GAME CHANGERS

EDUCATION and INFORMATION TECHNOLOGIES

Edited by **DIANA G. OBLINGER**



Game Changers: Education and Information Technologies

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FROM THE EDITOR

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-Diana G. Oblinger

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Central Piedmont Community College: Online Student Profile Learning System Clint McElroy

Introduction

MORE PEOPLE THAN EVER are pursuing higher education in the United States. The increasing number of students attending community colleges reflects a broader reach into the general population as well as higher percentages of underprepared students for U.S. community colleges. For example, at Central Piedmont Community College (CPCC)—a large, urban college in Charlotte, North Carolina—more than two-thirds of incoming students need academic remediation. At the same time, colleges are tasked with providing all students the opportunity to be successful, despite multiple student risk factors, some of which are beyond the institution's control.

Since the turn of the millennium, a technology-based solution called the Online Student Profile (OSP) system has dramatically increased the success rates for at-risk students at CPCC. Developmental students at CPCC participating in the full OSP system (orientation course, developmental reading and/ or writing with an instructor trained in the system, and participation in learning style and personality assessments) are retained and are successful (A-C grades) at much higher levels than students who do not participate or do not fully participate. From 2004 to 2009, students participating in all elements of the OSP system were:

- 8.70 percent more likely to complete the courses in which they enrolled,
- 9.36 percent more likely to persist from spring to the subsequent fall term,
- 10.82 percent more likely to get A-C grades in their courses, and
- 3.45 percent more likely to earn a college degree.

These results were achieved as the result of a homegrown student success project that is still growing at CPCC and is now being adopted by six partner colleges through a grant from Next Generation Learning Challenges (NGLC, http://nextgenlearning.org).

The Evolution of CPCC

In 2002, CPCC's president, Dr. Tony Zeiss, and his cabinet charged a three-member team¹ with researching best practices in retaining at-risk students, developing a retention plan for these students, and writing a U.S. Department of Education Title III Improving Institutions grant proposal to fund implementation of the plan. The cabinet members were looking for a collaborative approach to student success, and the grant-writing team, in collaboration with a variety of faculty and staff, developed an integrated student success intervention model with three components:

- 1. a technology solution-the OSP-as the lynchpin to hold together a variety of student services
- 2. instructional and collaborative interventions
- 3. specific interventions targeted directly to students

One component of the grant included an assessment of students' learning styles and personality types, which informed faculty and influenced their decision to utilize various teaching methodologies; this was supported by providing faculty training. A second component was another element of the OSP—advising notes—which continues to be used to document information for advisors and instructors. Including the information technology services (ITS) department ensured that the appropriate technology was provided for student tracking, analytical reports, and comparative data. A third component was design and implementation of a one-credit student success course (ACA 111), elements of which were integrated into developmental reading and writing courses for expanded work with at-risk students taking those courses. By taking a collaborative approach with the grant, the team conveyed the fact that student success is a college-wide focus and that no single entity of the college has the sole responsibility for ensuring student success. (See Figure 1.)

The collaborative nature of the process extended to the development of the OSP system. Marcia Conston, vice president for Enrollment and Student Services, explains what she and other Cabinet members were looking for from the potential Title III project—a collaborative approach to student success: "The college's decision to establish a collaborative approach which included student

Figure 1. Integrated Student Success Intervention Model

Component 1: Improve Student Services "Student Success Model"

Develop an expanded and improved model of student services for highrisk students operating from Student Success Centers established on each of six campuses

Establish two new assessment instruments to determine student learning/ cognitive styles and personality types

Implement a comprehensive orientation course for all entering high-risk students

Component 2: Improve Faculty Skills "Student Success Series"

Develop a faculty training series to increase integration of student learning styles and student success strategies into teaching

Develop an online supplemental instruction tutoring program for developmental English and reading

Improve Academic and Student Support Services for High-Risk Students

Component 3: Improve Technology for Student Tracking "Online Student Profile"

Develop and implement an Online Student Profile (OSP) system providing faculty and staff with access to demographic and performance data, student goals, and assessment results

Develop a predictive modeling/early warning program to identify students for intervention services

services, instruction, and the information technology departments was based solely on the premise of affecting student success. We recognized that success occurs both inside and outside of the classroom." A team of faculty, counselors, advisors, and midlevel administrators representing student services, instruction, and ITS worked together to develop and implement every aspect of the project. Nothing occurred in a vacuum—everyone was involved in the conversation, whether it was institutional processes, statistical analysis, how students and counselors might interact, teaching and learning, testing methodology, or how the user interfaces of the OSP should flow.

Outcomes and Developments

As a result of the collaborative work among the team members, a variety of interventions and new processes were developed and implemented during the five-year Title III grant period, including the following:

- Student Orientation Course: A blended-learning course that provides incoming students with personal development skills essential to succeed in college (communication, critical thinking, teamwork, problem solving, self-advocacy).
- 2. Student Assessment Tools: An online learning-styles assessment (a CPCC product) and a personality profile (available to partners in the NGLC grant), which are essential components of the orientation course. Knowledge gained from these self-evaluations leads to students' enhanced understanding of how they learn and perceive information, strengthens their feelings of having a measure of control over their academic future, and increases their sense of self-efficacy and advocacy.
- **3. Online Profile and Tracking:** An online portal that enables students, faculty, and counselors to access real-time student data that includes academic history, risk factors, demographic data, advising history, and assessment results (individual and entire-class profile). This profile facilitates enhanced delivery of instruction and advising and enables timely and effective interventions for at-risk or underperforming students.
- **4. Faculty and Staff Development:** Training for faculty and counselors that outlines the effective and holistic use of all four components (learning style assessment, personality assessment, advising/counseling notes, and integrated student success course) to better understand their students, enhance learning, evaluate student risk, and provide appropriate interventions for underperforming students. Having faculty and advisors taking the course together yields integrated teaching, support, and interventions that directly impact retention and graduation rates.

Additionally, as part of the Title III project, Student Success Centers were opened on each of CPCC's six campus locations. These centers are designed to provide one-stop service to students or potential students who have questions about any program or service offered by the college. Rita Dawkins, dean of Student Success Services, explained, "It's more than an information center because you can do some up-front advising and counseling—somebody who can help from the very beginning."

The Student Success Centers are a high-touch element, in addition to the OSP, the features of which include advising notes that contain specifics of every meeting a student has with a professional advisor or faculty advisor. Date-logged, these notes allow the multiple advisors who end up working with each student to get right to work on what the student needs rather than having to re-create a student's advising history. Advisors also have access to students' learning style and personality assessments, ensuring that they are better informed. As Dawkins said of the OSP, "It shows the collaboration and the resources regarding how we have gotten to know the student and how the student has gotten to know him or herself. It is situation in which technology has pulled the best of what we can do for a student together all in one place."

Faculty also benefit from the enhanced information about their students. Class rosters show the preferred learning styles and the personality types of every student in each section faculty teach and also provide a quick, two-click intervention function for referring students for help from student services staff, including counselors, career counselors, and tutoring staff. As part of Title III funding, all full- and part-time faculty members were required to teach student success courses (including ACA 111, the one-hour student success course into which all students placing into developmental courses were referred), as well as developmental reading and writing courses. Training was developed with the students in mind, focusing on the critical first three weeks of a course and how to provide an atmosphere of success for first-year students.

Challenges Faced

In the collaborative process to develop and implement the faculty training component of the Title III grant, the team of faculty and student services staff began by asking, "What do students need in order to be successful? What can instructors do with that knowledge to leverage learning in and out of the classroom?" It was determined that students need more information about the way they learn best and that instructors can enhance their delivery methods and assess student learning daily. Although educators would seem to be in the best position to know what students need to be successful, it became obvious that all of the partners in education must collaborate to initiate cultural change. At CPCC, teams of full- and part-time instructors and student support services initiated faculty development, incorporating techniques and strategies for content delivery and assessment to improve student success and retention. A reluctance to change is often the first hurdle that must be overcome with any cultural shift, but gradually, as instructors were given tools to improve their day-to-day interactions with students, the college learned new ways to create stimulating and interactive environments in the classroom. Those environments thrive today because of the consistent and steady reinforcement by all key stakeholders of faculty support, technology enhancement, and a systemic desire for positive change.

From a teaching and learning perspective, ACA 111 served as the starting point for all of the related instructional and student support interventions. The ACA 111 College Student Success course was originally designed to focus on three main areas:

- the student (goals, learning styles, personality type),
- CPCC (the college's resources and services), and
- college (academic planning and technology).

Students who successfully complete ACA 111 are prepared to set realistic academic goals, utilize technology to enhance coursework, use their learning style to determine their best study habits, make choices about careers and majors, prepare an academic plan for their course of study at CPCC, and access and utilize the college's resources and services.

With the expansion of the ACA 111 course to include over 3,000 students per year, one aspect of the original Title III plan had to be revisited—a required advising session for all students enrolled in the course. The number quickly overwhelmed the professional advising staff, and the college realized it had to advise more effectively and in a more efficient manner. The solution was simple: expand the advising component of ACA 111 from individuals to groups. The sessions will continue to be tweaked based on student feedback. In response to the last question of an evaluation of ACA 111 group advising sessions ("State how this session has or has not been beneficial to you"), up to 95 percent of the comments are positive. Students now encourage their friends to attend the sessions to avoid being erroneously advised by their peers or attempting to self-advise. A common student comment received regarding group advising is, "This should be mandatory for all students."

Can It Work Elsewhere?

The OSP technology and the many practices and systems that are allied with its use have changed the culture at CPCC. Usage of the OSP system has expanded beyond the parameters of the Title III project, with current OSPbased projects now beginning or operational in the areas of technical careers, continuing education (a certified nurse-assistant program), and basic skills/ literacy.

Thanks to funding from NGLC, CPCC is scaling up its successful implementation of OSP and its related systems with six partner colleges: Asheville-Buncome Tech, Fayetteville Tech, and Forsyth Tech (all in North Carolina), and Lane Community College (Eugene, Oregon), Monroe Community College (Rochester, New York), and Moraine Valley Community College (Palos Hills, Illinois). The goal of the NGLC project is to ascertain whether similar student success results can be garnered at colleges that receive the OSP system and adapt its usage to their own needs, based on the system developed at CPCC. The NGLC project seeks to scale an effective innovation across multiple institutions. Most of the software built was intended for use only at CPCC-the systems are built to easily support the college's needs but not to necessarily be portable. With this project, the entire approach to development changed, forcing CPCC to think about how it could easily integrate with other colleges' systems while continuing to support its users. The college is reaping the benefit of its partners' expertise as well as its own. Through shared collaboration and technology, it was able to increase the number of innovators on a single project. This change in development style, coupled with the open-source release of the software, has proved to be a game changer in the way CPCC delivers solutions.

Is It Effective?

While assessment results from the partner colleges are not yet available, anecdotal results from the first implementation period at the partner colleges shared at an October 2011 training and information session for teams from the partner colleges—were quite positive. With over 3,500 students from the partner colleges participating at that time, preliminary feedback from students and staff indicated that use of the OSP system and implementation of the related practices have created an on-campus energy centered on student success through collaboration. The use of technology to facilitate higher-quality human interaction has proved key to the improved success of at-risk students at CPCC, and it appears that the use of the OSP system as a catalyst for change at other colleges will lead to similar improvements.

Note

 This team—known as the Title III Writing Team—included Emma Brown, dean of Retention Services (in the Enrollment and Student Services unit of the college), Michael Horn, director of Resource Development (the chief grants officer of the college), and this researcher (at the time the associate dean for business, international, and general studies in the instructional unit of the college).

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