# Rice University: Innovation to Increase Student College Readiness

Jennifer Gigliotti

#### INTRODUCTION

ollege readiness" means that a student can enter a college classroom without remediation and successfully complete entry-level college requirements (Conley, 2012). In order for students to be considered college ready, they must acquire skills, content knowledge, and behaviors before leaving high school. The core areas of college readiness are:

- The development of strong intellectual growth throughout the primary and secondary years fostered by increasingly challenging content in the four core subjects and beyond.
- The ability to think critically and problem solve in the context of a continuously changing set of circumstances and realities.
- The advancement of reading, writing, and numeric skills that enable success in all college courses.
- The capacity to communicate effectively with individuals from a variety of cultural and professional backgrounds (Conley, 2011).

Research on high-school performance illustrates that large numbers of high-school graduates are not adequately prepared for postsecondary education. For example, a survey of recent graduates found that 39 percent of those currently enrolled in college say they were not prepared for the

<sup>© 2012</sup> Jennifer Gigliotti, Associate Dean, Glasscock School of Continuing Studies, and Executive Director, Center for College Readiness, Rice University, Houston, TX

expectations of college (Hart, 2005). Additionally, only 24 percent of seniors who took the ACT test in 2010 met its college-ready benchmarks in all four core subject areas (ACT, Inc. 2010).

This article will discuss the importance of college-readiness initiatives, explore the Rice University model for increasing student college readiness and building K–12 strategic partnerships, and discuss programming that could be implemented by any continuing education unit with the goal of increasing the pipeline of college-ready students in their own communities.

## THE IMPORTANCE OF COLLEGE READINESS

It is critical that higher-education institutions have a robust pipeline of students well prepared for college-level work and equipped with the skills and knowledge to cooperate and compete in a global community. Unfortunately, too often we find matriculating students underprepared for the rigors of college. Forty-one percent of students who start college are not ready for credit-bearing college-level work, resulting in discouragement, delay, and dropouts (Adelman, 2004).

Half of all students studying for an associate degree and one in five of those seeking a bachelor's degree, including many who graduated from high school with a grade point average of 3.0 or higher, are required to take remedial or developmental courses and many of them never move on to credit-bearing courses, much less graduation (Complete College America, 2011). Having to enroll in remedial courses increases the time it takes students to complete their degrees and is associated with a decreased graduation rate (Adelman, 1999; National Center for Education Statistics, 2004). For example, only 17 percent of those students who must take a remedial reading class receive a bachelor's degree or higher; of those taking two remedial classes (other than reading), only 20 percent receive a bachelor's or higher (National Center for Education Statistics, 2004).

The nonprofit Complete College America has revealed alarming trends in higher education attainment. In Texas, for example, of every 100 students who enrolled in a public college, 79 started at a community college, and only 2 of them earned a two-year degree on time; even after four years, only 7 of them graduated. Of the 21 of those 100 who enrolled at a four-year college, 5 graduated on time; after eight years, only 13 had earned a degree (2011).

Finally, the Center for Education and the Workforce at Georgetown University asserts that 63 percent of all jobs will require some college education or better by 2018 (Carnevale et al., 2010), yet only 38 percent of

young adults (ages 25-34) have an associate degree or higher (NCHEMS, 2009). Where will our educated work force come from?

## THE RICE UNIVERSITY MODEL

(www.collegeready.rice.edu)

In 1994, the Glasscock School of Continuing Studies, in honor of the commitment to community engagement of Edgar Odell Lovett, Rice University's first president, established a department of teacher professional development. The department began by providing summer training for Advanced Placement (AP) and pre-AP teachers and the Rice AP Summer Institute has grown to become one of the largest such training programs in the nation. In 2005, we expanded our offerings to include professional development for International Baccalaureate (IB) teachers, which makes us the only institute of higher education to train both AP and IB teachers.

Though our original mandate was teacher professional development, over the last several years our initiatives have expanded to include programming not only for teachers but also district administrators, counselors, and secondary students. In recent years, our program portfolio has increased dramatically beyond the AP Summer Institute and IB Diploma Programme workshops to include a variety of programming focused on advanced content to add depth and breadth to the secondary curriculum and tools for educators and students to increase college and career success for all students.

Our program diversification has stayed true to the core of our work providing training and support for teachers and students engaged in advanced academic coursework that will provide a strong foundation of skills and knowledge to ensure student success in higher education. The Glasscock School of Continuing Studies at Rice University is currently one of the largest K-12 training institutes in the country. To date, the department has trained more than 37,000 educators and students from all 50 states and 37 countries through a variety of programming. In the 2011-2012 academic year, the center trained over 6,200 teachers, administrators, counselors, and students. Program participation has increased by 147 percent since 2007 due to our program diversification and growing appreciation among our constituents of the importance of college readiness initiatives.

In light of our ever-expanding and diversified portfolio, it became clear that the name of our department, "Teacher Professional Development," no longer accurately represented the full scope of our work. In September 2011, the Glasscock School launched the new Center for College Readiness,

which more accurately encompasses the full scope of our work.

Our programming has and continues to be centered on innovative strategies and content to ensure students are academically prepared for the rigors of college. Through intensive teacher professional development programming focused on both content and pedagogy, we provide teachers with opportunities to hone their skills in order to better prepare their students for the rigors of their postsecondary education. There is a critical need to make sure that students have access to high-quality, well-trained teachers who can both challenge and nurture them. Indeed, teachers fail to motivate their students if their own lack of knowledge is apparent. Content knowledge of our public-school teaching force is a significant national issue. Moreover, the most useful professional development emphasizes the active teaching, assessment, and reflection opportunities that deepen knowledge of content and enhance a teacher's competence.

We believe the cornerstone of college readiness for students is rigorous coursework led by highly trained teachers. The intensity and quality of secondary-school curriculum are more important than parent education level, family income, or race/ethnicity in predicting whether a student will earn a postsecondary degree (Adelman 1999, 2006). We work in partnership with district administrators and counselors to help them understand their role in establishing a college-going culture on their campuses and in supporting the work of teachers to increase the depth and complexity of their college preparatory courses. We also provide development and enrichment opportunities for students to increase their awareness of the importance of college and to master the skills necessary for their post-secondary success.

The Rice Model is unique in that we also capitalize on the intellectual capital of our faculty to increase the content knowledge of secondary teachers. Over the last eighteen years, we have engaged a multitude of professors across numerous departments in our outreach work. We have nurtured these relationships and developed a network of highly engaged faculty who embrace the opportunity to contribute to the professional growth of secondary teachers. Many of the Rice professors regularly contribute to our professional development programming through content presentations to both middle-school and high-school teachers. Including Rice faculty not only deepens the content knowledge of our secondary audience, it also helps to build awareness among faculty of the value of K-12 outreach programs and provides a venue for the discussion of college-level expectations of incoming students.

The Center for College Readiness implements its programming in Houston, Texas, the 4<sup>th</sup> largest city in the country. Houston is a city with great diversity that has experienced rapid population growth in recent years. The population of the metropolitan area has increased by 26 percent since 2000. Our programs serve many large, urban school districts including the Houston Independent School District, the largest district in Texas and the seventh largest in the nation.

## Blueprint for K-12 outreach efforts

The following are a few programs offered through the Center for College Readiness that could be modified to fit local needs and strengths. Other CE departments could easily replicate these programs with internal resources and human capital.

- Rice for High School Students provides an opportunity
  for high-school students to enroll in Rice University's
  summer school. Students who meet university enrollment criteria can choose from among more than 20
  courses offered in a variety of subjects including math,
  science, and English. These for-credit courses allow
  rising juniors and seniors to experience the rigors of
  college-level curriculum and experience campus life.
- The College Readiness Summit introduces participants to valuable information on how to create a college going culture, how to close equity and achievement gaps, the importance of mentorship and leadership, and proven college-readiness strategies.
- The College and Career Counseling Workshop is designed for secondary counselors. Participants receive valuable training and insight into the college admissions process, the importance of high-school course selection, and tools that will increase college and career success for all students.
- C3: Content, College, Careers is a program for highschool students that provides enrichment courses on communication skills, navigating the college admission and application process, and exploring a variety of career options in the sciences and social sciences.

Relationship building and strategic partnerships with like-minded organizations. The key to any successful K-12 outreach effort is building relationships and strategic partnerships with organizations that share similar goals. Through interactions at the district level and at professional conferences, we have worked to nurture relationships that have led to customized district professional development and collaborations on state and local grants.

Strong district partnerships have resulted in customized workshops designed by Rice University in response to expressed district needs or demonstrated weaknesses through the analysis of district data. We work to help districts increase awareness about the connections between a rigorous curriculum and postsecondary success as well as provide an analysis of district data in order to make informed decisions related to their Advanced Placement and International Baccalaureate programs.

Additionally, we have collaborated with local districts and like-minded nonprofits in designing and implementing multiple successful grant collaborations including Department of Education Teaching American History and GEAR UP grants as well as a Texas Regional Math/Science Collaborative grant from the Texas Higher Education Coordination Board. In 2012, we embarked on a new College Readiness Initiative that is collaboration between the Center for College Readiness, the AVID Center, the College Board, and ten local school districts. Funded by a local foundation, the Initiative brings together the expertise of three like-minded non-profits in service to the college readiness goals of ten Houston districts.

The key to success in your community is to be responsive to district needs and to be proactive in seeking out district collaborations and strategic partnerships.

## K-12 OUTREACH:

## WHAT PEER INSTITUTIONS ARE DOING IN THEIR COMMUNITIES

The 2012 UPCEA national conference in Portland showcased the efforts of other institutions that are also engaged in college-readiness activities. Addressing college-preparedness happens on different levels and with different audiences: K-12, adult students, and those who teach and support them. During a panel discussion, "Partnerships for College Preparedness: Recruitment, Retention, and Beyond, "representatives from four different institutions shared innovative models for building successful programs through strategic educational partnerships. Models discussed include Transitions: College and Career Prep, at Penn State University; the Center

for Student Success at Portland State University; dual-credit programs at the University of Missouri-St. Louis; and the Center for College Readiness at Rice University. Below is a brief synopsis of each program as additional examples of replicable college-readiness initiatives.

Penn State Transitions: College and Career Prep

(http://ceup.psu.edu/transitions)

In their work with prospective adult learners in their service area, the Penn State Continuing Education Student Services team learned that many of the students have the motivation and need for further education but lack the necessary skills—educational planning, time management, study strategies, technology competence and confidence, writing and research, college-level math, and familiarity with higher education— to be initially successful. The Transitions Program was developed to serve this need. Program goals include:

- improving study skills, including time management, test-taking, note-taking, and general organization;
- improving reading comprehension;
- developing basic research, college-level writing, and presentation skills;
- developing a personal educational plan through career exploration;
- increasing basic computer skills, including proficiency using MS Word and PowerPoint, Internet, and email;
- understanding of available resources to help finance an individual's educational plan.

Portland State: Center for Student Success

(http://pdx.edu/ceed/center-for-student-success)

The Center for Student Success in Continuing Education in the Graduate School of Education at Portland State University has offered a range of services (e.g., onsite professional development, technical assistance, third-party evaluation, materials development, and data analysis) and works with a number of PK-12 school districts and nonprofit agencies to increase PK-12 student success and to bridge the achievement gap.

University of Missouri-St. Louis: Advanced Credit Program (http://www.umsl.edu/continuinged/acp/)

The Advanced Credit Program (ACP) at the University of Missouri-St. Louis is a dual-credit program as defined by the Missouri Board of Higher Education. This program permits qualifying students to earn college credit and to become familiar with the college experience while still in high school. College credits earned through ACP are accepted at all of Missouri's public colleges and universities and many other institutions across the country.

Dual-credit courses are transcribable university-level courses taught in high schools to eligible high-school students by university-qualified instructors using the college's required textbooks and curricula. When students successfully complete a dual-credit course, they receive both high school and university credit. High-school teachers who have been approved to serve as adjunct lecturers by the university teach courses on the high-school campus. In the state of Missouri, these teachers must have a master's degree that includes substantial study—usually a minimum of 18 semester hours—appropriate to the academic field in which they are teaching. As for any instructor of college-level courses, high-school instructors of dual-credit courses must meet the requirements for faculty teaching in institutions of higher education, as stipulated for accreditation by the Higher Learning Commission.

## **CONCLUSION**

It is critical that higher education institutions engage with their K-12 counterparts to ensure that students have the foundational knowledge and skills necessary to achieve postsecondary success. Schools of continuing studies across the nation should be assessing ways in which to provide services to their local community and building relationships with local school districts to evaluate needs. K-12 outreach will serve to strengthen our communities, create a pipeline of college ready students for our campus, and serve as a university recruitment tool.

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