Can Online Education Deliver on Its Promise?

Thomas Bailey

There has been much speculation recently that higher education is rapidly heading toward a technological “disruption” similar to that experienced by the music industry. Advocates promise that advances in online learning technologies will soon make a high-quality, low-cost online postsecondary education available to all students. Along with excitement about this possibility, there is also anxiety. Community colleges and other institutions of higher education are concerned about their ability to stay relevant if massive open online courses (MOOCs) and other forms of online learning begin to offer students a high-quality, convenient, and low-cost pathway to a college degree.

In the meantime, millions of community college students are enrolled in “traditional” online courses—courses developed by individual instructors and taught in sections of 25 or so students. For the sake of these students and those who will enroll in the immediate future, it is important to turn our gaze from what could be and direct it for a moment toward what is. Only by examining the actual experiences of community college students in online courses today can we understand both the potential of online learning and its pitfalls.

CCRC recently concluded a series of studies that took a close look at online courses across one state’s community college system. We found that in the majority of online courses, students had little meaningful interaction with their instructors. While the courses frequently required interaction with peers in online discussion boards or chat rooms, most students did not value this peer-to-peer interaction and said it felt both artificial and of little educational value.

Students told us that if they expected to struggle in a subject or really “wanted to learn something,” they preferred a face-to-face classroom where they had more contact with the professor. In online courses, they reported, they were more or less on their own. For their part, online instructors explained that they expected their students to be relatively sophisticated and independent learners. They expected online students to be able to manage their time, take initiative, and generate their own approach to mastering course material.

Concomitant with this online work, CCRC researchers examined the role that non-
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academic factors play in the ability of students to succeed in college. Interviews with almost two hundred students and faculty underscored the reality that many—if not the majority of—community college students arrive without the behaviors and skills necessary for college success. Our researchers concluded that many incoming students require more explicit instruction and scaffolded support to acquire the non-academic skills they need to thrive academically. These skills are as basic as time management, note taking, using a library, and recognizing when, how, and whom to ask for help. In fact, they are precisely the skills that online instructors told us were necessary for students to succeed in their courses.

It is perhaps not surprising, then, that CCRC studies indicate that community college students fail and withdraw from online courses at higher rates than they do from face-to-face college courses. For students with deficiencies in non-academic skills, online courses that offer limited guidance and instruction may be particularly challenging. Interestingly, an analysis of online course variables that might predict student performance—including course organization, use of technology, clarity of learning goals, and interpersonal interaction—found that only one was correlated with improved student performance: interpersonal interaction, particularly with the instructor.

Together, these findings suggest that while the flexibility and accessibility of online education may well be beneficial for academically well-prepared students who already possess the habits and skills necessary to succeed in college, they are less promising for weaker students. Most discussions about online education—particularly those regarding MOOCs—focus almost exclusively on college-ready students. The reality is, however, that large numbers of college students arrive underprepared. These students make up a large portion of the community college population, and they fare particularly poorly in the online environment. For these students, college is a place they go to learn how to learn. It is unlikely that even the most responsive technologies can replace the kind of instructor-mediated support that both hard data on student performance and qualitative research evidence suggest is vital in motivating and inspiring such students to succeed in college.

Online learning will almost certainly continue to make significant inroads in the postsecondary sector. So how can we ensure that the growth of online education does not lead to higher dropout and failure rates for community college students? Based on our research, we contend that community colleges must take the lead in developing and enacting robust student readiness activities that address students’ non-academic competencies and evaluate their preparedness for online coursework. Colleges will also have to be more deliberate about which courses they put online and who they allow to enroll in those courses. Finally, we must identify—through research and experimentation—the technological and pedagogical methods that lead to more meaningful interaction between instructors and students in the online environment. These methods must be shared with online faculty through well-designed professional development activities.

These adjustments will require time and money, but those at community colleges know better than anyone that there are no shortcuts when it comes to increasing college attainment among our most disadvantaged students. By developing a model of online learning that incorporates robust professional development, significant instructor presence, and scaffolded supports for students, community colleges can make a meaningful contribution to a system of online postsecondary education that offers quality instruction as well as easy access.
Our Research

The Role of the Community College

What role do community colleges play in the post-secondary landscape? We study the history and mission of community colleges, their commitment to access and equity, and the opportunities and challenges they face, including growing competition from for-profit colleges. Projects in this area include a study of the role of for-profit colleges in higher education, conducted by affiliated researchers under the aegis of the CCRC-led Center for Analysis of Postsecondary Education and Employment (see p. 4).

High School to College

CCRC conducts research on programs and policies designed to prepare high school students for college, including short-term readiness programs as well as college-credit transition programs and vocational pathways.

CCRC researchers are currently leading a project examining early assessment and “senior year transition curriculum” in four states. CCRC is also studying dual enrollment programs in Tennessee in order to develop policy recommendations to present to Tennessee policymakers in the 2013 legislative session.

FEATURED PROJECT:
Analysis of Statewide Developmental Education Reforms (ASDER)

States across the country are trying out new approaches to improve college readiness among high school students. A number of high schools have begun to conduct early assessments of 11th and 12th grade students to gauge their progress toward becoming college ready. In addition, some high schools and colleges are working together to develop a senior year “transition curriculum” to prepare students for college-level academic work. CCRC is looking at both of these approaches to college readiness, studying implementation and outcomes in four states.

Project Lead: Elisabeth Barnett

Developmental Education and Adult Basic Skills

CCRC studies the factors that contribute to low rates of college completion among community college students assigned to remedial coursework and evaluates reform efforts aimed at helping underprepared students achieve greater college success.

Projects in this area include analyses and evaluations of assessment and placement practices among colleges, accelerated developmental education models, and other college-based and statewide developmental education reforms.

FEATURED PROJECT:
Reshaping the College Transition: Study of Early Assessment and Curricular Interventions

This project examines ambitious system-wide developmental education redesign efforts in Virginia and North Carolina. CCRC will measure student outcomes over three years and conduct qualitative research on implementation, assessment and placement, and instructional technology within the redesigns.

Project Lead: Nikki Edgecombe
Our Research

Student Services, Financial Aid, and Other Supports

Success in college requires more than academic skills. CCRC researchers study non-academic factors that influence success as well as student support services, such as counseling, success courses, and online advising systems. We also study the effects of student employment and financial aid on student outcomes.

Ongoing CCRC work in this research area includes studies examining the non-academic skills and behaviors that contribute to student success and studies that look at how “College 101” courses can be optimized to impart skills and improve long-term student outcomes.

Online Education and Instructional Technology

Technology plays a growing role in postsecondary education. Our research examines the structure and design of online instruction and its impact on persistence and completion rates of community college students.

CCRC is currently completing studies of online course quality and outcomes in two statewide community college systems. Our researchers are also testing the effectiveness of instructional technology in developmental classrooms.

Student Persistence, Completion, and Transfer

Student persistence and completion rates at community colleges are low, particularly among low-income students, students of color, and first-generation students. CCRC studies how student populations progress through college and how the structure of college programs and pathways may influence rates of completion and transfer.

Ongoing CCRC work in this area includes identifying the institutional complexities at one college that pose challenges to students and recommending changes that will streamline the student experience. CCRC researchers are also studying program structure in community and technical colleges and the effectiveness of e-advising and learner relationship management systems.

College to Career and Workforce Education

Preparing students for the workforce is a central mission of community colleges. CCRC studies the role of community colleges in the U.S. economy and their effectiveness in preparing students for the labor market.

CCRC is leading several projects in this research area, including a study of a career-technical program that integrates basic skills and vocational education. CCRC also houses the Center for Analysis of Postsecondary Education and Employment (CAPSEE), a U.S. Department of Education–funded center that analyzes labor market returns to postsecondary credentials, among other issues.

Improving Community College Institutional Performance

CCRC works with major initiatives that aim to improve student outcomes by helping colleges use data to implement significant institutional changes. CCRC also studies system-wide reform models, such as performance funding, to identify practices that increase student success across colleges.

RESEARCH PARTNERSHIP:
Center for Analysis of Postsecondary Education and Employment

CAPSEE carries out research in five states to better understand the employment and earning benefits associated with a wide range of postsecondary pathways. CAPSEE is funded by the U.S. Department of Education’s Institute of Education Sciences and operates in collaboration with scholars at CCRC, Harvard, the University of Michigan, Stanford, CUNY, and the University of North Carolina. To learn more, visit www.capseecenter.org.

CAPSEE Director: Thomas Bailey
CCRC-led projects in this research area include studies of state performance funding systems and participation in Completion by Design, an initiative that is working with states to increase rates of community college completion.

**FEATURED PROJECT: Completion by Design**

CCRC is a national technical assistance partner in Completion by Design, a Bill & Melinda Gates Foundation–funded initiative that works with three states to increase community college completion rates. CCRC is helping build the capacity of participating colleges to analyze student pathways, use the results to redesign policies and practices, and analyze the cost and efficiency effects of such reforms.

*Project Lead: Davis Jenkins*

For more information about our areas of research and to see a full list of research subtopics, projects, and publications, please visit our website at ccrc.tc.columbia.edu.

**Funders for Active Projects**

Bill & Melinda Gates Foundation  
Ford Foundation  
Kresge Foundation  
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U.S. Department of Education, Institute of Education Sciences  
William and Flora Hewlett Foundation

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**New from CCRC**

**Practitioner Packets**

Look out for our new series aimed at community college faculty and administrators. Each packet summarizes research findings, describes case studies, and lays out issues for educators to consider when implementing changes at their colleges.

**CCRC Analytics**

Designed especially with institutional researchers in mind, publications in this new series present practical analyses that colleges and college systems can use to better understand and improve student progression, completion, and success.
The Year in Review

FEBRUARY 2013
CCRC Launches New Website

In February, CCRC launched a new website—and a new logo and look! Please visit our website to browse our publications, projects, and presentations and to check out new features such as selected resources for community college practitioners and answers to frequently asked questions about community colleges. We would appreciate hearing your reactions! Email us your thoughts at ccrc@columbia.edu.

SEPTEMBER 2012
Shanna Smith Jaggars Appointed CCRC’s Assistant Director

In September, CCRC Director Thomas Bailey named Shanna Smith Jaggars as CCRC’s new assistant director. Jaggars has long carried out leadership roles at CCRC, coordinating research for the Center for Analysis of Postsecondary Education and Employment and managing a suite of studies funded by the Bill & Melinda Gates Foundation. Katherine Hughes, the previous assistant director, has moved to a new position at the College Board after 17 years at CCRC.

MAY 2012
Doctorates Awarded to CCRC Researchers

Three CCRC staff members completed doctorates at Teachers College, Columbia University, in spring 2012. Rachel Hare Bork (right), who has been with CCRC since 2006, was awarded a PhD in the Politics and Education program. Michelle Hodara (left) and Mina Dadgar (center) both earned PhDs in the Economics and Education program. Hodara has been with CCRC since 2009 and is transitioning to a senior researcher position at Education Northwest this spring; Dadgar currently works as a policy research associate at WestEd.

JUNE 2012
NCPR Holds Final Conference to Share Findings on Developmental Education Reforms

Community college researchers and practitioners gathered to share what works and what does not in developmental education at the closing conference of the National Center for Postsecondary Research (NCPR). U.S. Under Secretary of Education Martha Kanter delivered the keynote address.

Established through a grant from the U.S. Department of Education’s Institute of Education Sciences, NCPR was led by CCRC in partnership with MDRC, the Curry School of Education at the University of Virginia, and other scholars. NCPR set out to identify effective practices for remedial students by conducting rigorous studies on a range of interventions.

Overall, the interventions discussed at the conference had varying levels of success. Some, such as summer bridge programs and learning communities, had only modest short-term effects on student achievement. Others, such as developmental acceleration models, appeared more promising in helping students succeed in college-level courses.

JULY 2012
Concurrent Courses Initiative Comes to Close, Releases Final Report

In July, the three-year Concurrent Courses Initiative, funded with a grant from the James Irvine Foundation, came to a close after issuing a final report that found positive outcomes for participating students. The initiative was created to demonstrate the feasibility of using dual enrollment programs to enhance college and career pathways for low-income youth who are struggling academically or who are within populations historically underrepresented in higher education. CCRC managed the initiative and evaluated program outcomes.
CCRC Receives Funding to Help Community Colleges Increase Student Completion

The Bill & Melinda Gates Foundation awarded CCRC a pair of three-year grants to conduct research and to develop strategies and tools for improving community college student completion.

CCRC will pursue four streams of research focused on (1) enhanced student progression tracking systems, (2) diagnostic and innovative assessments for academically underprepared students, (3) leveraging of instructional technology in developmental education, and (4) state-level longitudinal data tools and performance metrics.

While some individual projects will be carried out at the institutional level, others will focus on large community college systems, particularly those in Florida, North Carolina, and Virginia.

April 2012
Director Thomas Bailey Receives Award at AERA

CCRC Director Thomas Bailey was presented the Division J (Postsecondary Education) Exemplary Research Award at the American Educational Research Association’s annual meeting in Vancouver. The award recognizes “scholars whose published research has made an outstanding contribution to knowledge and understanding in the field of higher education.”

In accepting the award, Bailey emphasized that his accomplishments have depended on the excellent group of researchers and staff who work with him at CCRC. He accepted the award on their behalf as well.

April 2012
Director Thomas Bailey Elected to National Academy of Education

Dr. Susan Fuhrman, president of the National Academy of Education and of Teachers College, announced the election of Professor Bailey in April 2012. The National Academy of Education (NAEd) advances the highest quality education research and its use in policy formation and practice. Founded in 1965, the NAEd consists of U.S. members and foreign associates who are elected on the basis of outstanding scholarship related to education.

March 2012
CCRC Research Featured in New York Times, Prompts Broad Rethinking of Remedial Placement Practices

Two CCRC studies on placement tests released in February 2012, Predicting Success in College: The Importance of Placement Tests and High School Transcripts and Do High-Stakes Placement Exams Predict College Success?, received widespread press coverage and were the subject of a New York Times editorial in March 2012. The studies have been cited in several reports issued by Jobs for the Future, Complete College America, and other organizations calling for a new approach to remediation, and they have been used as evidence by legislators working on revamping developmental education policies in their states.

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Housed at Teachers College, Columbia University, the Community College Research Center (CCRC) is the leading independent authority on the nation’s nearly 1,200 two-year colleges. Our staff is comprised of economists, sociologists, and other scholars whose specialties range from high school–college transitions to workforce education. We produce reports, briefs, practitioner packets, and other materials; present widely at conferences and colleges across the country; and provide testimony before Congress and state legislatures in order to help community colleges achieve their mission of providing effective and affordable postsecondary education for all students.

CCRC was founded in 1996 with a grant from the Alfred P. Sloan Foundation. At the time, very little was known about two-year public colleges despite the fact that they enrolled nearly half of the nation’s undergraduates. In the years since, thanks to support from Sloan and other funders, CCRC’s work has served to generate and inform a renewed interest in these essential higher education institutions and continues to make vital contributions to higher education research, policy, and practice.

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