Conley, D. T. (2010). *College and Career Ready: Helping all Students Succeed Beyond High School*. San Francisco: Jossey-Bass.

(Abstract prepared for AVID Postsecondary by Harriet Howell Custer, Ph.D.)

In his second book, Conley focuses on the premise that "essentially all students should be capable of pursuing formal learning opportunities beyond high school" (1). However, for a variety of reasons the vast majority of contemporary American public high schools are not adequately preparing their graduates to succeed in postsecondary education. Conley states the problem as follows: "today's high school diploma qualifies students only for jobs that do not require what we like to think of as a high school education" (3). The fundamental concept of the comprehensive high school with two tracks for two different types of students no longer holds. The expectations of the public (including employers) for what a high school graduate knows and is able to do are low, and the assumption is that high school graduates are not particularly well educated.

One of the "great debates," according to Conley, is the degree to which college readiness and work readiness are similar—is there a "broader, more foundational set of knowledge and skills that span school and work, and, if so, can this be taught to all students?" (4). There is mounting evidence that students should develop a core set of skills and knowledge that will prepare them for postsecondary education and/or for work. Employers require high skill levels from applicants and expect them to be ready to be productive workers even in entry-level jobs; they are not finding these employees within the ranks of high school graduates.

Conley proposes a fair standard to which high schools should be held accountable: They should be considered successful in proportion to the degree to which they prepare their students to continue to learn beyond high school. By 'learn,' he means "the ability to engage in formal learning in any of a wide range of settings: university and college classrooms, community college 2-yr certificate programs, apprenticeships that require formal classroom instruction as one component, and military training that is technical in nature and necessitates the ability to process information through a variety of modes developed academically such as reading, writing and mathematics" (9). High schools should provide students with skills, knowledge and resources so that they can make informed choices about work and career—and have the foundation to move forward in just about any field. In **College and Career Ready**, Conley builds upon the research reported in **College Knowledge** and the results of a study he and his colleagues at the Educational Policy Improvement Center (EPIC) conducted with 38 high schools that "outperform comparable schools that are preparing students for college and careers" (104). He describes the tools that high school graduates need to be successful, analyzes the "gap" between what's taught in high school and what is needed for college success, provides examples of these skills and abilities in practice, and profiles high schools that are working.

Conley defines *college and career readiness* as "the level of preparation a student needs in order to enroll and succeed—without remediation—in a credit-bearing course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program, or in a high-quality certificate program that enables students to enter a career pathway with potential future advancement." *Success* is defined as "completing the entry-level courses or core certificate courses at a level of understanding and proficiency that makes it possible for the student to consider taking the next course in the sequence or the next level of course in the subject area or of completing the certificate."He describes the current strategies used to determine college and career readiness (course titles and GPA, tests, performance in college courses, and baccalaureate-level general education requirements) and examines in detail a four-part conceptual model for college readiness:

- 1. **Key cognitive strategies** are those "habits of mind" or intentional behaviors students must be able to employ over time and in a variety of situations so that they "learn when and where to employ them" (33). They tend to be embedded in first level college courses across the disciplines. Key cognitive strategies include problem formulation, research, interpretation, communication, and precision and accuracy (34).
- 2. The mastery of *key content knowledge* is achieved by "processing information and applying that information by means of the key cognitive strategies" (39). This includes "overarching academic skills" such as writing, and core academic subject knowledge and skills such as math, science, the sciences, world languages, and the arts.
- 3. **Academic behaviors** (or self-management) require greater self-awareness, self-monitoring and self-control of a variety of "processes and behaviors necessary for academic success," such as reflection, commitment to continuous improvement, and study skills (39-40).
- 4. Contextual skills and awareness (or "college knowledge") incorporate the "privileged information necessary to understand how college operates as a system and a culture" (40). This includes understanding the relationship between the students' "cultural frame of reference" and the culture of the college; the ability to collaborate in the learning process; and being comfortable around people from diverse backgrounds. Additionally, students need to be aware of the formal and informal aspects of college culture in order to gain admission to and navigate within the postsecondary system.

In order to determine what are expected and required of students in order to be successful, Conley and his colleagues have focused their research on identifying and analyzing entry-level college courses that typically fulfill general education requirements. They have reviewed course syllabi, surveyed faculty teaching these courses, and analyzed other course documents. Their findings comprise a number of "characteristics that tend to distinguish college courses from high school courses" (43), including the following (43-48):

- 1. College instructors move at a more rapid pace and have different goals for their courses.
- 2. They emphasize key thinking skills, expecting students to work independently, draw inferences, interpret results, analyze conflicting information or ideas, support arguments with evidence, solve complex problems that have no obvious right answer, reach conclusions, offer explanations, conduct research, engage in consideration of ideas.
- 3. They expect students to generally behave in ways that are respectful of the instructor, fellow students, and the course material.
- 4. Student work is assessed in a variety of ways, including frequently writing papers that require high levels of cognition and support.
- 5. Science courses have required labs and students are often expected to write using scientific language.
- 6. College faculty expect students to produce work that is consistent with the requirements outlined in the syllabus; to work independently and let the instructor know when they have questions or need help; hold students to high standards; and are unlikely to be tolerant of plagiarism, late or sloppy work, and poor excuses.
- 7. Overall, college faculty expect students to "take care of themselves in significant ways through independent action and self-initiative" (47).

Conley provides operational examples of college readiness, including what he terms "general characteristics" and examples of performance relating to those characteristics (see 49-51). His study of high school curricula and teaching methods reveals that most high schools teach key cognitive strategies

(when they do teach them) in isolation from key content knowledge. He presents solutions to this dilemma—focusing on the "big ideas" that comprise the content of each discipline, and aligning courses and expectations between high school and college. What Conley suggests as a remedy is a set of "college readiness standards that define where students are expected to end up by the conclusion of high school" (54). These standards, which have been and are being developed by states and educational organizations (such as those outlined in *College Knowledge*), should be adopted by high schools that then align their curriculum with the standards.

He proposes a series of options for creating connections between what students need to know to succeed and what they bring with them from high school. He also addresses formative assessments for college readiness, as well as the role of scaffolding (which calls for the careful planning and sequencing of activities and assignments that indicate a systemic approach to curriculum and its delivery):

- 1. Advanced Placement (AP) and International Baccalaureate (IB) courses, which now have standards, can be used to create an aligned curriculum.
- 2. High school course syllabi can be aligned with the syllabi of colleges in which graduates of the high school are likely to enroll. This requires that secondary and postsecondary faculty collaboratively reach agreement on an analysis of course objectives, standards, expectations, assignments, readings, grading criteria, prerequisite knowledge, and teaching methods.
- 3. College-ready seminars can be offered at the high school, designed to provide students with a model "college-going" experience; course expectations are similar to what they will be in college.
- 4. College-ready assignments can be incorporated into a senior project, "carefully crafted to represent something that students will have to do in college and is scored against postsecondary readiness criteria" (63).
- 5. The paired course model is based on collaboration between a high school and college, where the partners develop "guidelines that apply to exit-level high school courses and entry-level college courses." Syllabi are aligned in key areas, and course pairs emphasize continuity in expectations and coordination in coverage of content. Assignments are graded according to mutually agreed-upon scoring guides.

Conley defines "self-management" as a "category of behaviors and attitudes by which students take greater responsibility for their actions and become significantly more proactive" (73). This includes time management—matching obligations and available time and learning to set priorities in use of time. Study skills include "key strategies and mind-sets related to study," or "meta-strategies" (74-79), such as

- 1. Distinguishing between material the student understands and can pursue independently, and material he/she doesn't understand and needs help to complete. Students need to focus on **how well** they are doing, rather than on **how much** they are doing.
- 2. Knowing how to work with others in study groups, including selecting study group members, moving outside of a comfortable social network, and learning how effective groups function.
- 3. Knowing how to prepare for a variety of different kinds of tests.

Goal setting is another key self-management strategy that should be begun in high school and continued into college. Goal setting needs to become systemic for the student and for the institution, so that goals are reviewed and revised periodically.

High school students are used to being able to complete assignments with little effort in a short amount of time. Learning to persist with difficult tasks is critical to being successful in college. "Students who are unwilling or unable to cope with ambiguity or the need to be highly self-directed," Conley insists,

"will struggle with many of the assignments and tasks they encounter in college courses." He suggests a variety of techniques to wean students from "easy" learning. They include (81-83):

- 1. Begin in the 9th grade, giving assignments that require multiple days to complete;
- 2. Introduce problems that have no one right solution (or at least no obvious solution);
- 3. Require that the student review and revise written assignments

Successful college students are aware of their academic strengths and weaknesses; high schools need to prepare them for more rigorous expectations, helping them develop "psychological toughness." Conley suggests several strategies:

- 1. Grade high school papers against both high school- and college-referenced standards.
- 2. Provide regular feedback on common assignments that all students at a particular grade level complete, including tasks such as research papers and lab assignments.
- 3. Use feedback to encourage students to reflect on the quality of their work; have students work in groups to discuss their perceptions of the differences between high school and college-level feedback; and provide opportunities for guided reflection on the quality of their work and ways in which they need to improve.

High schools need to build "cultural capital" for their graduates—the knowledge, experience and values (or "college knowledge") that will enable them to succeed within the social and cultural context that college presents. College admissions processes need to be made more transparent to prospective students; once admitted, students need to know how to function effectively and successfully within the college environment. Conley discusses the need for students to be able to navigate admissions processes, understand the importance of admissions testing, and access assistance with financial aid applications. Developing regional partnerships can help students successfully manage the college entry bureaucracy. A number of strategies can also support postsecondary participation in student success initiatives as well, including establishing organizational structures that help with college preparation, such as lower counselor-to-student ratios, counseling centers with computer access, and counseling departments that mimic college characteristics. In addition, a focus on career planning and exploration; student advisory periods and programs; and regular communication with parents—particularly those who have not been to college themselves—have proven effective in minimizing the college readiness gap.

The findings of EPIC's study resulted in the formulation of seven key principles for College and Career Readiness. More information is available at http://www.collegecareerready.org/. For each principle outlined below, Conley provides examples of effective practices.

- 1. Create and maintain a college-going culture in the school.
- 2. Create a core academic program aligned with and leading to college readiness by the end of twelfth grade.
- 3. Teach key self-management skills and academic behaviors and expect students to use them.
- 4. Make college and careers real by helping students manage the complexity of preparing for and applying to postsecondary education.
- 5. Create assignments and grading policies that more closely approximate college expectations each successive year of high school.
- 6. Make the senior year meaningful and appropriately challenging.
- 7. Build partnerships with and connections to postsecondary programs and institutions.

Conley provides case studies of diverse high schools that have been particularly successful in preparing their graduates for college and careers. These include an alternative school, University Park Campus School in Worcester, Massachusetts; two magnet schools— Fenway High School in Boston and Polytech High School in Woodside, Delaware; two comprehensive high schools—Cherry Creek High School in Greenwood Village, Colorado and Garland High School in Garland, Texas; Minnesota New Country School, a charter school in Henderson, Minnesota; Manhattan Hunter Science High School in New York City, an early college high school; and, finally, one private school, Cristo Rey Jesuit High School in Chicago.

He acknowledges that for a school to successfully undertake the kind of transformation he suggests is extremely difficult. It requires a shared vision, persistence, and an ongoing commitment to ensuring that graduates are college and career ready. Barriers emerge in response to change initiatives that may include community push-back, policy disincentives at the state level, and reluctant faculty and staff. Here Conley outlines a series of steps that a high school can undertake to help provide the focus and energy needed to implement true reform:

- 1. Develop a profile of the schools' college readiness capacity.
- 2. Identify outcome measures of success.
- 3. Assess the district capacity to support improvements.
- 4. Institute specific programs to address the four dimensions of college and career readiness, including small, incremental changes, larger systemic changes, and engaging outside partners.
- 5. Institute professional development to support college readiness. Conley focuses on the need to help teachers strengthen content knowledge, instructional strategies, and awareness of college knowledge, as well as using the "power" of learning communities (193).
- 6. Recognize the importance of culture and culture change, which involves changing behaviors in order to change beliefs.
- 7. Gauge the progress of changes in the high school.
- 8. Follow graduates to assess the effects on student performance in college.

Conley outlines and evaluates a number of new and emerging models for schools to consider for improving college and career readiness. These include small schools, career academies, AP and BI programs, early college high schools and dual credit programs. He also discusses steps that some states are taking to make more students ready for college and career success, spending considerable time with the initiative underway in the state of Texas, which has developed a set of high school college readiness standards and assessments.

Finally, he sends a "clear message" to both the secondary and postsecondary systems, which must change and work together:

- High schools must focus more clearly on college readiness, develop and use more comprehensive
 measures of student readiness, pay attention to the needs of first-generation college students, and
 commit to ensuring that teachers have the necessary content knowledge and instructional skills.
- Colleges must work with high schools to better align the secondary curriculum with entry-level
 college courses, control the quality of entry-level courses, use better diagnostic information for
 placement, create integrated student support programs, and, finally, ensure that future educators
 have the skills to make all students college ready