilot, the ICCB, in cooperation with ACT, invited colleges from around the state to participate in the Course Placement Service. To date, over 40 colleges have submitted their courses for ACT analysis.

REDUCING THE NEED FOR DEVELOPMENTAL/REMEDIAL COURSEWORK

To reduce the need for developmental/remedial coursework in math, reading, and writing, the pilot program sites are administering a number of interventions that target current high school juniors and seniors. The types of interventions vary in scope, timeline, and method. The diversity in the initiatives reflects the diverse needs of the community colleges’ districts and the various innovative responses to the legislation’s mandate.

During the first year, John A. Logan College (JALC) developed a summer orientation that offered incoming freshman the opportunity to learn about the college and the CCR Pilot Program, along with a three-day math intervention focused on math remediation. For the second year of the CCR Pilot Program, JALC is expanding its math intervention to six weeks.

After taking the COMPASS test, seniors attending three partner high schools associated with Moraine Valley Community College (MVCC) were invited to participate in an 8-week summer program at MVCC to receive instruction in math, study skills, and “college knowledge”. The focus on graduating seniors will continue during the second year, but attention to high school juniors will become a larger component.

Shawnee Community College (SCC) delivered a summer intervention that incorporated the CCR Act goals into an established credit recovery program. The credit recovery program was complimented with an academic enrichment component, providing students an opportunity to further develop their college and career readiness.
Southwestern Illinois College (SWIC) administered the College Success Initiative (CSI) to give qualified students in high-need areas the chance to improve their college and career readiness knowledge. CSI was a semester-long program during the spring of 2008 that provided instruction in math remediation, college counseling, and academic tutoring. In year two of the CCR Pilot Program, SWIC will expand its CSI program to the fall and spring semesters and provide more student-focused workshops with additional partner high schools.

During the first year of the CCR Pilot Program, South Suburban College (SSC) implemented the Academic Intervention for Matriculation, or AIM Program, to provide qualified juniors from three partner high schools the opportunity to improve their skills in math or reading/writing. During the second year of the pilot program, SSC will increase its number of partner high schools to recruit more students and expand its AIM Program to include multiple cohorts.

ICCB continues to emphasize the importance of student impact. These interventions have the potential to provide a large number of students with the skills and knowledge needed for college and career readiness. During year two, ICCB has requested that sites outline their recruitment strategies. ICCB has provided sites with feedback and facilitated conversations between the sites so that the program administrators can learn about effective recruitment methods that other sites are implementing.

ALIGNING HIGH SCHOOL AND COLLEGE CURRICULUM

Across the sites, program administrators stressed that the approach taken to curricular alignment must be one of collaboration and to avoid playing a “blame game” of high schools’ alleged academic deficiencies. Faculty members from both high schools and community colleges are eager to provide their input on student transitions and to learn about curricular alignment and best practices.

Arrangements for discussing curricular alignment vary at each site. JALC held numerous workshops and meetings that gave faculty members an opportunity to talk about their high school students’ needs and to identify promising practices for readying students for college. With the CCR Act grant, SWIC was able to further enhance and expand existing curricular alignment projects in which high school and community college members compare grading rubrics and grading styles. SCC held a CCR Summit with high school and college faculty to identify strategies to help students reduce remediation. Comparison of grading rubrics are also a component of SCC’s curricular alignment agenda.

Conversations about curricular alignment are not always easy. MVCC found it important to hire a high school liaison to represent both the high school and community college perspectives on curricular alignment and assist in facilitating communication between institutions. The liaison helped to bring the parties together to engage in a productive dialogue about future opportunities.

ENRICHING THE SENIOR YEAR

Several of the interventions delivered last year were designed to include high school seniors, such as SSC’s AIM program and SWIC’s CSI program. These program sites will continue to enhance these models while other sites will implement academic enrichment opportunities for juniors and seniors throughout the school year. For example, SCC intends to offer ACT preparation workshops and science enrichment activities, while JALC will provide seniors with CCR guides/tutors and offer dual credit opportunities for qualified students.

Administering the COMPASS test to high school seniors is also a goal of all program sites. After students take the test, they will have a chance to learn the meaning of their test scores through follow-up assemblies and workshops. It is the hope that by understanding the significance of COMPASS scores, students will better understand what is needed to be college ready.

EVALUATION PROCESS

The ICCB has contracted with the Office of Community College Research and Leadership (OCCRL) at the University of Illinois to evaluate the project. The OCCRL brings years of experience to evaluation and significant expertise surrounding transitions from high school to college. The state is using the evaluation to describe the programs and practices that the pilot sites are using, to assess student outcomes, and to plan for sustainability beyond the life of the project, including documenting how the colleges are evaluating their own programs.

During the second year of the evaluation, programs are asked to submit information on how they are using the OCCRL evaluation in the development of their own local evaluation. In the third year, the evaluation will focus more intensively on student outcomes and sustainability, both in these pilots and on the continuation of the legislation. Evaluation results are a critical tool to making this a reality.

THE STATE’S ROLE

The ICCB intends to provide program administrators a national perspective of curricular alignment. At future meetings, program administrators will learn about approaches other states are taking to address curricular alignment and to develop state and local policies that attempt to smooth the transition from high school to college.

The CCR Pilot Program is an important part of the larger state agenda around strengthening the transition from high school to college and reducing leakages in the educational pipeline. For example, the Public Agenda for College and Career Success (Public Agenda), led by the Illinois Board of Higher Education (2008), places developmental/remedial education as a centerpiece of its several goals. The Public Agenda says Illinois must “reduce remediation for recent high school graduates through stronger postsecondary/high school partnerships for early
identification and correction of gaps in knowledge and skills” (IBHE, 2008, p. 18). The CCR Act will facilitate local community college integration into this broader higher education initiative.

Also, Illinois is the 34th American Diploma Project (ADP) state. Originating from Achieve, Inc., the ADP is aimed at aligning high school standards to college curriculum and closing the gap between high school and college expectations (Achieve, Inc., 2009; Office of the Governor, 2008). The Illinois State Board of Education (ISBE) is working with the ICCB, the IBHE, and the Illinois Business Roundtable, along with countless other state and local stakeholders, to achieve this goal. Colleges that have already participated in the CCR Pilot Program and the ACT Course Placement Service are poised to partner in this initiative as it begins to be implemented locally.

Recently, Senators Heather Steans, Kimberly A. Lightford, Edward D. Maloney, James T. Meeks, Pamela J. Althoff and Dan Cronin sponsored the P-20 Longitudinal Education Data System Act. If passed, this Act would require the development of a P-20 student unit record system (P-20 Longitudinal Education Data System Act, 2009). This legislation mirrors a goal of the Public Agenda and provides an opportunity to refine and develop the data driven decision-making that often eludes developmental/remedial education policy. This legislation will help drive better alignment between secondary and postsecondary systems, a critical component of strengthening college readiness (Achieve, 2009; Callan, P., Finney, J., Kirst, M., Usdan, M., Venezia, A., 2006; IBHE, 2008).

CONCLUSION

The CCR Pilot Program has not been without its obstacles. The late appropriation of grant monies during year one (due to a delayed state budget) prompted the pilot sites to develop intervention strategies quickly to meet the mandates of the legislation. During the second year, the pilots have been able to devote the necessary time and resources to fully develop their innovative interventions and readiness prescriptions. Some of these interventions are working better than others. However, this fits with the ICCB’s overall expectation for CCR and the philosophical goal of the law, to examine what works and to develop effective strategies of developmental/remedial education and curricular alignment that can be pursued aggressively and sustained.

The ICCB commends the pilots for their work thus far. Nonetheless, the ICCB and the community college system recognize the daunting nature of the problem. Only through continued innovation, trial and error, and support from the General Assembly can the projects be sustained. Efforts thus far have been fruitful but more will be required in the coming years as the economy cools further and the number of enrollments in the system climb. With an increase in enrollments, students’ developmental/remedial educational needs are expected to increase. The CCR pilots are expected to lead the state in providing preparation and remediation for future classes of community college students.◆

REFERENCES


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Evaluating the College and Career Readiness Act

by Sadya Khan

OCCRL was granted funding by the Illinois Community College Board (ICCB) for a 3-year project to evaluate the state’s attempt to align high school and community college curriculum and reduce the need for remediation at the postsecondary level. Evaluation questions from year one focused on goals, policies and practices employed by the CCR pilot sites, collaboration of various partners in implementing CCR, and the role of state and local organizations in supporting CCR. Selected findings from year one of the CCR evaluation include the following:

- All pilot sites shared a few common goals in implementing programs for the CCR program, including:
  - facilitating discussion and collaboration between high schools and the community college,
  - providing students with the skills and knowledge to score higher on placement exams, and
  - preparing students for the transition from high school to college.
- The pilot sites offered a wide variety of program approaches, including a range of target student populations, length and intensity of program delivery, curriculum content, and student services.
- Most pilot programs focused on college preparatory programs in math, with only a couple of colleges offering English/writing courses.
- Administrators associated with most of the colleges reported that parents and high school counselors are essential to the recruitment of students to the programs.

For more information, the year-one evaluation report is posted on the OCCRL website at [http://occrl.ed.uiuc.edu/Projects/CCR/files/CCRYear_One_Report.pdf](http://occrl.ed.uiuc.edu/Projects/CCR/files/CCRYear_One_Report.pdf)

Year two of the evaluation continues to focus on key practices employed by the pilot sites, as well as collaborative efforts by state and local partners in supporting CCR. Additional evaluation questions for year two include the following:

- What are the predominant patterns of academic (college preparatory) course-taking of rising senior students who engage in CCR remedial programs and supplemental services? What percentage of students progress to college preparatory coursework?
- What are promising and sustainable models of remediation and academic assistance?
- What other experiences and support services enhance student preparation for and transition to college, including student participation in college fairs, campus visits, career advising, college success courses, etc.?
- What are the intended and unintended consequences of student participation in CCR? What impact does the CCR program have on students’ aspirations for college and careers, their self-efficacy, and confidence?

Furthermore, year two of the CCR evaluation utilizes a model of college readiness developed by David Conley to evaluate students’ level of college readiness upon completion of the CCR interventions. Conley (2007) offers a comprehensive, multifaceted concept of college readiness that includes both internal and external factors to the school environment. The four facets of college readiness in Conley’s model are key cognitive strategies, key content, academic behaviors, and contextual skills and awareness, otherwise known as “college knowledge” (Conley, 2007). These four facets are not perfectly separated from one another, but rather work together extensively to create a more comprehensive definition of college readiness (Conley, 2008). (This issue of the UPDATE newsletter features an article by David Conley on page 23 explaining his model of college readiness in greater detail). In year two, the evaluation will work to operationalize Conley’s model of college readiness to measure CCR implementation.

In conclusion, key elements will be examined as OCCRL’s evaluation of the CCR Act moves into years two and three. The evaluation will continue to identify and describe promising practices that attempt to address remediation and better prepare students to be college ready. Additionally, as some of the colleges faced challenges with recruitment and retention of students in their CCR programs in year one, year two continues to look at the colleges’ strategies for increasing student participation and improving retention. Another priority for years two and three of the evaluation includes examining the coordination of state-level CCR activities with the local pilot programs. As Illinois recently became the 34th state to join the American Diploma Network (Achieve, 2008), the CCR evaluation could facilitate the use of data in measuring student outcomes and identifying promising practices. The CCR Act has created the opportunity for Illinois to examine and reflect upon issues of college readiness, curriculum alignment, and remediation and determine the potential for various strategies and approaches to better prepare high school students to transition to college and careers.

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The CCR Project at South Suburban College
by Marybeth Beno

South Suburban College (SSC) was one of five community colleges selected to participate in Illinois’ College and Career Readiness (CCR) Pilot project. Our initial program was planned in the spring of 2008 and began during the summer of 2008. This article describes the thought processes that went into formulating the original concept of the CCR program and its implementation in 2008. Lessons learned from the initial trial that are driving the second year of implementation of the pilot program in 2009 are discussed.

SSC, located just south of Chicago in South Holland, IL, serves three high school districts (D205, D215, D228) housing nine area high schools. While the majority of students attending these high schools indicate they are college-bound, upon matriculation many discover that their math, English, and/or reading skills are not adequate for college-level work. This discovery is disappointing to students and their parents, as remediation adds not only semesters but tuition dollars to their college plans. In an interview with a senior student at one of our feeder high schools, Jane (not her real name) complained about her academic preparation, stating, “I’ve been led to believe that I’m an honors student – I get all A’s and B’s here and rank near the top of my class, but I scored 19 on my ACT. What does that mean?” This student recognized the fact that she had not even achieved the state average ACT composite score of 20.7, and after four years of very hard work, this realization was devastating to her. Table 1 shows 2008 statistics on 11th grade students from our feeder districts on the ACT College Readiness Benchmarks (CRB).

With this need in mind, SSC created the Academic Intervention for Matriculation, or AIM program. In the first year, only SSC and High School District 205 participated in the AIM program. A team was assembled consisting of math and English faculty, counselors, and administrators from three feeder high schools in District 205 and from SSC. We met monthly to brainstorm, compare curricula, and create our model. Tasks were divided between the district and college. For example, District 205 chose potential participants and invited them to a Parent Information Night at SSC, while SSC planned the Parent Information Night agenda and designed the summer program, including pre- and post-testing of AIM participants.

The summer program included two separate cohorts of skill-building math and English classes. Both cohorts included sessions with counselors and tutors. The English class was supplemented with reading comprehension, study skills, and career planning sessions. The math class was supplemented with Structured Learning Assistance (SLA), which included tutoring, group work, study skills, and career planning sessions. As an extra incentive, students who successfully completed the summer program were able to enroll in a general education course free of charge at SSC for the following school year. In 2008, the two AIM summer courses were Math 100 (Intermediate Algebra) and English 099 (Writer’s Workshop III), developmental courses that serve as prerequisites for Math 115 (General Education Math) and English 101 (Composition and Rhetoric).

<table>
<thead>
<tr>
<th>High School District</th>
<th>Percent of Students Who Meet the CRB for Reading</th>
<th>Percent of Students Who Meet the CRB for Mathematics</th>
<th>Percent of Students Who Meet the CRB for Science</th>
<th>Percent of Students Who Meet the CRB for English</th>
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</thead>
<tbody>
<tr>
<td>District 205</td>
<td>17%</td>
<td>14%</td>
<td>4%</td>
<td>47%</td>
</tr>
<tr>
<td>District 215</td>
<td>30%</td>
<td>22%</td>
<td>11%</td>
<td>54%</td>
</tr>
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<td>District 228</td>
<td>39%</td>
<td>39%</td>
<td>22%</td>
<td>64%</td>
</tr>
</tbody>
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Results from the summer 2008 program showed pre- to post-test gain scores for the English cohort remained the same, while the math cohort increased the pre- to post-test gain scores by almost 10 percentage points. Out of the 9 total students in the English cohort, 8 passed the course with a “C” or above and 4 of these students went on to enroll in at least one college-level course in the fall of 2008. All 4 of the students who enrolled in a college-level course passed the course. Out of the 10 students enrolled in the math cohort, all 10 passed the course with a “C” or above and 7 went on to enroll in a college-level course in the fall of 2008. Out of these 7 students, 4 passed their college-level course. There are 3 students from the math and English cohorts enrolled in a college-level course this spring 2009 semester.

While we were satisfied with the outcomes and enjoyed outstanding student evaluations, we were disappointed with the small number of participants. We also realized, in hindsight, that students who participated in the AIM Program were probably not from the “at-risk” population that we wanted to reach. Some identified themselves as an “honor student.” In an attempt to get the project off the ground quickly, faculty and advisors may have encouraged their best students to participate, rather than focusing on those who were most in need of this type of intervention. Learning from year one, we are currently in the midst of revising the AIM Program. After reviewing the data, we concluded that there are three major elements that need to be changed.

First, we want to include all three high school feeder districts, rather than just one. At the present time, we have accomplished this goal. Each district has assembled a 5-person team whose members have been included in email discussions and attended monthly meetings. Each team has identified a team leader who is responsible for communicating with SSC and carrying out tasks related to the CCR Project. These district teams selected students from all nine of our feeder high schools to be invited to Parent Information Night on March 17, 2009. Criteria for selection includes students who are college-bound, classified as motivated by teachers, and score in the range of 13-17 on their practice ACT test. We have asked each attendee to fill out an interest survey with personal information, and we plan to enter this information into our database to identify potential candidates.

Second, we want to dramatically increase the number of participating students. In 2008, we had one cohort of math students and one cohort of English/reading students, totaling 19 students. In 2009, our goal is to run two cohorts of math and two cohorts of English/reading students, totaling a target number of 96 students. Each district has been assigned 32 slots – 16 students to participate in the math cohort, and 16 in the English/reading cohort. The summer program will run eight weeks (June 8 – July 30), Monday through Thursday, from 9:15 am until noon.

Students participating in the summer program will take a pre-test to determine the level of math or English course into which they will be placed. We are anticipating offering Beginners and Intermediate Algebra (Math 095/100) and Writer’s Workshop II and III (English 098/099), and we will use the results of the pre-test to determine specific objectives and course content. The math courses will once again be supplemented with Structured Learning Assistance (SLA) where trained facilitators assist with homework, test preparation, and formation of study groups. The English courses will be supplemented with reading comprehension classes in which the instructors will work together on lesson plans and assignments. Similar to 2008, both cohorts will participate in counselor-led sessions that include study skills and career planning.

Third, we want to do a better job of serving the at-risk student population that has a slim chance of transitioning from high school to college without access to interventions like the AIM program. Attainment of this goal necessitates cooperation from multiple partners in the project. We are working toward this goal by starting the planning process earlier to give optimal time to select and recruit participants. Finally, we are reaching out to serve the at-risk population better by changing the PACT selection range from 16-19 to 13-17.

There are also other incentives attached to our 2009 program. One is the opportunity for a limited number of AIM students to work part-time at SSC (after lunch from 12:30 – 3:30 pm). We feel that this will attract those students who cite a “need to work” as a potential reason for not participating in the AIM program. Another opportunity is being offered to students who complete Math 100 or English 099. These students are being given the option to enroll in a college-level class at SSC in the fall of 2009. Though this is not the main objective of the program, it provides an added incentive to the most motivated high school students. Overall, we are doing our best to learn from our first-year experience and improve upon program organization for year two of the CCR project.

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Developing High School Partnerships

by Amanda Starkey

Using funds from the College and Career Readiness (CCR) grant, Southwestern Illinois College (SWIC) is working collaboratively with area high schools on four projects to reduce the need for remediation as students move from secondary to postsecondary education. The projects involve direct student contact that benefits students, though the greater outcome of these projects is the enhanced communication and development of partnerships between SWIC and area high schools, particularly with high school faculty and counselors. SWIC’s CCR projects include the High School Math Partnership Project, the High School Writing Partnership Project, the College Success Initiative (CSI), and Faculty Workshops. All of these projects involve several components, and they continue to grow as new ideas are introduced.

HIGH SCHOOL MATH PARTNERSHIP PROJECT

The goals of the High School Math Partnership Project include:

- Providing opportunities for high school math faculty and counselors to become familiar with the college placement tool used at SWIC,
- Providing opportunities for high school and SWIC math faculty to discuss alignment of high school and college curricula, and
- Helping students understand the level of competency expected when they enter college and encouraging them to further develop their math skills while in high school.

A component of this project that is receiving positive feedback from participants is the meetings between SWIC math personnel and high school math faculty groups. Meetings have taken place with 16 of the more than 30 high schools in the district, and the intent is to continue this project until all interested high schools have been invited to participate. Topics of discussion with each school include an overview of high school and SWIC math curricula, expectations for students at each level, and the college placement process used at SWIC. The high school math teachers are also given the opportunity to become familiar with the math college placement assessment tool (COMPASS) used at SWIC.

Several key changes have been implemented as a result of these meetings. High school math faculty, after seeing the college placement tool and discussing the developmental coursework in place at SWIC, quickly focused on the need for their students to review algebra throughout their high school math courses. Second, though math teachers were already aware of this, the discussions reinforced the need to keep students in a math class during their senior year. Strong math students move on to advanced math topics, but those with less proficiency need to continue with math, even if it means placing them into a course that reviews the concepts of algebra and geometry from previous courses, perhaps with more applications. Concern has been expressed that the senior year curriculum is sometimes overlooked due to the emphasis placed on courses taken before the Prairie State Achievement Exams in the junior year.

A final component to the project is the administration of COMPASS to assist one high school with the evaluation of a course for seniors who struggle with math. A group of 40 seniors are enrolled in this course, sometimes called “911 Math” by the faculty. These students took the math portion of COMPASS in September 2008 and will return to campus in April 2009 to take the full COMPASS exam. Of the 40 seniors taking 911 Math, 93% placed into basic algebra or lower on the initial COMPASS test. The goal is to use information from the assessments to assist high school math faculty to examine the merit of the course and make adjustments. If the students show significant progress, information about the value of this course will be shared with other area high schools. This course is being provided to address the concern that content in traditional senior math courses is not the most appropriate for the less developed math student. Since algebra is often considered the “gatekeeper” course to more advanced mathematics courses for high school students, it may be most beneficial to continue to emphasize algebra topics for students at this ability level. The expectation is that students who have shown progress in this math course will place at the Intermediate Algebra level or higher on COMPASS in April.
HIGH SCHOOL WRITING PARTNERSHIP PROJECT

The goals of the High School Writing Partnership Project include:

- Facilitating meetings between SWIC and high school English faculty to better align high school and college writing expectations, and
- Communicating to high school students the importance of developing writing skills that are necessary to be successful writers in college.

Currently, members of the SWIC writing faculty are meeting for the third semester with high school writing teachers from area high schools. Several schools are invited to send up to four writing instructors to participate in a series of meetings throughout the semester. A total of 11 schools have participated, with other schools getting the opportunity to participate in future semesters.

Faculty involved in this project find discussions about their own classroom experiences to be important, along with examination of a common grading rubric and the norming of that rubric. During the norming process, the instructors agree on what components of writing are most important and how they should be assessed. Within those conversations, faculty members express concern that students see little use for writing, particularly at the secondary level. SWIC faculty are sympathetic when they learn that high school faculty are sometimes required to assign a specific number of papers and as a result may not have adequate time to give feedback to students during the writing process. The college faculty are also concerned about large class sizes, the little amount of writing required outside of English classes, and the shortage of computer lab space. They understand these concerns could hinder the successful teaching of writing at the high school level.

Both the high school and college faculty use the common rubric to grade senior essays. Interestingly, when the first group engaged in this grading exercise, they did not find a gap between the grades assigned by high school teachers and those assigned by college instructors. One thought is that the norming session gave the faculty members an opportunity to agree upon the importance of various elements of writing. Though the high school teachers were apprehensive about the amount of time they were away from their classrooms to participate in this project, it proved to be an excellent opportunity for them to discuss alignment of curriculum with SWIC writing faculty.

An unexpected outcome of the first series of writing faculty meetings was a request by the high school faculty for a SWIC representative to visit their classrooms to discuss college-level writing expectations with their students. As a result, the SWIC Writing Coordinator visited with over 340 seniors at one high school during fall 2008. He reminded the students of the importance of taking responsibility for their own education and discussed college-level writing requirements. Students also completed a survey that gave SWIC faculty a better understanding of the high school students’ perceptions of themselves as writers and their experiences with writing.

COLLEGE SUCCESS INITIATIVE

The goals of the College Success Initiative (CSI) include:

- Increasing successful student transitions into postsecondary education, and
- Reducing remediation for high school seniors by improving their college readiness skills.

CSI involves collaboration of SWIC faculty and staff with several district high schools to identify students who will likely place into a developmental course. These students are given the opportunity to take the COMPASS placement test, with students who place into either Basic Algebra or Intermediate Algebra being given the opportunity to enroll in the course during the second semester of their senior year as a dual enrolled student with tuition, course fees, and textbooks paid by the grant. Those enrolled in Basic Algebra and some of those enrolled in Intermediate Algebra receive extra support either at the college or during class time with the instructor or tutor. Studies, usually before class. Students are also offered attendance incentives, are instructed in effective time management and study strategies, and are encouraged to make an appointment with a counselor. Successful completion of the course eliminates one semester of required developmental math coursework at SWIC. Of the 21 CSI students enrolled in the spring 2008 semester, 16 (76%) successfully completed the course, compared to the success rate of approximately 50% for the average SWIC student.

At one site, those who take COMPASS but do not place into the developmental courses are invited to attend a series of four workshops. Topics include study skills, goal setting, time management, and application for financial aid. Though the workshops receive good reviews from the students, scheduling is difficult. Careful coordination with the high schools is necessary if these workshops are to be continued. Future workshops may be offered at the high schools to minimize disruption to students’ schedules.

FACULTY WORKSHOPS

The goals of faculty workshops include:

- Providing opportunities for high school and SWIC faculty to learn new methods for instruction,
- Providing a venue for high school and SWIC faculty to share successful teaching strategies with one another, and
- Offering high school and SWIC faculty opportunities to meet and develop trust and respect for one another.

In the summer of 2008, a total of 107 high school and college math teachers, representing 27 area high schools and SWIC, participated in one of two sessions of an algebra workshop. The faculty members in attendance on both dates were receptive to
learning ways to keep students engaged using active learning techniques, and they practiced a number of activities to implement in their classrooms to improve student learning. The evaluations were very positive, with 100% of participants indicating the workshop increased their knowledge and teaching skills. The high school teachers were able to earn Continuing Professional Development Units (CPDUs) to meet requirements for continued certification, and they received a stipend for their attendance.

Additional workshops are planned for spring and summer of 2009. Meetings for both English department chairs and math department chairs from area high schools are scheduled and will be facilitated by SWIC leaders in those disciplines. Participants will have an opportunity to share best practices, dialogue about common concerns within their discipline, and discuss curricular issues. These meetings are anticipated to continue as an annual event where faculty leaders from SWIC and area high schools network and continue these important discussions.

Additionally, another workshop is scheduled for high school counselors, with the intake process used at SWIC as the topic for discussion. Participants will learn about Mission Success, which includes an orientation to the services available at SWIC, assessment using COMPASS, and interpretation of the scores.

**MOVING FORWARD**

As these many activities are implemented and evaluated, SWIC’s communication with its partner high schools is improving. It is apparent that everyone involved wants to see the students succeed. Through these developing partnerships, SWIC and its partner high schools will continue to collaborate to align college placement and assessment expectations and find ways to motivate secondary students to improve their basic skills. 

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OCCRL Welcomes Dianne Bazell, New Deputy Director, Illinois Board of Higher Education

by Jason L. Taylor

Dr. Dianne M. Bazell is the most recent addition to the Illinois Board of Higher Education (IBHE) where she serves as the Deputy Director of Academic Affairs and Student Development. Dr. Bazell comes from Kentucky, where she served as the Assistant Vice President for Academic Affairs at the Council on Postsecondary Education, which she joined in 1999. OCCRL interviewed Dr. Bazell to learn more about her role at the IBHE and her vision for college and career readiness.

UPDATE: Welcome to the state of Illinois. How long have you been here and what attracted you to the state?

Dr. Bazell: I have been in my position officially since January 5, 2009, but many things attracted me to the state. For one, I was born and raised in Illinois; I’m from Chicago. I never expected to come back to Illinois in this capacity, but I’m not unfamiliar with Illinois. I was attracted to this particular position because of the interesting policy issues. The IBHE has recently led a public agenda for higher education which we had begun in Kentucky 10 years ago, so I’d been through this process before. Many of the same national policy experts and approaches were used in Illinois that were used in Kentucky. I’m coming into a set of similar issues, but at a much larger scale. There are so many more colleges and institutions of higher learning in Illinois. Illinois has such a wealth and gamut of higher learning institutions—both public and independent.

UPDATE: What are your duties as Deputy Director of IBHE, and are they similar to your role at the Kentucky Council on Postsecondary Education?

Dr. Bazell: They are very similar, in the sense that we approved academic programs in Kentucky. In Illinois, however, IBHE has a much larger role because of the number, variety, and span of colleges and institutions. The board [IBHE] itself has program approval jurisdiction over so many more of them. The Kentucky coordinating board had jurisdiction only over the public institutions, and here we have the private for-profit and not for-profit institutions in our purview, so there is a much broader range of responsibility, and that’s a great part of what we do as an agency.

My responsibilities in Kentucky also included P-16 work. When I arrived in Kentucky, I was charged on Day three with P-16 work. I was told, ‘You’re in charge of P-16: make it happen.’ Of course, Illinois doesn’t have a state council yet, nor does it have many official local councils. Right now, I’m making visits to all the public institutions in the state and as many of the private institutions as I can. When I go to meetings, I’m trying to get as much on-site introduction to Illinois’ campuses as possible. Prior to my visits, I have encouraged institutions to invite a superintendent or two from their feeder districts, a community college leader from one of the leading transfer districts, or a civic leader. So I’m trying to get the institutions to begin thinking about starting those [P-16/P-20] conversations. Even if they’re just conversations, they are conversations that in some cases have never taken place. Many of the institutions have done some work, but they’re not those conscious cross-sector planning interactions that need to take place to make systemic change.

So my main functions will include program approval for the public and independent institutions and overseeing the P-20 initiative. I will be working with the Illinois State Board of Education (ISBE) and the Illinois Community College Board (ICCB) on the American Diploma Project1 in Illinois.

UPDATE: What is your vision for higher education in Illinois?

Dr. Bazell: My vision for higher education in Illinois—that is a big question. One vision is ensuring that more Illinoisans are ready for postsecondary education and that’s not just the high school graduates but adult learners as well. I think this ADP initiative is very important to gain clarity and transparency about what one needs to know and be able to do to be ready for college level work. I think if we can accomplish this in Illinois a lot of our issues with transfer and remediation would be considerably aided.

There’s such a wealth of intellectual capacity in Illinois that other states don’t have. I would like to see what the IBHE can do to help to support the research and the applied research function of higher education at our institutions. We’re all about access but we’re all about excellence too.

There are so many more things that higher education institutions are being asked to do. They’re being asked to supply the traditional rite of passage for 18-22 year olds. They’re being asked to draw in and support nontraditional learners—adults coming back into the system after a few years. They’re being

1 Information on the American Diploma Project (ADP) in Illinois is available on the ISBE website: http://www.isbe.net/ADP/default.htm. Also see article on ADP by Erin Castro appearing in this issue of Update on Research and Leadership (OCCRL).
asked to prepare themselves for incoming students who are not traditionally prepared through adult education. They’re being asked to furnish research and the development and creation of new knowledge. They’re also being asked to be entrepreneurs and to sell that knowledge—and that’s controversial but they’re being asked to do it. So if you think of all the functions, and there are more, that higher education institutions are being asked to fulfill, I see myself and our agency as being a kind of midwife to the development of new forms for higher education.

We have a very different population, demographically, than we are used to. We’re all living longer and we’re all working longer. I think our institutions have to be open to providing not just the traditional basket weaving or wine tasting outreach courses that continuing education departments provide but real significant professional development—intellectual refreshment for mid-career professionals. We also need to consider “encore careers,” a term I’ve recently learned from Phil Minnis at John A. Logan College. For example, there are engineers, lawyers and business retirees who might be willing to go in and teach middle school math at the age of 65, or younger. This is not just Teach for America for the 22-year-old; this is alternative certification for the well-seasoned experienced person who is now retired and willing to take on the classroom or another career in social work for example. Who is going to prepare that kind of well-trained, experienced and educated individual who needs specific job training in a new way? Who is going to certify these people?

We also need to think in new ways about integrating the liberal arts and technical skills. They’re not antithetical. We’ve got a lot of liberal arts majors graduating who are unable to get jobs. A lot has been said in recent months about plumbers. My plumber was an English major, reads Greek, and subscribes to the New Yorker. He apprenticed with a master plumber after college, and became one, because he needed to support himself. He can work anytime, anywhere in the world, and makes a very comfortable living for himself and his family. One of the highest-growing areas for community and technical colleges is post-baccalaureate enrollment to gain technical skills. How can we systematically address this need?

So my larger vision for higher education is to really think widely about what it is that people need from education. And it’s not just getting jobs, although that’s part of it. It’s having the opportunity to think, read and learn widely in a lot of different ways that we don’t yet have programs to address.

**UPDATE:** Kentucky has had tremendous success with college and career readiness initiatives with their work on standards, placement policies, the ADP, etc. What lessons have you learned in Kentucky and how are they transferable to Illinois?

**Dr. Bazell:** I think that it is possible for colleges and universities at all levels to come to agreement on defining college readiness. This is going to present different challenges in Illinois, but I think our institutions are ready to address these challenges. I have met with the chief academic officers twice formally and several of them again on their own campuses. One of the lessons I’ve learned from Kentucky is that you don’t have to win the whole game at once. I would rather have a few early victories to let myself and everyone I work with know that the goal is attainable and then move on from there.

I’ve also learned the importance of listening, how to broker agreements and how to reach out to secure external pressures. I learned very clearly in Kentucky to have both state level policy work occurring as well as grassroots initiatives—and national pressure. If, for example, a state-level board member says, ‘We really can’t require Algebra II in all districts because not everyone can do it’, and then you find out that two thirds of the local districts are already teaching Algebra II, you can say, ‘Well look, they’re doing it.’ So you learn what’s possible from the grassroots initiatives and then you provide guidance at the state level, and leverage pressure from national initiatives. It was very helpful in Kentucky to be part of several national initiatives—some with the ADP, some with adult learners through the Lumina Foundation and Jobs for the Future.

**UPDATE:** What is at the top of your agenda for college and career readiness in Illinois, and how do you reach out to institutions and build buy-in?

**Dr. Bazell:** Well, if we can get an agreement, at least an agreement on the knowledge and skills to be ready for college credit-bearing coursework at any Illinois institution I would be thrilled. We’re starting that now, and I think that’s probably the most important thing we can do for career readiness—agree on what it means.

We already are reaching out to institutions and building consensus. I’m working with chief academic officers of all our public institutions and with the ICCB. I’m asking them to name a representative of their placement standards in math and English to join the ADP content work groups. If we can get buy-in from math and English faculty at the public institutions and some of the independent institutions (the people who are placement decision makers), then that is getting a lot of buy-in. It’s finding the institutional leavers and that’s working with the chief academic officers.

**UPDATE:** How do you build awareness of college and career readiness in the state and reach out to potential students and the public at large?

**Dr. Bazell:** We probably need a wider and more concerted communication venue than what we have had. In fact, some of our faculty advisory council members are communication specialists and have offered to help us. It would be nice to have a one-stop shopping venue for college. I don’t know that we were part of the Lumina “KnowHow2Go” initiative, but it would

2 See [http://www.knowhow2go.org](http://www.knowhow2go.org)
be helpful to have something similar. The Illinois Student Assistance Commission has a website, but I don’t know how well known it is. It would be nice to have all of the materials in one place with a highly visible profile. This type of initiative is larger than my role in academic affairs and is a statewide initiative but it is something to which I can contribute.

The other huge issue now in the legislature is the P-20 data capacity. It’s hard to make a case for a particular policy or program when you have no data to support that it is effective. We need those student unit-level identifiers where we can tell which curricula are most effective for college readiness, where students go after they graduate from college, if they are employed inside or outside the state, etc. We need to know which interventions and which programs work best. All we have is anecdotal and subjective assessments. We have no hardcore data. So we really need P-20 data, and I’m pleased that the legislation is making progress. The hopeful thing is that President Obama and the federal government have mandated this—we have to do this if we want stimulus funding.

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Kentucky’s P-16 Council as Agent of Change: Implications for College and Career Readiness in Illinois

by Jason L. Taylor

INTRODUCTION

Established in 1999, Kentucky’s P-16 Council is an advisory board and coordinating body for Kentucky’s education system, particularly the Kentucky Department of Education (P-12) and Kentucky’s Council on Postsecondary Education. The P-16 Council was formed for the purpose of improving communication and collaboration between the two agencies in an effort to increase student success at the secondary and postsecondary levels (Kentucky Council, 2008). The P-16 Council has since expanded to include representatives from Kentucky Adult Education, Kentucky Workforce Investment and other business and community representatives. This article uses document review and analysis of meeting minutes from the Kentucky P-16 Council, Kentucky Council for Postsecondary Education (CPE) and the Kentucky Department of Education (KDE) to highlight select college and career readiness efforts. Based on the policies implemented over the last several years, this article considers the role of Kentucky’s P-16 Council in advancing college and career readiness and considers implications of Kentucky’s efforts for Illinois.

THE EMERGING P16/P20 CONTEXT

The notion of a P-16 Council is a relatively recent idea that has emerged in many states to connect parts of the overall education system that has been disconnected historically. Early documentation of P-16 Councils highlight variation in name and structure, but most are named a P-16 or P-20 Council and include preschool, K-12, and postsecondary education (Van de Water & Rainwater, 2001). Education Week conducted an inventory in 2008 that showed 40 states have established P-16 or P-20 Councils (Hightower, 2008), and most attempt to address the following kinds of systemic issues by expanding access, aligning standards, easing student transition, reducing remediation, strengthening the relationships between educators and families, improving accountability, and improving teacher quality (Krueger, 2006; Van de Water & Rainwater, 2001).

KENTUCKY’S P-16 COUNCIL

Since its inception, the Kentucky P-16 Council has reported periodic progress reviews of P-16 collaborations in the state. The most recent review appears in Kentucky P-16 Collaboration: A Review After Eight Years, released in September, 2007. This document is divided into six parts:

- Teacher preparation and professional development—from early childcare through grade 12
- Alignment of P-12 and postsecondary curriculum and competency standards between high school and college
- Increasing the college-going rate and success of Kentucky’s students
- Improved data systems
- E-learning and access
- Local P-16 Councils.

Each section describes progress on P-16 collaboration, with implications for college and career readiness.

This article describes three policies articulated under the category of alignment of P-12 and postsecondary curriculum and competency standards between high school and college: the Statewide Placement Policy, the Revised High School Graduation Requirements, and the Statewide Administration of the Educational Planning and Assessment System (EPAS), ACT and WorkKeys.

STATEWIDE PLACEMENT POLICY

The Statewide Placement Policy is a standard postsecondary placement policy for English and mathematics that was implemented by the Council on Postsecondary Education (CPE) in 2004, with the full support of the P-16 Council (State P-16 Council, September 2007). Prior to implementation of this policy, Kentucky embarked on a series of processes beginning with CPE’s call to public institutions for benchmarks. Second, the CPE convened two placement policy groups, one in math and the other in English. Each policy group was composed of nine members who represented each of the eight public universities and one representative of the Kentucky Community and Technical College System (KCTCS). Third, the policy groups developed the policies and shared them among their colleagues at each institution. Finally, recommendations were presented by the CPE to the P-16 Council (State P-16 Council, 2004).

The placement policy standardizes English and math placement in public postsecondary institutions based on students’ ACT scores as an indicator of readiness for credit-bearing college coursework. The cutoff scores, one for English and three for various levels of math, mandate placement in credit-bearing coursework in a public postsecondary institution. The English policy states that an ACT English sub-score of 18 or higher qualifies a student for a credit-bearing writing course. The math policy states: 1) an ACT math sub-score of 19 or higher qualifies a student for a credit-bearing math course; 2) an ACT math
sub-score of 22 or higher qualifies a student for college algebra; and 3) an ACT math sub-score of 27 or higher qualifies a student for placement in calculus. The policy also notes that institutions may exercise individual discretion for students who do not meet the cutoff scores. This placement policy is applicable to all public postsecondary institutions, including colleges within the technical and community college system. (State P-16 Council, 2004)

REVISION OF HIGH SCHOOL GRADUATION REQUIREMENTS

Another initiative aimed at improving college and career readiness resulted from the approval of a regulation to update and raise minimum high school graduation requirements. The regulation was given final approval in 2006 by the KDE oversight board, the Kentucky Board of Education (Kentucky Board, February 2006). Reflective of college and career readiness, an articulated goal is the preparation of students for postsecondary entrance and careers (State P-16 Council, December 2005). Three noteworthy activities stand out in Kentucky’s efforts to raise graduation requirements.

First, the revisions take a broad view of graduation requirements, avoiding making simple changes to courses and disciplines. Kentucky’s approach includes changes to both “content and standards” (Kentucky Board, February 2006, p. 2). Rather than conceiving of minimum requirements as exclusively courses or years (e.g., 4 years of English courses), the approach includes a comprehensive set of criteria with detailed content and standards.

A second notable activity was a discussion of whether students should graduate high school with competency in a second language. This suggestion elicited high levels of discussion by the KBE and received full support from the P-16 Council. Presumably, supporters were seeking ways to increase graduate competition in the workforce and increase the academic preparation of graduates entering postsecondary education who choose advanced language coursework. However, the second language requirement was not included in the final revised graduation requirements. There was interest to continue conversations and development work about this requirement and the KBE passed a motion to “develop capacity…and move toward the goal of students demonstrating competence by 2016” (Kentucky Board, January 2006, p. 9).

The third major revision to the graduation requirements includes a provision to increase the mathematics requirement. Final changes in the high school graduation requirements indicate that a math course is taken all four years of high school (instead three years) and Algebra II as a required course (Kentucky Board, January 2006).

Some opposition to the Algebra II requirement came from those who believed that an “opt-out” option should be available for students, resulting in the insertion of two alternatives to the Algebra II requirement. One alternative is an “integrated, applied, interdisciplinary or technical/occupational course” to replace a math course while also adhering to content standards (Kentucky Board, January 2006, p. 7). The other alternative is the option of attaining a credential indicating work readiness and employability. These alternatives demonstrate Kentucky’s desire to promote college and career readiness by providing multiple paths to a single credential for all high school students.

The broad rationale for the modified graduation requirements also promote college and career readiness as reflected in a KDE staff note: “the amendments to the minimum requirements are just one of the necessary steps in the broader refocusing secondary initiative that will ensure students reach the goal of being credentialed as prepared for the next level of education or work” (Kentucky Department, February 2006, p. 5).

STATEWIDE ASSESSMENT AND EVALUATION

A third policy relative to college and career readiness and advanced by the P-16 Council was legislative Senate Bill 130, passed by the Kentucky General Assembly in 2006 that requires statewide administration of the Educational Planning and Assessment System (EPAS), the ACT, and the voluntary administration of WorkKeys. EPAS “provides a longitudinal, systematic, approach to educational career planning, assessment, instructional support, and evaluation” (ACT, 2008a).

Essentially, EPAS is a system that encourages successful student transitions from middle school to high school to college. Four components—student planning, instructional support, assessment, and evaluation—allow adjustments by students, teachers, schools, and districts. The ACT is a standardized exam (also part of the EPAS system) used for college admissions and placement decisions in Kentucky, and WorkKeys is a system developed by ACT that measures career readiness by assessing individuals’ job skills against employer standards (ACT, 2008b). The bill requires a careful and active integration of EPAS into the education system by mandating that: a) high school readiness is assessed in 8th grade (EXPLORE); b) college readiness is assessed in 10th grade (PLAN); and c) the ACT is administered to all students in 11th grade.

Beyond the use of EPAS as an assessment system, the bill mandates a certain degree of utilization of assessment scores. This legislation specifies at least two uses for exam results: 1) students scoring high are counseled and encouraged to enroll in advanced courses of study; and 2) students who score low must participate in accelerated learning. Both outcomes demonstrate a commitment to support individual learners and encourage acceleration to better prepare students for the next level of education. In addition to using assessment results for individual counseling, the legislation specifies the generation of an individual report that includes test scores and an evaluation of passing/not passing standards.
to “identify, assess, and remedy academic deficiencies prior to
high school graduation” (Kentucky Senate Bill 130, 2006, p. 7).
By making this information available to students, parents, and
teachers, the state supports opportunities for student success.

The EPAS system has been strengthened by recent work to link
assessments to standards. Given the misalignments that sparked
new policies, Kentucky aligned their Program of Studies for
Kentucky Schools Primary-12, Core Content for Assessment,
and the American Diploma Project (ADP) College Readiness
Standards. A result of these alignment activities was a docu-
ment that aligns Kentucky’s Program of Studies standards with
ACT’s College Readiness Standards (Kentucky Department,
2008). The aggregation of these seemingly disparate com-
ponents was the alignment of state secondary content and stand-
ards to secondary assessments and to college and career readi-
ness expectations (Kentucky Council, July 2006).

IMPLICATIONS FOR COLLEGE AND CAREER READINESS
IN ILLINOIS

Has Kentucky’s P-16 Council contributed to the advancement
of college and career readiness activities? Without question, the
P-16 Council has contributed to college and career readiness.
Many of the changes to alignment activities and policies can be
attributed to Kentucky’s participation in ADP, of which Ken-
tucky was one of five pilot states. ADP aims to create stronger
links between secondary and postsecondary educators at the
state level by helping participating states to “create a system
of assessments and graduate requirements that – considered to-
gether – signify readiness for college and work” (Achieve, Inc.,
2004, p. 7). The college and career readiness goals articulated
by ADP are similar to the original goals articulated by Ken-
tucky’s P-16 Council (State P-16 Council, December 2004),
and Kentucky’s P-16 Council has been cited as a primary pro-
mitter of ADP activities in Kentucky (Klein, 2008).

Illinois has recently added two elements to state policy simi-
lar to Kentucky. First, Illinois became the 34th state to join the
ADP Network in 20082, and second, the legislature passed a
statute authorizing the formation of a P-20 Council. It seems
the confluence of the ADP and the P-16 Council (and likely
other variables) helped to advance college and career readiness
in Kentucky. Whether the recent adoption of these initiatives
will stimulate change in Illinois is unknown, but anticipated.
Similar to Kentucky, Illinois would benefit from embarking
on a collective process of benchmarking and creating buy-in
before attempting to implement readiness standards. By build-
ing consensus, Illinois could move forward to define statewide
standards.

REFERENCES

Achieve, Inc. (2004). Ready or not: Creating a high school diploma
that counts. Retrieved October 26, 2008 from [http://www.achieve
.org/files/ADPreport_7.pdf]

ACT. (2008a). Educational planning and assessment. Retrieved No-

www.act.org/workkeys/index.html]

Hightower, A.M. (2008). State councils vary in form and focus. [Elec-
tronic Version]. Education Week.

Kentucky Board of Education. (2006, February). Kentucky Board of
Education regular meeting: Summary minutes. Retrieved December

Kentucky Board of Education. (2006, January). Kentucky Board of
Education regular meeting: Summary minutes. Retrieved December
5, 2008 from [http://www.education.ky.gov/users/spalmer/
KBE%20Summary%20Minutes%20Jan%202006%20mg.pdf]

Kentucky Council on Postsecondary Education. (2004). Statewide
Public Postsecondary Placement Policy. Retrieved November

Kentucky Council on Postsecondary Education. (2006, June). Min-
rdonlvres/AAF151AE-5620-4B14-96A6-3AF80B096D5D/0/071006CPE.pdf]

Kentucky Council on Postsecondary Education. (2008). State P-16
Frequently Asked Questions. Retrieved November 2, 2008 from
[http://cpe.ky.gov/committees/p16/p16_faq.htm]

How should Illinois proceed with the P-20 Council? Education
Week’s June 5, 2008 edition on P-16/P-20 Councils reviews
various state council efforts and provides recommendations
for implementation of a Council. At the least, it appears that
Kentucky’s P-16 Council provides an official forum for state
education leaders to communicate, collaborate, and send a con-
sistent message to various constituencies and the public. Simi-
larly, agendas and discussions are documented and posted on
the KPE and KDE websites so meeting minutes and supporting
documents are easily accessible. It is also worth studying Ken-
tucky’s Regional and Local P-16 Councils, which have been
credited with advancing collaborative work at the local level
and strengthening state level work.

The type of collaborative policy work conducted by the Ken-
tucky P-16 Council is informative to Illinois and should be
studied by policymakers and state agencies. The Illinois P-20
Council has the potential to positively affect college and career
readiness systematically, and policies can be enhanced by care-
ful review and consideration of P-16/P-20 efforts in Kentucky
and other states. ◆

For more information on Illinois’ participation in the ADP, visit the
ISBE website [http://www.isbe.net/ADP/default.htm]


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Achieve and The American Diploma Project

by Erin Castro

“Right now, three-quarters of the fastest-growing occupations require more than a high school diploma. And yet, just over half of our citizens have that level of education. We have one of the highest high school dropout rates of any industrialized nation. And half of the students who begin college never finish.”

(Obama, B.H., 2009)

Citing alarming statistics, President Barack Obama called attention to the serious plight of P-20 education in his address to Congress last month. He called on American citizens to commit to at least one year of postsecondary education, recognizing the power of education in helping to reshape and revitalize the economy. However, he also illuminated a disappointing reality: secondary and postsecondary students are not persisting through the educational system.

One organization that is attempting to address the educational issues highlighted in President Obama’s speech is Achieve, Inc. (http://www.achieve.org), a non-profit, bipartisan organization dedicated to helping states systemically raise academic standards and decrease drop-out rates. Established in 1996 and based in Washington, D.C., this independent organization strives to increase accountability systems in education and improve the assessment of educational policy and programs at the state and local level. Highlighted as one of America’s most influential education groups by Education Week in 2006, Achieve has helped to focus national attention on the issue of college readiness (http://www.achieve.org/AboutAchieve).

As of fall 2008, the ADP network was comprised of 34 states that have pledged to do the following:

1. Align high school standards and assessments with the knowledge and skills required for success after high school.
2. Require all graduates to take rigorous courses—aligned to college- and career-ready standards—that prepare them for life after high school.
3. Streamline the assessment system so that the tests students take in high school can also serve as placement tests for college and hiring for the workplace.
4. Hold high schools accountable for graduating students who are ready for college or careers and hold postsecondary institutions accountable for students’ success once enrolled.

(http://www.achieve.org/ADPNetwork)

In February of 2005, the ADP Network was created as a 13-state coalition to improve high schools and work collaboratively to reshape public education (Maurer, 2005). Determined to close the expectations gap in education, states associated with the ADP Network work together to address a multilayered problem.

Achieve provides various tools and resources supported by contemporary research to aid states in their effort to close the expectations gap, including state alignment and program assessment services. In the same spirit, Achieve and The Education Trust launched Measures that Matter as a joint project to address college- and career-readiness for high school students in the fall of 2008. Through this project, Achieve and The Education Trust provide strategic and technical guidance to states to create “a coherent set of policies designed to get all students college- and career-ready” by the time they graduate from high school (http://www.achieve.org/files/AboutMeasuresthatMatter.pdf).

Measures that Matter was launched as an ongoing project to close the “college readiness” gap between high school graduation expectations and the demands of future college and career endeavors. Currently, Measures that Matter assist states in implementing their own college and career readiness standards (http://www.achieve.org/m easuresthatter).
Calling on states to address college and career readiness, the Education Trust and Achieve published, Making College and Career Readiness the Mission for High Schools: A Guide for State Policy Makers (http://www.achieve.org/files/MakingCollegeandCareerReadinessTheMissionforHighSchool.pdf). This guide offers major recommendations for states to consider when creating a comprehensive college and career readiness framework, which is imperative to addressing the growing gap between what is expected of high school graduates and what the world beyond high school demands.


- Align high school standards with the demands of college and careers;
- Ensure students enroll in a college- and career-ready course of study;
- Provide high-quality curriculum and teacher-support material;
- Build better assessments to measure student learning; and
- Establish information and accountability systems that value and incentivize college and career readiness.

(The full report is available at www.achieve.org/measuresthatmatter or www.edtrust.org)

**ADP AND ILLINOIS**

In 2000, after an extensive external review of systemic education reform in Illinois, Achieve recommended to the state of Illinois that it take immediate steps to increase college- and career- readiness in four broad areas: standards and assessments, teacher quality and organizational capacity, accountability, and public leadership (http://www.achieve.org/files/Illinois-Benchmarking4-2000.pdf, pp. 16-19). Achieve found that while Illinois’ standards were strong in some areas, they were lower than national benchmarks in core content areas of English, math and science. Addressing specific areas where Illinois could close the gap, Achieve also encouraged Illinois to communicate with its citizenry on the importance of long-term, standards-based reform. Creating dialogue about the fluidity and transformative aspects of emerging standards would allow programs and policies to adjust to these changes.

In the fall of 2008 as the 34th state to join, Illinois signed on to the ADP Network making a serious commitment to better prepare students for the demands of college and career endeavors. In a presentation titled, Important P-20 Developments in Illinois: Longitudinal data and membership with the American Diploma Project at the first annual Educational Organization and Leadership Graduate Student Conference at the University of Illinois in March 2009, State Superintendent Christopher Koch and Assistant Superintendent Linda Tomlinson highlighted the relationship between The American Diploma Project and P-20 education in Illinois. This partnership allows the state to review current learning standards in math, English/Language Arts, and science curricula to make sure that students are leaving high school with “21st century skills,” such as critical thinking and problem solving, global awareness, self direction, and social responsibility (Koch & Tomlinson, 2009). Illinois will also seek to align assessments, such as the Illinois State Achievement Test (ISAT) and the Prairie State Achievement Exam (PSAE) and hold postsecondary institutions accountable for student success once they have been admitted to higher education.

As a result of joining ADP, Illinois will assess the intensity of coursework in light of the knowledge and skills necessary for post-high school success. In addition to developing strategies to improve teaching and learning, ADP will allow Illinois to track courses completed with long-term career and educational endeavors. The state will also match “student-level records across K-12 and higher education” as a way to increase the efficacy of current and future educational policies and programs (Koch & Tomlinson, 2009). To realize the educational goals set forth by the project, Koch and Tomlinson called for a state-wide longitudinal data system to measure the effectiveness of college and career strategies.

Earlier this month, those calls were answered as Illinois was chosen by the U.S. Department of Education to receive nearly nine million dollars in grant money to fund a longitudinal data system (Illinois State Board of Education, 2009). The Illinois State Board of Education (ISBE) will use this grant money to continue establishing the statewide identification system and collect student-level data beginning pre-kindergarten and continuing through high school and post-graduation (ISBE, 2009). The ability to collect these data is a significant step toward creating a college and career readiness framework. The ISBE has a webpage with resources and information regarding ADP in Illinois at [http://www.isbe.net/ADP/default.htm](http://www.isbe.net/ADP/default.htm).

**LOOKING AHEAD**

As of 2008, Achieve reported increasing the number of states that now require Algebra II as a graduation requirement from two to thirty. Also, twenty states now require a college and career ready diploma (Cohen, 2008). These are necessary and important advancements and ones that should continue to improve schooling in America.

Looking to the future, President Obama proposed that by the year 2020, “America will once again have the highest proportion of college graduates in the world” (Obama, B.H., 2009). Programs like ADP are helping to actualize this national vision by partnering with state systems eager for improvement. By focusing attention on high schools, increasing the rigor of their course offerings, and drawing connections between what students are required to do in high school and their college and career aspirations, ADP helps states to reconcile the expectations gap in education. Addressing this multifaceted issue by focusing on aligning standards, course requirements, and curricula contributes to the national goal of equipping students to be successful once they graduate from high school. 

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REFERENCES


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Rethinking College Readiness

David T. Conley

The likelihood that students will make a successful transition to the college environment is often a function of their readiness—the degree to which previous educational and personal experiences have equipped them for the expectations and demands they will encounter in college. A key problem is that current measures of college preparation don’t fully get at what it means to be college ready. A new definition and a broader, more comprehensive conception of college readiness are both necessary if more students are to be prepared to go on to college.

DEFINITION OF COLLEGE-READY

College readiness can be defined as the level of preparation a student needs in order to enroll and succeed—without remediation—in credit-bearing general education courses at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program. “Succeed” is defined as completing entry-level courses at a level of understanding and proficiency that makes it possible to take the next course in the sequence or the next level of course in the subject area.

The college-ready student envisioned by this definition is able to understand what is expected in a college course, can cope with the content knowledge that is presented, and can understand the key intellectual lessons and retain the dispositions the course is designed to develop in students. In addition, the student who is ready for college will be able to understand the culture and structure of postsecondary education and the ways of knowing and the intellectual norms of this academic and social environment.

COMPONENTS IN A NEW DEFINITION

College readiness is a multi-faceted concept comprising numerous factors both internal and external to the classroom environment. The model presented in this article derives from the author’s research and is organized around four key facets.

In practice, these four facets are neither mutually exclusive nor perfectly nested as portrayed in the model. The factors interact, and a lack of competency in any of the four areas can cause students to fail to complete their first year in college successfully.

The model, explained in greater detail below, argues for a more comprehensive conception of what it means to be college ready and for more attention to be paid to student preparation in each of the four facets.

Key Cognitive Strategies

At the heart of college readiness is development of the cognitive and metacognitive capabilities of incoming students. These include analysis, interpretation, precision and accuracy, problem solving, and reasoning. Student facility with these strategies has been consistently identified as being centrally important to college success (e.g., Conley, 2003b, 2005; Conley & Bowers, 2008; National Research Council, 2002). Several studies of college faculty members nationwide, regardless of the selectivity of the postsecondary institution, expressed near-universal agreement that students arrive largely unprepared for the intellectual demands and expectations of college (Conley, 2003b). They have difficulty formulating and solving problems, evaluating and incorporating reference material appropriately, developing a logical and coherent argument or explanation, interpreting data or conflicting points of view, and completing their assignments and projects with precision and accuracy (Conley, McGaughy, & Gray, 2008). Several important cognitive strategies are presented below as examples.

Problem formulation and problem solving: The student develops and applies multiple strategies to formulate and solve routine and non-routine problems, and selects the appropriate method for solving complex problems.

Research: The student engages in active inquiry and dialogue about subject matter and research questions and seeks evidence to defend arguments, explanations, or lines of reasoning. The student documents assertions and builds an argument that extends from previous findings or arguments. The student utilizes appropriate references to support an assertion or a line of reasoning. The student identifies and evaluates data, material, and sources for quality of content, validity, credibility, and relevance. The student compares and contrasts sources and findings and generates summaries and explanations of source materials.

Reasoning, argumentation, proof: The student constructs well-reasoned arguments or proofs to explain phenomena or issues, utilizes recognized forms of reasoning to construct an argument and defend a point of view or conclusion, accepts critiques of or challenge to assertions, and addresses critiques and challenges by providing a logical explanation or refutation, or by acknowledging the accuracy of the critique or challenge.

Interpretation: The student analyzes competing and conflicting descriptions of an event or issue to determine the strengths and flaws in each description and any commonalities among or distinctions between them. The student synthesizes the results of an analysis of competing or conflicting descriptions of an event or issue or phenomenon into a coherent explanation. The student states the interpretation that is most likely correct or is most reasonable, based on the available evidence. The student presents orally or in writing an extended description, summary, and evaluation of varied perspectives and conflicting points of view on a topic or issue.

Precision and accuracy: The student knows what type of precision is appropriate to the task and the subject area, is able to increase precision and accuracy when a task or process is repeated, and uses precision appropriately to reach correct conclusions in the context of the task or subject.

These key cognitive strategies are broadly representative of the foundational elements that underlie various “ways of knowing.” They are at the heart of the intellectual endeavor of postsecondary education and are how postsecondary faculty members think about their subject areas. They are necessary to discern truth and meaning as well as to pursue them.

Academic Knowledge and Skills

Linked closely with the key cognitive strategies are specific types of content knowledge. Entering college students should possess an understanding of the “big ideas” of each subject area. Several sets college readiness standards specify in detail the key knowledge associated with college success (e.g., Achieve, Inc., The Education Trust, & Thomas B. Fordham Foundation, 2004; ACT, 2004; College Board (2006); Conley, 2003a, 2003b; Texas Higher Education Coordinating Board, 2008). Following are some examples of key structures, concepts and knowledge associated with several core academic subjects. A more comprehensive exposition is contained in College Knowledge (Conley, 2005).

English: The knowledge and skills developed in entry-level English courses enable students to engage texts critically and create well-written, organized, and supported products, both oral and written. The foundations of English include reading comprehension, literature, writing, editing, information gathering, analysis, critiques, and connections. Students need to build vocabulary and word analysis skills and to utilize techniques such as strategic reading that will help them understand a wide range of non-fiction and technical texts. Knowing when to re-read a passage and how to underline key terms and concepts strategically aids comprehension and retention of key content.

Math: Students need a thorough understanding of the basic concepts, principles, and techniques of algebra. They use conceptual understandings to specify a problem, to solve the problem, and to interpret the solution. They know when and how to estimate to determine the reasonableness of answers and can use a calculator appropriately as a tool.

Science: Students utilize scientific thinking in all its facets. This involves learning to think like a scientist, using communication conventions followed by scientists, basing conclusions on empirical evidence, and subjected findings to challenge and interpretation. Students view scientific knowledge as both constant and changing, and understand that the discovery of new scientific knowledge does not mean that previous knowledge was necessarily “wrong.” Students grasp that scientists think in terms of models and systems. Students master core concepts, principles, laws, and vocabulary of the scientific discipline being studied, and learn to view laboratory settings as environments where content knowledge and scientific thinking strategies converge.

Social Studies: The social sciences entail a range of subject areas within which analytic methods emphasize skills such as interpreting sources, evaluating evidence and competing claims, and understanding themes and events within larger frameworks. Students need to be aware that the social sciences consist of “big ideas” (theories and concepts) that form the structure for each discipline.

Academic Behaviors

Also contributing to student success is a set of academic self-management behaviors. Among these are time management, strategic study skills, awareness of one’s true performance, persistence, and the ability to utilize study groups. All require students to demonstrate high degrees of self-awareness, self-control, and intentionality. Research on the thinking of effective learners has shown that such individuals tend to monitor actively, to regulate, to evaluate, and to direct their own thinking (Ritchhart, 2002).

Examples include awareness of one’s current level of mastery and understanding (and misunderstandings) of a subject; the ability to reflect on what worked and what needed improvement regarding a particular academic task; the ability to persist when presented with a novel, difficult, or ambiguous task; the tendency to identify and systematically select among and employ a range of learning strategies; and the capability to transfer learning and strategies from familiar settings and situations to new ones (Bransford, Brown, & Cocking, 2000).

Another important set of academic behaviors is student mastery of study skills. Study skills encompass active learning strategies that go far beyond reading the text and answering the homework
questions. Key study-skill behaviors include time management, stress management, task prioritizing, using information resources, taking class notes, and communicating with teachers and advisors (Robbins et al., 2004). An additional critical skill is the ability to participate successfully in a study group.

Time management is perhaps the most foundational of all academic behaviors. Time management techniques and habits include accurately estimating how much time it takes to complete outstanding and anticipated tasks and allocating sufficient time to complete the tasks; using calendars and creating “to do” lists to organize studying into productive chunks of time; locating and utilizing settings conducive to proper study; and prioritizing study time in relation to competing demands such as work and socializing.

**Contextual Skills and Awareness (“College Knowledge”)**

Finally, an increasing number of studies have highlighted the complexity of the contextual knowledge associated with application and acculturation to college (e.g., Conley, 2005; Lundell, Higbee, Hipp, & Copeland, 2004; Venezia, Kirst, & Antonio, 2004). Contextual awareness, or “college knowledge,” also include the ability to interact with professors and peers and other members of an intellectual community.

This dimension includes all the information—both formal and informal, stated and unstated—necessary to be eligible for admission, select an appropriate postsecondary institution, gain admission to a college, and obtain financial aid. Students with college knowledge understand college admission criteria including high school course requirements, know how to complete an application, understand that different colleges have different missions, can state approximate tuition costs and the likelihood of financial aid from various types of colleges, and know admissions-testing requirements and deadlines (Conley, 2005; Robbins et al., 2004; Venezia, Kirst, & Antonio, 2004).

Success in college is enhanced for students who possess the knowledge and skills that enable them to interact with a diverse cross-section of academicians and peers. These include the ability to collaborate and work in a team; knowledge of the norms of the “academic” culture and how one interacts with professors, administrators, and others in that environment; the ability to be comfortable around people from different backgrounds and cultures; the ability to take advantage of academic and personal support resources available on most campuses; and the ability to demonstrate leadership skills in a variety of settings.

**CONCLUSION**

Clearly, far fewer students are truly ready for college when measured against this multi-dimensional model than when judged by the conventional standard of courses taken and grades received in high school. The goal of presenting a more comprehensive model of college readiness is not to deny students entrance to college, but to highlight the gaps that exist between college-eligible and college-ready.

By adopting the four-part conception of college readiness presented in this article, high schools and colleges can agree on what it means for students to be ready for postsecondary education. The importance of greater agreement is heightened when an ever-increasing proportion of high school students are choosing to go to college. Making certain that they are not just eligible, but prepared, will help them achieve their goals and help colleges function more effectively.

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**REFERENCES**


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COLLEGE AND CAREER READINESS RESOURCES


California’s Cal-PASS system - A resource that works to improve student transitions by helping educators identify and reduce barriers through data collection and by bringing together K-16 faculty and educators: [http://www.cal-pass.org](http://www.cal-pass.org)


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