Research Overview and Dual Enrollment Findings
THOMAS BAILEY

Over the past several years, community colleges have gained more attention among researchers, policymakers, and the public at large. Because of their comparatively low tuition costs, their convenient locations and course schedules, and their open-door admission policies, community colleges have an understandably strong appeal for a broad range of prospective students. Indeed, two-year public colleges enroll nearly half of all undergraduates nationwide. And compared to four-year colleges, community colleges enroll greater concentrations of low-income, first generation, minority, immigrant, part-time, older, and academically underprepared students. While operating with budgets that are more limited on a per-student basis than four-year institutions, community colleges nonetheless provide a great variety of education and training programs, among them remedial and basic skills programs, to a diverse student population that includes those who are among the hardest-to-serve.

Given that substantial college-level coursework and even a bachelor’s degree is now required for most well-paying jobs in the United States, it is difficult to overstate the importance of community colleges for millions of students who might otherwise have little opportunity for postsecondary education. The fact that college-level learning is a virtual necessity for gaining middle-class employment underscores the enormity of the community college mandate to enroll and educate local students regardless of academic background. It also serves to generate greater interest in just how effectively community colleges actually succeed in helping students achieve their education and career goals. More progress certainly needs to be made in improving outcomes among community college students. Rates of certificate and degree attainment, for example, are still too low, particularly among disadvantaged students.

Since 1996, the Community College Research Center (CCRC), an independent research institute established by the Alfred P. Sloan Foundation, has engaged in comprehensive examination of the evolving role that community colleges play in the context of a changing economy and changing workforce needs, including investigation of how community colleges and others seek to increase student achievement and how well they succeed in doing so. We are currently involved in a dozen projects (many of which are described in the pages that follow) in four core research areas. Although these areas focus on different activities and initiatives, the fundamental goal of each is to support and promote student success. In the first area, we...
provide research and technical assistance to state and national initiatives that assist colleges in undertaking data-informed strategic reform to improve student learning and student outcomes. Second, we investigate workforce education in the context of economic development activities. Third, we study developmental education and practices to improve the success of students with weak academic skills. And fourth, we explore education and career transition pathways, particularly those between the secondary and postsecondary education sectors and those for adults entering or re-entering higher education.

Relevant to this fourth area of focus, CCRC researchers have recently completed an important study on dual enrollment that has gained wide readership and that serves to inform policymakers and practitioners who may be reconsidering how students, including career and technical education (CTE) students, make the transition from high school to college.

Dual enrollment programs enable high school students to enroll in college courses and earn college credit. Once limited to high-achieving, academically focused students, such programs are increasingly seen as a means to support the postsecondary preparation of a wider range of students. Despite the popularity and growth of such programs, little is known about how well they work. Funded by the National Research Center for Career and Technical Education, U.S. Department of Education, Office of Vocational and Adult Education, the CCRC study is one of the first to use large-scale administrative datasets to investigate the outcomes of students participating in dual enrollment, and it provides the first examination of the relationship between dual enrollment participation and the postsecondary outcomes of CTE students.

The study examined dual enrollment in two places that have long-standing dual enrollment programs, the State of Florida and New York City. The longitudinal nature of the data used in the study enabled the researchers to control for many relevant student characteristics, such as high school academic achievement, socioeconomic status (SES), race/ethnicity, and other demographic variables. Future research should seek additional control variables as well as use experimental and quasi-experimental designs to establish a causal relationship between dual enrollment participation and educational outcomes.

For the full population of students in Florida, several consistently positive correlations between dual enrollment participation and student outcomes were found. Dual enrollment students in Florida were more likely than comparison students to earn a high school diploma, to enroll in postsecondary education in the state university system, to enroll in college full-time, to earn more total credits, and to have higher cumulative college grade point averages (GPAs) three years after high school graduation. (The researchers did not have data to examine outcomes among the full population of New York City students.)

Data from both Florida and New York City were used to examine whether dual enrollment benefited CTE students. Here, too, they found consistently positive correlations between dual enrollment participation and CTE student outcomes. For example, dual enrollment CTE students were 8.6 percent more likely than comparison CTE students to enroll in the state university system in Florida and 9.7 percent more likely to pursue a bachelor’s degree at the City University of New York. Positive correlations were also found between dual enrollment participation and college GPAs and total postsecondary credits earned in both locations, though the apparent effects were stronger in Florida.

Finally, using the Florida dataset, researchers examined whether dual enrollment may have benefited certain subgroups of students more than others. In terms of likelihood of postsecondary
enrollment and college GPA, it appears that males, low-income students, and low-achieving high school students all benefited from dual enrollment to a greater extent than their peers who entered college with more social, economic, and educational advantages.

Among the full population Florida sample, for example, while high-SES dual enrollment participants had cumulative college GPAs that were, on average, 0.17 points higher than their non-participating high-SES peers, low-SES participants had GPAs that were 0.27 points higher than their non-participating low-SES peers (see figure). While this relationship in subgroup cumulative GPA outcomes did not hold for the CTE sample, other meaningful subgroup relationships, such as likelihood of postsecondary enrollment and first-year college GPA, did hold for the CTE sample, though the apparent effects were weaker than for the full sample.

The findings of this study, led by Melinda Mechur Karp (mechur@tc.edu), provide a very encouraging, though not definitive, picture of dual enrollment as a strategy for encouraging student access to and persistence in postsecondary education. Dual enrollment does indeed hold promise for improving the postsecondary outcomes of all students, including those in CTE programs and those from disadvantaged backgrounds. The full report of the study, titled *The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States* (see p. 15), is available on CCRC’s website.

Over the past year, CCRC has become involved in another project on dual enrollment. The *Concurrent Courses: Pathways to College and Careers Initiative*, funded by the James Irvine Foundation, aims to strengthen college and career pathways for low-income, academically struggling, and underrepresented students in California by providing them with rigorous, supportive, and career-focused dual enrollment opportunities. CCRC researchers will manage and evaluate the initiative, which will support six to eight secondary-postsecondary partnerships.

CCRC will continue to engage in projects on college transitions, on workforce education, on developmental education, and on data-driven college reform at the institutional and state levels. More research in all four of these areas is needed to gain a better understanding about what actually happens to students as they strive to progress into and through higher education institutions. Moreover, such research can and should contribute to the development of practice and policy that expands access to community colleges and promotes the success of all students who attend them.

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most rigorous research methodologies possible, including random assignment experimental design, to evaluate such practices.

A major NCPR study on learning communities is now underway. Led by researchers from MDRC, the study involves evaluating learning communities for students in need of remediation at six community colleges around the country. The sites cover a wide range of learning communities, with some focused on developmental math, others focused on developmental English or reading, and one with a career focus. These courses are linked with student success courses, other developmental courses, and college content courses in different configurations across the sites.

Transcript-level data will be used to evaluate the impact of assigning students to a learning community, using the following outcome measures: registration for any courses; number of courses attempted (regular and developmental); number of courses passed (regular and developmental); course withdrawals; English and/or math test scores; total semesters enrolled; total credits earned; GPA; course-level information, including course title and possible credits; major; degrees or certificates awarded; and transfer to other postsecondary institutions. A paper describing the design of this study, titled *The Learning Communities Demonstration: Rationale, Sites, and Research Design* (see p. 14) will soon be available on the NCPR website, www.postsecondaryresearch.org.

Other projects NCPR researchers are pursuing or engaged in include an evaluation of the effects of developmental education on postsecondary outcomes using a quasi-experimental regression discontinuity design by Bridget Terry Long of Harvard University and Juan Carlos Calcagno of Mathematica Policy Research. Bridget Long is also authoring a comprehensive review of research findings on the effects of financial aid on college access (titled *What Is Known About The Impact of Financial Aid? Implications for Policy*, see p. 14). Building on a project that began at CCRC, NCPR researchers are also conducting quantitative analyses of dual enrollment. The original project (described on p. 2) found a positive correlation between participation in dual enrollment and postsecondary outcomes. Using more data and different statistical techniques, NCPR researchers will estimate the strength of the causal relationship between dual enrollment and those outcomes.

IES also provides partial support for an ongoing NCPR-related project, called the H&R Block FAFSA experiment, that is co-led by Bridget Long. This project, being undertaken in Ohio and North Carolina, provides an intervention that streamlines both the aid application process and students’ access to accurate and personalized higher education information. Using a random assignment research design, H&R Block tax professionals will help a group of eligible low- to middle-income families complete the free application for federal student aid (FAFSA). Then, families will be immediately given an estimate of their eligibility for federal and state financial aid as well as information about local, postsecondary education options. To track the impact of this intervention, the project data will be linked with college administrative files to determine which individuals elect to enroll and persist in higher education.

The study will answer key questions about the importance of information and financial barriers in college access and persistence. The researchers also aim to provide concrete examples of ways to improve college access for low-income students and to increase the effectiveness of financial aid policies.

The Postsecondary Center is also exploring the possibility of conducting a random assignment evaluation of a Texas summer bridge program that provides intensive developmental education services to students with weak academic skills during the summer before they start college. Additional projects will be developed in close collaboration with the staff of IES, with the goal of conducting supplementary research studies that are responsive to the needs of education policymakers and practitioners.

NCPR and related publications are available on the NCPR website.

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**Achieving the Dream: Community Colleges Count**

CCRC is a partner in a multiyear national initiative to help more community college students succeed, particularly low-income students and students of color. Conceived in 2004 by Lumina Foundation for Education, Achieving the Dream: Community Colleges Count (www.achievingthedream.org) currently involves 83 institutions in 15 states.

In partnership with seven national organizations and 19 funders, CCRC leads the “knowledge development” work for Achieving the Dream by conducting
research to maximize learning from the initiative. Two focal areas of CCRC’s research include: 1) working with participating states to use the data they collect to inform improvements in policy and practice; and 2) learning from Achieving the Dream colleges about strategies for building a “culture of inquiry and evidence” in community colleges.

Using state data to improve community college policy and practice. A growing number of states are recognizing the potential of using data collected at the state level to inform changes in policy and practice that can lead to improved outcomes for students and regions. CCRC is at the forefront of working with state community college agencies to use such data to better understand patterns of student progression, identify barriers to student achievement, and formulate and evaluate strategies for overcoming those barriers. Particularly potent for this purpose are state-level student unit record (SUR) data, which allow tracking of individual students over time, both within and across education systems and into the labor market.

CCRC is working with several of the states involved in Achieving the Dream. For example, researchers have conducted several studies in partnership with the Florida Department of Education, which has the most comprehensive state-wide longitudinal database in the country, with the capacity to track students in public education from kindergarten through graduate school. In a recent study published as CCRC Brief No. 36 and titled Do Student Success Courses Actually Help Community College Students Succeed? (see p. 15), researchers tested an earlier finding by Dr. Patricia Windham of the Florida Department of Education that students who take student success courses are more likely to complete credentials, persist, or transfer to a state university. The CCRC study found that students who enrolled in a student success course were 8 percent more likely over five years to complete a credential and 5 percent more likely to transfer to a state university than were students who did not enroll in such a course. Developmental education students who took a student success course also did better than those who did not take a success course.

CCRC is also working with the Washington State Board for Community and Technical Colleges (SBCTC) to analyze longitudinal SUR data from that state. In a study completed this past year, researchers tracked data on the progression of cohorts of Washington community and technical college students over several years to identify “momentum points” — such as passing a college-level mathematics course or accumulating a given number of credits — that are correlated with degree completion and other successful outcomes. Using this analysis as well as other research, a broadly representative task force convened by the SBCTC staff recommended to the State Board a set of six momentum points that will serve as “pay points” in a new performance funding scheme the Board adopted to motivate colleges to improve student outcomes.

Based on this work, Timothy Leinbach and Davis Jenkins of CCRC wrote a guide (titled Using Longitudinal Data to Increase Community College Student Success, see p. 14) for state agency and college researchers on using longitudinal data to identify momentum points for community college students. With funding from Lumina Foundation for Education, CCRC is now evaluating the initial implementation of Washington’s momentum point performance funding policy, which is called the Student Achievement Initiative. Researchers also plan to conduct a quantitative analysis over the next 3 to 5 years to determine if the Student Achievement Initiative does indeed lead to improved outcomes, particularly for disadvantaged students.

Building a “culture of inquiry and evidence” to support student success at community colleges. Colleges and universities are increasingly adopting new strategies for performance improvement in which decisions about the design, management, and funding of academic programs and services are made based on evidence of what works to improve student outcomes. Achieving the Dream is working with participating community colleges to demonstrate whether colleges can enhance student success by building a culture of evidence and inquiry in which faculty, student services staff, and administrators work together to bring about continuous improvements in their programs and services, using data and research to guide their efforts.

In collaboration with MDRC, an evaluation is in progress of the culture of evidence model that is being tested by Achieving the Dream. In May 2007, as part of the Achieving the Dream evaluation, researchers published a report, titled Building a Culture of Evidence for Community College Student Success (see p. 15), based on field research at the 27 first-round Achieving the Dream colleges. The report describes the challenges these institutions are facing in building a culture of evidence as well as promising practices they are developing to do so. Based on this initial research, CCRC developed a framework that
summarizes the principles, process, and performance indicators of the Achieving the Dream model of institutional improvement. The framework also includes a tool designed to measure the extent to which colleges have adopted policies and practices that reflect the model.

Surveys are currently being conducted at a sample of Achieving the Dream colleges to better understand the ways in which faculty and administrators use data and research on students. A report on the findings from the survey research is expected this summer. CCRC also plans to conduct in-depth fieldwork at a sample of Achieving the Dream colleges in spring 2008 to examine key issues such as strategies for engaging faculty and institutionalizing the culture of evidence.

Many publications related to Achieving the Dream: Community Colleges Count, including those mentioned above, are available on CCRC’s website.

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Evaluating the Community College Bridges to Opportunity Initiative

The Ford Foundation’s Bridges to Opportunity Initiative, which began in 2002, is in its final year. The goal of the Initiative is to bring about changes in state policy and community college governance and practice that promote educational opportunities for low-income adults. The Ford Foundation supports teams in Colorado, Kentucky, Louisiana, New Mexico, Ohio, and Washington in pursuing this goal, following a model of stakeholder engagement and strategic communications — building support for policy change from a broad-based constituency — and the use of data, specifically student outcomes tracking data, to identify problems, inform solutions, and then measure progress. Mission integration is another aspect of the model — bringing together the various functions of community colleges, such as remediation, student services, and occupational and academic education, to make them more amenable to the needs of low-income adults.

CCRC has been assisting Ford since 2003 in evaluating the activities and impacts of the Initiative in the six states. In this final year, CCRC is focusing on policies and legislation enacted as a result of Bridges to Opportunity as a means to examine the sustainability of the Initiative’s achievements. Changes that have been institutionalized through reforms in educational governance and state legislation are the ones most likely to be sustained after Ford Foundation funding ceases.

For example, in Washington State, Bridges to Opportunity clearly had an impact in shaping the recent policy agenda of the State Board for Community and Technical Colleges. It also helped in gaining legislative funding for a series of programmatic initiatives that are designed to promote advancement for low-income adults through mission integration along the pathway from basic skills courses to baccalaureate programs. Efforts in Ohio and New Mexico have led to legislation that is likely to promote the advancement of low-income adults as well.

In collaboration with Initiative partners, CCRC is developing a guide for promoting state policies that serve to increase the number of low-income adults with postsecondary credentials in high-demand career fields. The guide will be aimed at state agencies concerned with community colleges and higher education, human services, workforce development, and economic development; governors and legislators and their staffs; business and labor groups; and college leaders and trustees.

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Concurrent Courses: Pathways to College and Careers Initiative

CCRC has been awarded a three-year grant of $4.4 million from The James Irvine Foundation (www.irvine.org) to direct and evaluate a new career and technical education dual enrollment initiative. The Concurrent Courses: Pathways to College and Careers Initiative aims to strengthen college and career pathways for low-income, academically struggling, and underrepresented students in California by providing them with rigorous, supportive, and career-focused dual enrollment opportunities. The initiative will support six to eight secondary-postsecondary partnerships to be selected in spring 2008 through a competitive Request for Proposals process.

CCRC will select the sites, re-grant funds to the sites, manage the initiative, and provide technical assistance to the partnerships. CCRC will also lead an evaluation of the initiative comprised of a qualitative analysis of program implementation and a quantitative analysis of student outcomes. This evaluation will provide suggestive evidence as to the effectiveness of career-focused dual enrollment in promoting positive student outcomes, such as the accrual of college
credit, high school graduation, and college enrollment. CCRC will also assess the feasibility of undertaking a more rigorous, experimental evaluation in the second year of the initiative.

A number of studies in the areas of dual enrollment and career and technical education have been completed by CCRC researchers. The James Irvine Foundation and CCRC together believe that supporting students as they engage in relevant career and technical education and challenging college coursework will result in smooth transitions to higher education and persistence once there.

Three reports over the course of the initiative will be produced as well as a final report on the outcomes of the initiative. The project will conclude in December 2010.

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**Student Persistence in Community Colleges**

How do institutional features, such as support services, influence student persistence in community college? It is well-established that many community college students do not persist in their coursework long enough to earn a degree, and there is some evidence that institutional practices can encourage student persistence. Yet there has been little research on which practices actually help students remain enrolled in college, and there has been even less study of how students themselves learn about these practices, make use of them, and view their usefulness.

With funding from the Alfred P. Sloan Foundation, CCRC has been investigating students’ use of support services in relation to their persistence and leaving processes. Researchers studied the experiences of students in two urban community colleges, interviewing a sample of 44 first-time college students over two semesters. Researchers also interviewed faculty and staff about the colleges’ student retention efforts.

Results from the study may help colleges better understand what factors are related to student retention as they develop programs and resources encouraging student persistence to graduation. The findings will soon appear in a series of CCRC Working Papers, and they will be presented at a variety of conferences during spring 2008. The first report examines the ways that student support services, despite the best of intentions, serve as inadvertent stratifying mechanisms within the college. Students generally need a high level of social or cultural capital to access these services, and, thus, those students most in need often do not have access. The second report focuses on student success courses, also called College 101. The study finds that these courses are an important source of information for students and that they serve as a catalyst for building important relationships. The third and final report examines Vincent Tinto’s theory of integration for community college students.

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**Assessing Noncredit Workforce Education at Community Colleges**

Noncredit workforce education programs at community colleges are noted for their important role in responding to shifting workforce demands and providing skills in a way that is flexible and responsive to employer needs. The recent growth in such programs raises fundamental questions about the extent to which colleges are keeping pace with student and workforce needs, using resources efficiently, and providing adequate access to all students. To answer such questions, the leadership of two major community college organizations — the National Council for Workforce Education and the National Council for Continuing Education and Training — collaborated with CCRC on a now-completed study that examined whose needs noncredit workforce education seeks to fulfill, whether colleges’ organizational approaches have kept pace with changes, and whether noncredit programs provide students with a valuable recorded outcome.

Funded by the Alfred P. Sloan Foundation, the study drew on two key sources of information. First, state policies on the funding and regulation of noncredit workforce education were reviewed in all 50 states by interviewing individuals in a variety of state departments with oversight for community colleges and/or workforce development. Second, case studies of 20 community colleges in 10 states were conducted by interviewing key administrative staff at each college. The colleges were selected to reflect innovative practices in noncredit workforce education as well as a range of institutional sizes, locations, and states.

Findings from the study suggest that noncredit workforce education can play an important role in responding to local labor market demands by meeting the workforce needs of employers and the needs of students for immediate skills. It can also benefit students in other ways by providing access to credit...
programs, generating meaningful recorded outcomes for a range of student needs, and facilitating the long-term pursuit of degrees. Indeed, community college noncredit workforce education can play a central role in states that choose to prioritize funding to support career pathways as part of their workforce development agenda by connecting short-term training to programs leading to degrees and credentials. A final report of the study, titled *The Landscape of Noncredit Workforce Education* (see p. 14), includes recommendations for college leaders and policymakers. It is available on CCRC’s website.

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### Race and Gender Differences in College Access

Recent trends show that African American males enroll in two- and four-year colleges at rates substantially lower than those of African American females. A weaker female advantage is also present among White students. Despite the prevalence of a male disadvantage in access to higher education, there is little research on what types of experiences orient African American males and females into different postsecondary trajectories. Furthermore, no investigation has used national data to explore how the experiences of African American students may parallel or differ from those of White students in explaining gender gaps within racial groups. Of particular interest is whether the benefits of college predisposition factors (academic preparation, postsecondary plans, and support from family, peers, and school) are the same for males and females across racial groups.

With funding from the American Education Research Association and the Institute of Education Sciences of the U.S. Department of Education, CCRC has been studying the gender gaps in access to two- and four-year colleges using data on 1992 high school graduates from the National Education Longitudinal Study of 1988. Multivariate analyses reveal that college predisposition factors explain only partially the male disadvantage in two-year college enrollment, suggesting that non-educational factors may better explain why males are less likely to enroll in a two-year college. CCRC researchers also found that the college predisposition factors associated with the male disadvantage in four-year college enrollment are similar for both African American and White students. For example, African American and White females were more likely than males from the same racial group to enroll in a four-year college because they earned better grades and test scores and were less likely to repeat a grade.

Despite evidence that racial membership had virtually no effect on which factors were associated with males’ and females’ four-year college enrollment, racial membership did determine how much students’ educational disadvantages reduced their chances of college enrollment. For example, African American males with poor academic preparation experienced lower odds of going to college than White males of similar background.

Research examining the gender gaps in college enrollment among older, nontraditional students is also underway. A third project examines the effects of financial aid information on the college attendance patterns of Black, Latino, and White students. Reports based on all three of these projects will become available in 2008.

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### The National Science Foundation’s Advanced Technological Education Program

Established through the 1992 Scientific and Advanced-Technology Act, the National Science Foundation’s (NSF) Advanced Technological Education (ATE) program seeks to improve the education of the nation’s science, technology, engineering, and mathematics (STEM) technicians. For several years, the ATE program was implemented through two major formats — broadly-conceived ATE national centers and narrowly-conceived ATE projects. ATE regional centers, first funded in 2001, were introduced to better address intermediate concerns surrounding STEM technicians and their employers. Regional centers work with community colleges and businesses in a single region, often defined as a state, to improve the effectiveness of education in one field of technology as a means to help meet the current and future workforce demands of their local economies.

In fall 2003, CCRC was awarded funding from NSF to examine how effective ATE regional centers have been in meeting these goals. CCRC’s research is now complete, and a report of the study submitted to NSF in fall 2007, titled *ATE Regional Centers: CCRC Final Report* (see p. 15), is available on CCRC’s website. Fieldwork for the study involved site visits and interviews with a range of individuals from each of eight regional centers distributed across the nation,
from participating colleges, and from businesses partnering with each center. The research focused on the unique nature of the regional centers and the ability of centers to initiate institutional change in the delivery of technical education at community colleges. Findings suggest that regional centers are indeed viable and useful for the NSF ATE program.

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**Employer Perceptions of Two-Year Degrees in Information Technology**

CCRC is partnering with the National Workforce Center for Emerging Technologies at Bellevue Community College (WA) on a new three-year project to examine industry perceptions of two-year information technology (IT) program graduates in the Seattle area. CCRC researchers will assess industry demand for community college IT programs based on employers’ level of knowledge, experience, and interest in IT program graduates. This research also seeks to understand the hiring process for program graduates among different types of employers, so that community colleges can better target their efforts to engage with employers. This project is funded by the National Science Foundation’s Advanced Technological Education program. A final report on the research findings will be available in 2009.

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**Postsecondary Content Area Reading-Writing Intervention: Development and Determination of Potential Efficacy**

This project is an intervention study that develops and tests the potential efficacy of an instructional approach to help community college developmental education students prepare for the reading and writing demands of courses in science and other areas. The project is funded wholly by the Institute of Education Sciences of the U.S. Department of Education in the amount of $1,168,758 over the three-year period beginning June 1, 2006. Three community colleges are participating in the study: Bronx Community College of the City University of New York, Los Angeles Pierce College, and Norwalk Community College.

The instructional approach is called the Content Comprehension Strategy Intervention (CCSI), a self-directed curricular supplement designed for the study, which provides guided practice in reading comprehension and writing skills using text from science textbooks. It is anticipated that practice with this type of text should be applicable to future science courses as well as other courses requiring the ability to comprehend factual, dense text. Apart from testing the potential value of CCSI overall, the study compares student performance using science material to student performance using a variety of expository texts on different topics, drawn from traditional developmental education textbooks. CCSI focuses on written summarization, vocabulary development, and question-generation, and also provides practice with tasks found in reading and writing tests that students may have to pass to exit remediation. The research methodology includes randomized assignment with a control group and a no-treatment comparison group, as well as qualitative interviews. Reports based on this research will become available in 2008.

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**Student Learning in the New York City Virtual Enterprises Program**

Researchers at the Institute on Education and the Economy, CCRC’s umbrella organization, have concluded the first external study of the New York City Department of Education’s Virtual Enterprises International program. Virtual Enterprises (VE) is a high school elective class in which students create and oversee a virtual firm. In 2006-07, the VE program was operating in 53 New York City schools and more than 450 institutions across the country.

The study, supported by funds from the Merrill Lynch Foundation to The Fund for Public Schools, consisted of site visits to VE firms in ten New York City high schools; interviews with VE coordinators and staff; observations of student workshops, events, and competitions; and an end-of-the-year survey completed by 215 students.

The student survey results suggest that VE had a largely positive influence on students’ career preparation. Through “working” in the firm, the majority of students surveyed said they acquired a variety of skills, including technical, time-management, problem-solving, and interpersonal skills, and 84 percent indicated that they could use the skills learned in VE for future employment. Participating in VE also helped the majority of the student respondents feel more prepared for college: 66 percent indicated that VE improved their confidence about being prepared to do college work, and 63 percent reported that VE made them believe that college was a realistic option for them. The New York City VE program provides students with opportunities to enroll in business-
related college-credit courses for no cost at local partnering colleges. One-fourth of the survey respondents took a college course through VE, and 91 percent of the seniors surveyed reported that they had plans to attend college the following fall.

The study finds that, at least for the individual programs studied, VE is successful in its student-centered, project-based approach that gives students responsibility, some autonomy, and opportunities for learning experiences outside the traditional classroom. The final report will be presented at the March 2008 American Educational Research Association (AERA) conference in New York City. The study will also be featured in Techniques, the magazine of the Association for Career and Technical Education (ACTE). The full-length report, titled When the Virtual Becomes Real: Student Learning in the Virtual Enterprises Program (see p. 15), as well as a summary of the study, IEE Brief No. 31, are available on the IEE website, http://www.tc.columbia.edu/iee.

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ANNOUNCEMENTS

CCRC Researchers Earn Doctorates

Over the past year, two CCRC staff members have completed doctorates in Economics and Education at Teachers College, Columbia University.


Calcagno has been with CCRC since beginning his doctoral degree program at Teachers College in 2003. His research interests include the transition from high school to college and postsecondary access and attainment, both from student and institutional perspectives.

Dong Wook Jeong, CCRC/College Board Postdoctoral Research Associate, defended his Ph.D. dissertation in June 2007. CCRC Director Thomas Bailey served as a member of the dissertation committee, which was chaired by Professor Henry Levin. Jeong’s dissertation, Issues Involving the Equity and Effectiveness of Advanced Placement Programs in United States High Schools, investigates five topics: the availability of Advanced Placement (AP) programs across U.S. high schools, the underrepresentation of underprivileged students in AP programs, AP program effects on student success in college, student participation and performance on AP exams, and resources allocation between AP and regular high school classes.

Jeong has been with CCRC since May 2006. His research interests include economic evaluations of education programs such as AP, dual enrollment, and developmental education. His postdoctoral research on AP programs has been conducted under the College Board’s fellowship since July 2007.

AERA Awards Co-Editors of Defending the Community College Equity Agenda

On April 12, 2007, Thomas Bailey and Vanessa Smith Most received the American Educational Research Association (AERA) Division J (Postsecondary Education) Exemplary Publication Award for the book they co-edited, Defending the Community College Equity Agenda, published by the Johns Hopkins University Press in 2006. The award is bestowed annually at the AERA national meeting in recognition of an outstanding publication that has made a substantial contribution to higher education literature.

Based on case studies of 15 colleges in New York, Texas, Florida, California, Washington, and Illinois as well as data from the National Center for Education Statistics, the collected volume examines the challenges currently facing community colleges. The contributing authors, including several CCRC researchers, analyze how recent developments, such as falling state budgets combined with growing enrollments and a greater emphasis on outcome-based accountability, impact the community college
and its mission of educational opportunity, especially for low-income students, students of color, and other underserved groups.

**NCES Commissioner Speaks at CCRC/NCPR Seminar at Teachers College**

On September 24, 2007, Dr. Mark Schneider, Commissioner of the National Center for Education Statistics (NCES), delivered a seminar talk titled “Recent Developments and New Directions for Data Collection at NCES” at Teachers College, Columbia University. His presentation, followed by a question-and-answer discussion, was sponsored by CCRC and NCPR.

Schneider discussed several NCES products and sketched out how data collections are being improved in response to the needs of policymakers and researchers. He noted, for example, that NCES will soon be embarking on the fourth generation of its high school longitudinal study. The Commissioner described the tentative details of this study and spoke about several other issues, including these: how sampling for the new high school longitudinal study could be abutted with sampling for an early childhood longitudinal study; why NCES is implementing a new teacher compensation study; methods for improving participation in the National Assessment of Educational Progress (NAEP); and, how basing Integrated Postsecondary Education Data System (IPEDS) data on full-time, first-time-enrolled college students may affect IPEDS-reported graduation rates.

Schneider also discussed a major change in NCES data collection that will continue to unfold in the next several years. He noted that surveys are becoming increasingly difficult to administer at NCES, and that survey response rates for both individuals and institutions have declined precipitously. A sharp decline in response rates is, in fact, occurring across the entire Federal statistical system. Schneider suggested that while the great majority of today’s NCES data are derived from surveys, this is likely to shift in the coming years. Administrative records from states will eventually become the predominant source for national education statistical data.

**UPCOMING CONFERENCE PRESENTATIONS**

**League for Innovation in the Community College**

11th Annual Conference, Denver, Colorado
March 2-5, 2008

**All Learning is Learning: Contextual Approaches to Developmental Education**
Monday, March 3, 2008, 12:15–1:15 PM
Adam’s Mark Hotel, Plaza Court 4, Concourse Level

*Session Participants:*
Dolores Perin, Senior Research Associate, CCRC
Elaine DeLott Baker, Principal Investigator, Colorado Lumina Initiative for Performance, Community College of Denver
James Jacobs, Associate Director, CCRC

**Student Success Courses: Are They Effective?**
Monday, March 3, 2008, 1:30–2:30 PM
Adam’s Mark Hotel, Plaza Court 4, Concourse Level

*Session Participants:*
Lauren O’Gara, Research Assistant, CCRC
Vanessa Smith Morest, Dean of Institutional Effectiveness, Norwalk Community College
Matthew Zeidenberg, Senior Research Associate, CCRC

**Clarifying the Landscape of Noncredit Workforce Education: State Policies and Community College Practices**
Monday, March 3, 2008, 2:45–3:45 PM
Adam’s Mark Hotel, Plaza Court 4, Concourse Level

*Session Participants:*
James Jacobs, Associate Director, CCRC
Laurance J. Warford, Project Director, CCTI, League for Innovation in the Community College
Michelle Van Noy, Senior Research Assistant, CCRC

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Please visit CCRC Booth #624 at the 11th Annual Innovations Conference March 2-5, 2008 Adam’s Mark Hotel, Denver
American Educational Research Association  
2008 Annual Meeting, New York City  
March 24-28, 2008

Off-site Visit to the Middle College-Early College High Schools at LaGuardia Community College  
Tuesday, March 25, 2008, 8:15 AM–12:30 PM  
LaGuardia Community College  
Session Participants:  
   Elisabeth Barnett, Senior Research Associate, CCRC/NCREST  
   Haiwen Chu, Teacher, International High School at LaGuardia Community College  
   Cecilia Cunningham, Executive Director, Middle College National Consortium

Building a Culture of Evidence in Community Colleges: Lessons from Recent Research on Challenges and Promising Practices  
Tuesday, March 25, 2008, 12:25–1:55 PM  
Marriott Marquis, Soho Complex, 7th Floor, Gramercy Room  
Session Participants:  
   Thomas Bailey, Director, CCRC  
   Thomas Brock, Director, Young Adults and Postsecondary Education Policy Area, MDRC  
   Davis Jenkins, Senior Research Associate, CCRC  
   Elizabeth Zachry, Research Associate, Young Adults and Postsecondary Education Policy Area, MDRC  
   Todd Ellwein, Senior Research Assistant, CCRC  
   Monica Reid, Senior Research Assistant, CCRC

Catching Up or Cooling Out? Academic Preparation and Transfer to Four-Year Institutions  
Wednesday, March 26, 2008, 8:15–9:45 AM  
Marriott Marquis, 9th Floor, Marquis Ballroom Salon B  
Session Participants:  
   Juan Carlos Calcagno, Researcher, Mathematica Policy Research, Inc., and Senior Research Associate, CCRC  
   Josipa Roks&uuml; Assistant Professor of Sociology, University of Virginia

Student Persistence in Community Colleges: An Exploration of Tinto’s Integration Framework  
Wednesday, March 26, 2008, 12:25–1:55 PM  
Marriott Marquis, 7th Floor, Astor Ballroom  
Session Participants:  
   Katherine Hughes, Assistant Director, CCRC  
   Melinda Mechur Karp, Senior Research Associate, CCRC  
   Lauren O’Gara, Research Assistant, CCRC

Faculty Validation, Integration, and Persistence as Experienced by Nontraditional Community College Students  
Wednesday, March 26, 2008, 12:25–1:55 PM  
Marriott Marquis, 7th Floor, Astor Ballroom  
Session Participant:  
   Elisabeth Barnett, Senior Research Associate, CCRC/NCREST

When the Virtual Becomes Real: An Evaluation of the Virtual Enterprises Program  
Thursday, March 27, 2008, 12:25–1:55 PM  
Marriott Marquis, Shubert Complex, 6th Floor, Plymouth Room  
Session Participants:  
   Katherine Hughes, Assistant Director, CCRC  
   Joanne Wang Golann, Senior Research Assistant, CCRC

Connections to College: The Role of State Policies and Community College Noncredit Workforce Education in Student Access  
Thursday, March 27, 2008, 12:25–1:55 PM  
Crowne Plaza Manhattan, Room 1506  
Session Participant:  
   Michelle Van Noy, Senior Research Assistant, CCRC

Preparing Community College Developmental Education Students for Discipline-Area Reading and Writing: Implications for Curriculum  
Thursday, March 27, 2008, 4:05–6:05 PM  
Crowne Plaza Manhattan, Room 1504  
Session Participant:  
   Dolores Perin, Senior Research Associate, CCRC

The Role of Information on the College Financial Aid and Enrollment Process (AERA-IES Postdoctoral Poster Session)  
Thursday, March 27, 2008, 4:05–6:05 PM  
Sheraton Hotel & Towers, 3rd Floor, New York Ballroom East  
Session Participant:  
   Belkis Suazo deCastro, Senior Research Associate, CCRC, and AERA-IES Postdoctoral Fellow

Council for the Study of Community Colleges  
50th Anniversary Conference  
Philadelphia, Pennsylvania  
April 4-5, 2008

The Role of Community College Noncredit Workforce Education in Student Access  
Time: TBA  
Location: TBA  
Session Participants:  
   James Jacobs, Associate Director, CCRC  
   Michelle Van Noy, Senior Research Assistant, CCRC

Effective Practices Associated with the College and Career Transitions Initiative: A “Pattonian” Analysis  
Time: TBA  
Location: TBA  
Session Participant:  
   Elisabeth Barnett, Senior Research Associate, CCRC/NCREST
American Association of Community Colleges
88th Annual AACC Convention
Philadelphia, Pennsylvania
April 5-8, 2008

Leveraging Data in Strategic Planning: Building Institutional Capacity for Accountability
Saturday, April 5, 2008, 9:00 AM–12:00 PM & 1:00–4:00 PM
Location: TBA
Pre-convention workshop (fee: $200) sponsored by AACC in cooperation with CCRC.

Bridges to What? A Call to Action
Sunday, April 6, 2008, 11:15 AM–12:15 PM
Location: TBA
Session Participants:
Kay McClenney, Bridges Initiative Consultant, University of Texas at Austin
John Colborn, Director, Program Operations and Services, The Ford Foundation
Thomas Bailey, Director, CCRC
Douglas Gould, President, Douglas Gould and Co.
Jan Yoshiwara, Director of Educational Services, Washington State Board for Community and Technical Colleges

Creating a Culture of Evidence to Improve Student Success: Lessons (and Tools) from an Achieving the Dream College
Monday, April 7, 2008, 8:45–9:45 AM
Location: TBA
Session Participants:
Davis Jenkins, Senior Research Associate, CCRC
Christine Johnson McPhail, Professor and Director, Community College Leadership Doctoral Program, Morgan State University
William Law, President, Tallahassee Community College

Expanding Access to Dual Enrollment: Research Findings and Institutional Practice
Monday, April 7, 2008, 8:45–9:45 AM
Location: TBA
Session Participants:
Katherine Hughes, Assistant Director, CCRC
Eduardo Martí, President, Queensborough Community College
José Vicente, Campus President, Miami Dade College, North Campus

Student Success Courses: Are They Effective?
Monday, April 7, 2008, 1:45–2:45 PM
Location: TBA
Session Participants:
Davis Jenkins, Senior Research Associate, CCRC
Lauren O’Gara, Research Assistant, CCRC
Vanessa Smith Morest, Dean of Institutional Effectiveness, Norwalk Community College

The New Interrelationship Between Credit and Noncredit Workforce Education Programs
Monday, April 7, 2008, 3:00–4:00 PM
Location: TBA
Session Participants:
James Jacobs, Associate Director, CCRC
Michelle Van Noy, Senior Research Assistant, CCRC
James F. McKenney, Vice President of Economic Development and International Programs, AACC

Join our researchers, staff, and affiliates at the CCRC Open Reception at the 88th Annual AACC Convention Sunday, April 6, 2008 7:00 pm – 9:00 pm Loews Philadelphia Hotel Lescaze Room See you there!

Association for Institutional Research
48th Annual Forum, Seattle, Washington
May 24-28, 2008

The Role of Financial Aid Information on First-Time College Attendance Decisions
Tuesday, May 27, 2008, 11:30 AM–12:10 PM
Washington State Convention & Trade Center, Room 614
Session Participant:
Belkis Suazo deCastro, Senior Research Associate, CCRC, and AERA-IES Postdoctoral Fellow

Using State Student Unit Record Data to Strengthen Community College Student Success: Lessons (and Tools) from Leading-Edge States
Wednesday, May 28, 2008, 10:40 AM–12:20 PM
Washington State Convention & Trade Center, Room 604
Session Participants:
Davis Jenkins, Senior Research Associate, CCRC
Patricia Windham, Associate Vice Chancellor for Evaluation, Florida Community College System
Corby A. Coperliwaite, Director of Planning, Research and Assessment, Connecticut Community Colleges
David Prince, Assistant Director, Research and Analysis, Washington State Board for Community and Technical Colleges
Matthew Zeidenberg, Senior Research Associate, CCRC
RESEARCH AND PAPERS

What Is Known About The Impact of Financial Aid?
Implications for Policy

Years of research support the notion that financial aid can influence students’ postsecondary decisions, but questions remain about the best ways to design and implement such programs and policies. This paper serves as a discussion of the research literature on the effectiveness of financial aid with special attention to its implications for policy.

The Learning Communities Demonstration:
Rationale, Sites, and Research Design

With its NCPR partners, MDRC launched a multi-college demonstration of learning communities in 2006. The demonstration tests six different models of learning communities in six community colleges across the country. This report presents the rationale for launching the demonstration and describes the goals and methodology of the study.

Using Longitudinal Data to Increase Community College Student Success: A Guide to Measuring Milestone and Momentum Point Attainment

Longitudinal student unit record (SUR) data can be used to answer many important questions about student progression. This guide shows how to use longitudinal SUR data to identify student groups among first-time community college students, calculate rates of attainment of milestones and momentum points for each group, and identify barriers to success for each group. Examples are presented from an analysis CCRC researchers conducted for the Washington State Board for Community and Technical Colleges.

The Landscape of Noncredit Workforce Education:
State Policies and Community College Practices

Noncredit workforce education can play an important role in responding to local labor market demands, while also connecting students to long-term educational opportunities and documenting education outcomes in a meaningful way.

Drawing on a CCRC study of community college noncredit workforce education that included interviews with state policymakers in all 50 states and case studies of 20 community colleges in 10 states, this report discusses findings and offers recommendations on state policies and community college practices.

Do Support Services at Community Colleges Encourage Success or Reproduce Disadvantage?

This study examines the ways that student support services in community colleges inadvertently perpetuate and legitimate disadvantage. Using interview data from students at two colleges in the Northeast, the researchers find that although support services are open to all students, only those who come to the college with pre-existing social and cultural resources can take advantage of them. Because such support services are presented as having open-access, however, students not able to make use of them interpret their failure to progress toward a degree as personal rather than structural.

Assessing and Improving Student Outcomes: What We Are Learning at Miami Dade College

Told from the point of view of the Miami Dade College (MDC) Office of Institutional Effectiveness, this paper describes how MDC has begun to develop a systematic and data-informed method for assessing and improving student outcomes across its large, eight-campus college. The paper recounts how the college has responded to the problem of poor student progression along the developmental/college-level mathematics pathway.

Promising Practices for Community College Developmental Education

Developmental education is a key part of the college experience for a great number of community college students, yet there is surprisingly little definitive research evidence on effective developmental education practices. This report, which was written for the Connecticut Community College System, summarizes key findings from the literature on effective developmental education practice.
The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States

Despite the popularity and growth of dual enrollment programs, little is known about their efficacy. The study reported here sought to assess the effectiveness of dual enrollment programs in promoting high school graduation and postsecondary achievement. Using quantitative analysis of large datasets, the researchers examined the influence of dual enrollment program participation on students in the State of Florida and in New York City, with a specific focus in both locations on career and technical education (CTE) students. The study suggests that dual enrollment is a useful strategy for encouraging postsecondary success for all students, including those in CTE programs.

When the Virtual Becomes Real: Student Learning in the Virtual Enterprises Program

Virtual Enterprises International (VE) is a high school program that teaches students about business through task-oriented and hands-on coursework. With the assistance of a coordinator and business mentors, VE students create and oversee a virtual firm, conducting business with other virtual firms nationally and internationally. Based on a one-year study, this report describes features of the New York City VE program and discusses student and teacher perceptions of various aspects of VE. Self-reported findings suggest that VE had a largely positive influence on students' career preparation.

Do Student Success Courses Actually Help Community College Students Succeed?
Matthew Zeidenberg, Davis Jenkins, and Juan Carlos Calcagno. Community College Research Center, CCRC Research Brief No. 36, June 2007.

This Brief reports the findings of a CCRC study on the relationship between enrollment in community college student success courses and successful student outcomes, including credential completion, persistence, and transfer. Using a large dataset on Florida community college students, researchers used statistical models to determine whether student success courses still appear to be related to positive outcomes even after controlling for student characteristics and other factors that might also influence the relative success of students who take such courses.

Building a Culture of Evidence for Community College Student Success: Early Progress in the Achieving the Dream Initiative
Thomas Brock, Davis Jenkins, Todd Ellwein, Jennifer Miller, Susan Gooden, Kasey Martin, Casey MacGregor, and Michael Pih. MDRC and Community College Research Center, May 2007.

Achieving the Dream: Community Colleges Count is a multiyear national initiative to help more community college students succeed. The initiative is particularly concerned about student groups that traditionally have faced significant barriers to success, including students of color and low-income students. Participating colleges commit to collecting and analyzing data to improve student outcomes. This report describes the progress that the first 27 colleges have made after planning and one year of implementation.

Remediation in the Community College: An Evaluator’s Perspective

Remediation is the most common policy designed to prepare students academically and socially during their early stages of college. This paper provides a conceptual framework for evaluation of remedial education programs. Based on previous literature, the authors review a list of ingredients for successful interventions, present a number of approaches to remediation that make use of these ingredients, discuss alternative research designs for systematic evaluation, and enumerate basic data requirements that are needed for such study.

ATE Regional Centers: CCRC Final Report

As part of the National Science Foundation's (NSF) Advanced Technological Education (ATE) program, ATE regional centers work with community colleges and businesses in a single region to improve technical education and better meet current and future workforce demands of local economies. The CCRC study reported on here analyzed how effective ATE regional centers have been in meeting these goals. Fieldwork for the study involved site visits and interviews at eight regional centers. Findings suggest that the centers are viable and useful for the ATE program.

Institutional Responses to State Merit Aid Programs: The Case of Florida Community Colleges

By using the introduction of the Florida Bright Futures Scholarship program as a natural experiment, researchers estimated the effects of a state merit aid program on community colleges. This paper examines the effects of the program in terms of institutional aid, tuition pricing, and as a re-sorting mechanism for high-ability students.
Institutional Research and the Culture of Evidence at Community Colleges

This report presents findings from a study conducted by CCRC on how well prepared today’s community colleges are in moving toward the greater use of data and research to improve student success. Data for the study were drawn from two major sources: an e-mail survey of college administrators responsible for institutional research (IR), and case studies of 28 community colleges. The report discusses how much IR capacity community colleges have, how IR is utilized by different actors within colleges, and what barriers exist that impede the development of IR analysis that would benefit college decision making.

Fifty States of Achieving the Dream: State Policies to Enhance Access to and Success in Community Colleges Across the United States
Kevin Dougherty and Monica Reid. Community College Research Center, April 2007.

In each of the states where Achieving the Dream colleges are located, the initiative is working with a lead organization — typically the state community college system office or state association of community colleges — to develop policies that will enhance student success. To help guide that policy effort, an audit of state policies affecting access to, and success in, community colleges was conducted. As a first step, in-depth analyses were conducted of the initial seven Achieving the Dream states. The second step was to survey all 50 states on selected state policies. This report conveys the results of that survey, describing what policies the 50 states have in place with respect to key community college practices in three main areas: access, success, and performance accountability.

Learning About the Role of College Student Through Dual Enrollment Participation

Dual enrollment programs have become a popular educational intervention. This paper seeks a rationale for this enthusiasm by exploring whether dual enrollment might serve as a location in which students learn about the role of college student. Theories of role change posit that, if this is the case, dual enrollment might encourage postsecondary persistence. In the study reported on here, in-depth interviews and observations were conducted among a sample of 26 dual enrollment participants. The paper concludes with implications for programs and policy.

ARTICLES AND BOOK CHAPTERS


CCRC was established in 1996 by the Alfred P. Sloan Foundation, and is housed at the Institute on Education and the Economy (IEE) at Teachers College, Columbia University. The continued generosity of the Sloan Foundation and support from other foundations and federal agencies make the work of CCRC possible.