Developmental education is one of the most difficult issues facing community colleges today. A core function of community colleges is to offer college-level course content to a diversity of students, yet a majority of students who arrive at community colleges do so with academic skills in at least one subject area that are judged to be too weak to allow them to engage successfully in college-level work. Colleges address this problem with extensive programs of developmental education, designed to strengthen skills so students can successfully complete regular college courses. But how effective are these programs?

Developmental education entails significant costs for institutions and taxpayers and, importantly, for students themselves. While engaged in developmental classes, students are spending time, money, and, in many cases, financial aid eligibility while not earning credits toward a degree. Given these costs and the numbers of students involved, it is crucial to understand the extent to which developmental education programs are effective in increasing student success.

Results from large-scale tracking studies carried out by researchers from the Community College Research Center (CCRC) and the National Center for Postsecondary Research (NCPR), among others, are beginning to sketch out what happens to students who arrive on campus without adequate academic preparation. In the text that follows, which summarizes discussion found in the paper Challenge and Opportunity: Rethinking the Role and Function of Developmental Education in Community College (see p. 14), I use some of these findings to outline the broad strategies community colleges are using to address the needs of underprepared students. Much of the research I draw upon is based on CCRC’s work with Achieving the Dream (see p. 5). I conclude by offering suggestions for reform.

The challenge for community colleges is certainly daunting. About six in ten community college students take at least one remedial course, and this figure actually underestimates the number of students arriving at community colleges with weak academic skills. Many students whose placement test scores suggest that they need some academic help to prepare them for college-level work do not end up enrolling in developmental classes. And many students who are judged to be college-ready nonetheless experience serious difficulties in their college coursework. Thus it is reasonable to conclude that two thirds or more of community college students enter college with academic skills weak enough to threaten their ability to succeed in some of their college-level courses.

Assessing students for developmental education is itself fraught with uncertainty. No clear consensus about what constitutes being college-ready exists among practitioners, and the assessments that are used have only a weak relationship with subsequent
educational performance. This uncertainty is reflected in a bewildering plethora of assessments and cutoff points employed around the country. And perhaps even more important, research suggests that there is no break or discontinuity in assessment test scores that clearly differentiates developmental from college-ready students. Thus many students who test out of remediation still struggle in their college courses and experience poor educational outcomes, indicating that a sharp distinction in the services received by these two types of students is not justified.

Those students who are referred to developmental programs struggle, in particular, with developmental math courses. Only three in ten community college students pass the developmental math courses in which they enroll (seven in ten pass the reading and writing courses they take). And new evidence (see CCRC Working Paper No. 15, p. 14) suggests that a great many students simply do not enroll in some or all of the developmental courses to which they are assigned.

It is important to realize that students, especially in math, are often referred not to just one remedial course but to a sequence of developmental courses of increasing difficulty, the first of which may be three or more levels below college-level (see figure). Analysis by CCRC researchers of data on more than 250,000 community college students from a sample of more than 50 colleges participating in the Achieving the Dream initiative indicates that fewer than one half of those students referred to developmental reading completed their full sequences of developmental courses, and fewer than one third of those referred to developmental math completed theirs. It is not surprising, then, that degree completion among developmental students is also uncommon.

While these findings are troubling, they do not suggest that developmental education itself causes or leads to worse outcomes, or even that it does not improve student outcomes. After all, students enrolling in developmental courses have in many cases much weaker skills than other students. Some research that controls for entering academic skills and other demographic characteristics finds that developmental students in community colleges do as well in college as non-developmental students. Such studies do not, however, account for unmeasured differences between developmental and non-development students, such as motivation, that could bias results.

Three new groups of studies (two involve CCRC and NCPR researchers) based on large state datasets from Texas, Florida, and Ohio use quasi-experimental methods to derive more reliable causal estimates of the effects of developmental education. The studies make use of comparison groups of students who score just above and just below the cutoff point for assignment to remediation. These studies yield mixed results — the Texas and Florida studies suggest students gain little from developmental classes while the Ohio study shows some positive results. Yet, among other limitations, these studies do not provide much insight into the effectiveness of developmental education for students with very weak skills. Moreover, these studies measure the average effects of all developmental education offered in a state, which actually represents a wide range of remedial programs and pedagogies.

There is, in fact, no consensus among educators about how to carry out developmental education most effectively. With the partial exception of the learning communities strategy, which has been found to have some positive benefits and which is now under study by NCPR research partner MDRC (see p. 4), definitive evidence on the effectiveness of particular models is scarce.

While this overall picture appears to indicate that the benefits of developmental services are modest at best, there is reason for some optimism. Several studies of developmental education programs at individual colleges show some positive results. And it is
important to keep in mind that students who participate in developmental education may make significant progress even if their skills do not reach the college-level standard. Getting a student from a sixth- to a tenth-grade math level is a valuable social undertaking, even if it is not enough to provide a solid foundation for a college education.

The above caveats notwithstanding, it is difficult to escape the conclusion that the developmental function in community colleges is not working well. Policymakers and educators may want to consider three principles in crafting an overarching reform agenda.

First, rethink assessment, focusing on understanding what students need in order to be successful in college rather than simply concentrating on placement within the sequence of a curriculum. Assessment scores may do little to reveal what type of help students need to be successful in college. Students who share the same low score on a mathematics placement test could face very different problems. For example, some students may have learned math successfully but scored poorly because they had been out of school for many years; other students may never have learned in high school the math being assessed; still others may be immigrants who had trouble understanding the English used in the math placement test. Each of these groups of students, all with the same assessment test score, probably needs very different types of services to prepare them to be successful in college-level mathematics. It is also the case that some students who do pass the placement assessments still lack many of the skills and knowledge that are essential for success in college.

Second, abandon the dichotomy between developmental and college-ready students by opening college-level courses to more students and by incorporating academic support assistance into college-level courses. There are a variety of approaches to incorporating extra support into regular courses that deserve further development and testing. Perhaps the best known is the supplemental instruction model, which relies on peer tutoring. Another approach, used by the Digital Bridge Academy at Cabrillo College in California, incorporates a variety of experiential learning and other pedagogic strategies into college-level courses (see p. 9). This approach eschews special programs for weaker students, maintaining that good pedagogy for those students is the same as it is for advanced students. Dual enrollment programs, which CCRC continues to study (see pp. 5 and 7), are also based on the notion that students benefit from being pushed to achieve at levels that traditionally were not thought to be appropriate for high school students.

Third, for those students whose skills are so weak that they could not be successful even in augmented college-level courses, explicitly work to minimize the time necessary to prepare students for entry into those courses. Many colleges are now experimenting with accelerated strategies. These include intensive bridge programs in the summer. (Such programs are now under study by NCPR; see p. 4.) At the Community College of Denver, students can combine two levels of developmental math, reading, or writing to accelerate their progress. Contextualization of developmental education is another way to engage students and to allow them to make progress in their areas of interest while they are still in remedial classes.

Introducing changes to developmental education programs based on these three principles will be a difficult task, but now is an opportune time for reform. An increasing number of private foundations, many state governments, and the federal government have all turned their attention to this issue. Colleges participating in the Achieving the Dream initiative, and many other colleges as well, are experimenting with some new approaches. And there is a growing commitment to better analysis of student progression in community colleges that promises a more informed process of program innovation. All these developments provide an opportunity for a major and much needed effort to rethink and strengthen developmental education.

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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. Comprising both qualitative and quantitative data collection and analysis, the research conducted by CCRC is of national importance in promoting adequate preparation, increased access, and educational success for all students.

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.

National Center for Postsecondary Research

The National Center for Postsecondary Research (NCPR), housed at CCRC and operated in collaboration with partners MDRC, the Curry School of Education at the University of Virginia, and faculty from Harvard University, was established through a grant from the Institute of Education Sciences (IES) of the U.S. Department of Education in 2006. NCPR focuses on measuring the effectiveness of programs designed to help students make the transition to college and master basic skills needed to advance to a degree. While colleges employ multiple programs and policies designed to teach students the skills they need to succeed, there is little definitive research on the effects of some widely-used practices. NCPR employs rigorous research methodologies, including random assignment experimental design, to evaluate such practices.

As described below, NCPR’s current and planned research includes studies of remedial learning communities, summer bridge programs, and dual enrollment. Large-scale data analysis on the effects of remediation and dual enrollment using administrative data from various states is also underway. Additional research on need- and merit-based financial aid and on the use of a simplified financial aid application process is also in progress.

NCPR, led by researchers from MDRC, is 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 are being used to evaluate the impact of assigning students to a learning community, using a number of outcome measures that include grade point average, credits earned, and degree completion. The design of this study is described in a paper titled *The Learning Communities Demonstration: Rationale, Sites, and Research Design* (see p. 15), and a report on early findings of the study, including impacts of learning communities on student outcomes for three study sites, will soon be available.

NCPR is also preparing to conduct a random assignment evaluation of developmental summer bridge programs in Texas that are sponsored by the Texas Higher Education Coordinating Board or are locally funded. This work is led by Elisabeth A. Barnett of CCRC. Summer bridge programs offer intensive developmental education services to students with weak academic skills during the summer before they begin college along with opportunities to learn “college knowledge.” These programs are increasingly viewed as a promising intervention to help students arrive at college in the fall ready to enroll in college-credit bearing classes. They aim to promote college readiness and to reduce or even eliminate the need for developmental education.

Seven Texas sites have been identified for inclusion in random assignment research planned for summer 2009 and beyond. Outcomes to be measured using transcript-level data include reduced need for developmental education in college, persis-
tence, and college credit accumulation. Houston Endowment is providing support (see p. 11) to ensure that these programs are well managed, well implemented, and consistent across sites.

CCRC has for some time carried out research on dual enrollment programs, which enable high school students to enroll in college courses and earn college credits. While such programs were once limited to high-achieving, academically focused students, today many educators and policymakers view dual enrollment as a strategy to help a wider range of students, including career and technical education students, make the transition from high school to college.

To further strengthen the research base on dual enrollment, IES is, through NCPR, providing partial funding for the evaluation of the Concurrent Courses Initiative. Funded by The James Irvine Foundation and managed by CCRC, the Initiative supports eight secondary/postsecondary partnerships in California as they develop, enhance, and expand career-focused dual enrollment programs, particularly for low-income or underrepresented youth (see p. 7). Participating students will be tracked over time and their outcomes compared to similar non-participants.

NCPR is complementing its research on remediation and dual enrollment with large-scale statistical studies using state unit record data from at least two states, Florida and Tennessee. Last year, a paper on the impact of remedial courses in Florida, titled The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach: Addressing Endogenous Sorting and Noncompliance (see p. 16), was released. A second paper using Florida data that examines how the impact of remediation varies by type of student (by gender, race, and age, for example) will soon be available.

Building on a project that began at CCRC, NCPR researchers are also conducting quantitative analyses of dual enrollment using Florida data. The original study (described in a report titled The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States) found positive relationships between participation in dual enrollment and a range of postsecondary outcomes. Using more data and different statistical techniques, NCPR researchers will estimate the strength of any causal relationship between dual enrollment and those outcomes.

Other projects NCPR researchers are pursuing include studies on financial aid. This work is being led by Bridget Terry Long of Harvard University. Dr. Long’s 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. 16), was released last year. Using unit record data from Florida, NCPR researchers now plan to investigate how both need-based and merit-based grants influence student access, choice, and persistence.

In addition, IES provides partial support for an ongoing NCPR-related project, called the H&R Block FAFSA experiment, co-led by Dr. 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 financial aid information. The intervention consists of H&R Block tax professionals helping low- to middle-income families in the treatment group complete the free application for federal student aid (FAFSA) and giving these families an immediate estimate of their eligibility for federal and state financial aid as well as information about local postsecondary education options. The study will answer questions about the importance of clear aid information and financial barriers in college access and persistence.

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Achieving the Dream: Community Colleges Count

CCRC continues to be a partner in Achieving the Dream: Community Colleges Count, 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. Conceived in 2004 by Lumina Foundation for Education, Achieving the Dream (www.achievingthedream.org) currently involves more than 80 institutions in 15 states.

CCRC leads the “knowledge development” work for Achieving the Dream with the aim of conducting research to maximize learning from the initiative. Two focal areas of CCRC’s research include: 1) learning from Achieving the Dream colleges about strategies for building a “culture of inquiry and evidence” in community colleges; and 2) working with participating states to use the data they collect to inform improvements in policy and practice.
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 that colleges can enhance student success by building a culture of evidence.

In January 2008, CCRC published a report in the Achieving the Dream/CCRC Culture of Evidence series titled Assessing and Improving Student Outcomes: What We Are Learning at Miami Dade College. The report describes the efforts of Miami Dade in tackling the difficult problem of student underachievement in mathematics. By applying a systematic, eight-step approach, the college’s faculty and staff, working closely with the college’s institutional researchers, have developed interventions that are showing promising results in improving student success in math.

In another report in this year’s Culture of Evidence series, titled Faculty and Administrator Data Use at Achieving the Dream Colleges: A Summary of Survey Findings (see p. 14), CCRC presents findings from the most extensive survey to date on the use of data by community college faculty and administrators. The survey, which received a very favorable response rate, asked full-time faculty and administrators at 41 colleges participating in Achieving the Dream about what student data they use, how accessible data on students are at their college, how they use data in their jobs, and what types of data they find most useful.

The survey found substantial variation by department in the extent to which faculty use data on student outcomes. Faculty in developmental education departments and for-credit occupational programs were more frequent users of data than were faculty in other types of departments, particularly those in general education. The survey found only a weak correlation between various indicators of data use and the extent to which respondents indicated that their college overall uses data on outcomes to evaluate programs. In terms of an overarching commitment to evidence-based decision making, the findings suggest that there is only a limited connection between the extent of data use by faculty and administrators and the views and management practices of college leaders. This may mean that efforts to build a culture of evidence will have to engage faculty on a department-by-department basis.

CCRC is conducting an evaluation in collaboration with MDRC on the culture of evidence model that is being tested by Achieving the Dream. A report based on fieldwork at the 13 round-three Achieving the Dream colleges will be made available in spring 2009. A report on the early progress of round-one colleges, titled Building a Culture of Evidence for Community College Student Success, was released in May 2007.

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. Davis Jenkins of CCRC and Peter Ewell of the National Center for Higher Education Management Systems recently published an article on this phenomenon in the journal New Directions for Community Colleges, issue 143, Student Tracking in the Community College, edited by Trudy Bers. CCRC is at the forefront of working with state community college agencies in using such data to better understand patterns of student progression, identify barriers to student achievement, and formulate and evaluate strategies for overcoming those barriers.

Last year CCRC completed a study in which researchers used longitudinal student record data from the Washington State Board for Community and Technical Colleges (SBCTC) to analyze cohorts of Washington community and technical college students over several years to identify “achievement 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 achievement points that will serve as “pay points” in a new performance funding scheme the Board adopted to motivate colleges to improve student outcomes.

This past year, CCRC conducted a formative evaluation of the initial implementation of Washington’s achievement point performance funding policy, which is called the Student Achievement Initiative (SAI). Based on interviews with over 240 personnel at 17 of the 34 Washington community and technical colleges, CCRC found that the achievement point framework was viewed positively by most college personnel who were aware of it, including faculty members, although there was considerable skepticism about the value of providing colleges with financial incentives to
improve rates of student achievement. Understanding of the Initiative was spotty among the rank and file within colleges. For SAI to catch hold moving forward, the SBCTC and college leaders may have to strengthen efforts to engage faculty and student services staff in particular.

CCRC also analyzes the data submitted by Achieving the Dream colleges to a database maintained by the initiative’s partners. In a recent analysis of the progression of students through developmental courses using these data (see CCRC Working Paper No. 15, p. 14), CCRC director Thomas Bailey and CCRC researchers Dong Wook Jeong and Sung-Woo Cho found that most students exited developmental education in the beginning of their sequences, and almost half failed to complete the first course in their given sequence. The study concludes that community colleges need to make fundamental changes in their approach to developmental education — modest changes will not have much effect on the problem. Specifically, because so many students drop out early in their sequences, colleges should offer advising for students perhaps even before their initial assessment, and they should strengthen student success courses and other supports for first-time students. Early warning assessments for high school students that let students recognize possible problems before they leave high school should also be considered.

Research publications related to Achieving the Dream, 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, has now concluded. The goal of the Initiative was to bring about changes in state policy and community college governance and practice that promote educational opportunities for low-income adults. The Ford Foundation supported 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 was 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 evaluated the activities and impacts of the Initiative in the six states, looking particularly at policies and legislation enacted as a result of Bridges to Opportunity as a means to examine the sustainability of the Initiative’s achievements. In several of the states, Bridges to Opportunity clearly had a strong impact. For example, in Washington State, the Bridges team’s emphasis on communication of hard data to influence policymakers helped in gaining legislative funding for programs that promote advancement for low-income adults. In New Mexico, a stakeholder engagement strategy brought together different constituencies to campaign for the College Affordability Act, a new, needs-based state scholarship program. During the 2007-08 academic year, over $1 million was disbursed, with most of the funds going to students in two-year colleges.

The stories behind these achievements and others are now available in Bridges to Opportunity for Underprepared Adults: A State Policy Guide for Community College Leaders (see p. 14). In addition to the case studies, this important new publication includes tools to help state and local leaders implement key elements of a comprehensive strategy for cultivating state policies that support increased success by underprepared adults. The Guide also provides concrete policy and practice guidance for community colleges systems to address the educational and economic challenges facing low-income and underprepared adults. For more information or to receive or download a free copy of the Guide, visit the Bridges to Opportunity website, www.communitycollegecentral.org.

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Concurrent Courses: Pathways to College and Careers Initiative

Funded by The James Irvine Foundation (www.irvine.org), the Concurrent Courses Initiative provides support to eight secondary/postsecondary partnerships in California as they develop, enhance, and expand career-focused dual enrollment programs. The Initiative aims to strengthen college and career pathways for low-income youth who are struggling academically or who are within populations historically underrepresented in higher education by providing them with rigorous, supportive, and career-focused dual enrollment opportunities.
This work is informed by and builds on years of CCRC research in dual enrollment and in career and technical education. *Dual, or concurrent, enrollment* provides high school students with the opportunity to enroll in college courses and earn college credits. While dual enrollment has often targeted accelerated students who demonstrate readiness for college-level coursework, it is increasingly seen by educators and policymakers as a strategy to help a wider range of students make the transition from high school to college. In addition, educators have long looked to *career and technical education* to engage high school students and to reduce dropout rates. Thus, there appears to be great potential in combining these two approaches.

CCRC is directing, managing, and evaluating the Initiative, which will continue through August 2011. MDRC, a nonprofit, nonpartisan education and social policy research organization, is providing technical assistance and evaluation support. The evaluation includes both a qualitative analysis of program implementation and a quantitative analysis of student outcomes. To track student participants, CCRC and MDRC are working with Cal-PASS, the California Partnership for Achieving Student Success, a data collection and sharing system. The evaluation will seek to provide 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 and persistence.

Additional support is being provided by the U.S. Department of Education’s Institute of Education Sciences through the National Center for Postsecondary Research (NCPR) to determine the feasibility of conducting an experimental evaluation of the Initiative. CCRC and MDRC are partners (along with the Curry School of Education at the University of Virginia) in operating NCPR (see p. 4).

Over the course of the Initiative, CCRC will produce several reports covering a variety of relevant topics, including student outcomes. One report is already available: *Dual Enrollment Policies and Practices: Earning College Credit in California High Schools*, by Joanne Wang Golann and Katherine L. Hughes. This report (see p. 15) is intended to inform educators, policymakers, administrators, and researchers about current policies and practices that shape dual enrollment in California. For a list of the funded partnerships, and to download the report, see the Initiative’s website: www.concurrentcourses.org.

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### Virginia Community College “Gatekeeper” Course Success Study

Using data on community college students in Virginia, CCRC is conducting a study of policies and practices that enable students who require remediation on entry to college to take and pass college-level math and English. These courses are often referred to as “gatekeepers,” since students must pass them to earn a degree. However, too few students take and pass these courses, particularly in mathematics. The study, which seeks to identify the practices of colleges that are more effective in enabling remedial students to succeed in gatekeeper courses, is funded by the Virginia Community College System and Lumina Foundation for Education. A report on the research will become available in spring 2009.

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### Student Persistence in Community Colleges

How do institutional features, such as support services, influence student progress toward a community college degree? It is well-established that many community college students do not persist in their coursework long enough to earn a degree or credential, 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, how they make use of them, and how they view their usefulness.

With funding from the Alfred P. Sloan Foundation, CCRC investigated students’ use of support services in relation to their progress toward a degree. 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. In particular, the study found that student success courses, also called College 101, are an important source of information for students and that they serve as a catalyst for building important relationships. A second set of findings suggests that the
structure of student support services (including but not limited to student success classes), serves to inadvertently reproduce social stratification within colleges. 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. A third set of findings discuss the applicability of Vincent Tinto’s theory of integration to the study of community college students.

Findings from the study appear in CCRC Working Papers No. 10 and No. 12 (see p. 15). Findings have also been published or will soon appear in Community College Review, Journal of College Student Retention, and New Directions for Community Colleges.

Findings from the study appear in CCRC Working Papers No. 10 and No. 12 (see p. 15). Findings have also been published or will soon appear in Community College Review, Journal of College Student Retention, and New Directions for Community Colleges.

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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 (Washington State) and Macomb Community College (Michigan) on a three-year project to examine industry perceptions of two-year information technology (IT) program graduates in the Seattle and Detroit labor markets. 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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**I-BEST: Accelerating the Transition from Basic Skills to College and a Career Pathway**

CCRC is evaluating the Integrated Basic Education and Skills Training (I-BEST) program model. I-BEST programs, which are offered at all 34 Washington State community and technical colleges, are designed to speed the transition to college and careers for adult basic skills students. They pair basic skills and career-technical instructors in the classroom to help students gain basic and occupational skills simultaneously. Initial results of the program are promising. A report on the research is expected in spring 2009. The study is funded by the Ford Foundation.

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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 June 2009.

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**Digital Bridge Academy Evaluation**

CCRC is conducting a quantitative analysis of the outcomes and effectiveness of this innovative
program at Cabrillo College in Santa Cruz, California. Founded by a former Hewlett-Packard researcher, Diego Navarro, the Digital Bridge Academy seeks to help at-risk students get on a path to success in college through an intensive, full-time semester of courses that integrate remedial instruction with college-level content. The program challenges the conventional notion that remedial instruction should precede college-level courses. The study is funded by Cabrillo Community College District. A report on the research will become available in summer 2009.

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Automotive Manufacturing Technical Education Collaborative

The Automotive Manufacturing Technical Education Collaborative (AMTEC) is a National Science Foundation funded consortium of 13 community colleges and 14 automotive manufacturing and supply companies who are working together to improve the training of skilled technicians and manufacturing engineers. The Kentucky Community and Technical College System (KCTCS) is the consortium’s lead partner. During the past three years, CCRC has used surveys and interviews to assess the impact that participation in AMTEC has had on the development of curricula, training programs, recruitment methods, and industry-community college collaboration. CCRC will produce an end-of-project report in June 2009. This research is funded by KCTCS.

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ANNOUNCEMENTS

Jacobs Appointed President of Macomb Community College

James Jacobs, who served as CCRC Associate Director until assuming his new role, was appointed President of Macomb Community College effective July 2008. Macomb is one of the nation’s leading community colleges, providing learning experiences to more than 59,000 students annually. Macomb nationally ranks in the top two percent in number of associate degrees awarded and as the largest grantor of associate degrees in Michigan.

Jacobs has been with CCRC since its founding in 1996, when he served on its first Advisory Board. He became Associate Director in 2000. Jacobs was instrumental in expanding the Center’s research portfolio and in building many fruitful partnerships with community colleges and community college organizations across the country. He is a recognized national expert on the workforce development role of community colleges. He specializes in the areas of occupational change and technology, suburban economic development, occupational education, retraining of displaced workers, and needs assessment of occupational programs. He earned his doctorate in politics from Princeton University.

While Jacobs will certainly be missed at CCRC, he will continue to play a leadership role, serving as chair of the Center’s Advisory Board. CCRC looks forward to a new type of partnership with Macomb's new president as we begin to work with him and his staff, both to sharpen our research and to carry out joint projects with the college.

Dougherty Awarded Lumina Grant for Study of Performance Funding

Many states tie a portion of funding of higher education institutions directly to those institutions’ performance in retaining students, student learning, graduation, job placement, and other indicators. One of the great puzzles about such performance funding, however, is that it has proved both popular and unstable. Between 1979 and 2007, 10 of the 25 states that enacted performance funding subsequently dropped it. Moreover the states that have retained performance funding often have sharply cut the level of that funding and substantially changed the means of allocating it.

Kevin Dougherty, CCRC Senior Researcher and Associate Professor of Higher Education at Teachers College, Columbia University, received a two-year grant of nearly $500,000 from Lumina Foundation for Education in August 2008 to study state performance funding systems for higher education. Dougherty will investigate which design features, strategies for policy enactment and implementation, and sociopolitical circumstances make states more likely to adopt and retain performance funding systems for higher education and to make smaller changes in funding levels and formulas for those systems.
NCPR Awarded Houston Endowment Grant

In January 2009, the National Center for Postsecondary Research (NCPR), housed at CCRC, was awarded a $900,000 grant from Houston Endowment. The funds will be used to support the work of colleges in Texas that are participating in a rigorous evaluation of Developmental Summer Bridge (DSB) programs (see p. 4). These intensive programs are designed to help recent high school graduates enter college ready to undertake college-level coursework. DSB programs may have the potential to reduce the need for developmental education courses in math, reading, and writing that many students with weak academic skills must take — at considerable cost to themselves and to taxpayers — before enrolling in college courses that count toward a degree.

The research, conducted in collaboration with the Texas Higher Education Coordinating Board, will reveal whether students participating in DSB programs are more successful in college than nonparticipants. Funds from Houston Endowment will allow colleges to strengthen their DSB program offerings, offer a stipend to participating students, and receive technical assistance from NCPR.

CCRC Participates in National Community College Symposium

On June 19, 2008, the U.S. Department of Education’s Office of Vocational and Adult Education (OVAE) hosted the National Community College Symposium: Improving Student Transitions at Community Colleges. The symposium provided a forum for administrators, policymakers, and researchers to discuss: (1) practices that appear to improve student transitions, (2) what needs to be known to validate and refine these practices, and (3) strategies for obtaining this information.

CCRC, along with Synergy Enterprises, Inc. (SEI), helped plan the gathering and moderate the day’s discussion. CCRC staff also authored four reports to support OVAE’s work leading up to and following the symposium. These include an analytic summary of the day’s events and three papers on the key topics of adult basic education, community college partnerships, and workforce development. All four papers (see p. 15) are available on CCRC’s website. For more information about the symposium, visit www.communitycollegesymposium.net.

Hechinger Fellows Meet CCRC Researchers

The Hechinger Institute on Education and the Media, housed at Teachers College, Columbia University, held its second annual residency week for 14 journalists selected for its 2008–2009 “Covering America, Covering Community Colleges” Fellowship, a program aimed at supporting in-depth coverage of education issues related to community colleges.

As part of the award, the Journalist Fellows came to New York City in September 2008 to meet with one another and with experts in the field, including CCRC researchers, and to conduct field visits to local community colleges. The Fellows come from 10 states, including Alaska, Montana, North Dakota, and Mississippi. They include a television reporter, one radio journalist, nine newspaper writers, as well as book authors and magazine writers.

The first day of their visit featured a discussion on developmental education led by CCRC Director Thomas Bailey and Hunter Boylan, Director of the National Center for Developmental Education, Appalachian State University, North Carolina. Later in the week, Michelle Van Noy, CCRC Research Associate, and Cynthia Azari, then Vice Chancellor of the State Center Community College District, California, and now President of Fresno City College, gave a presentation on the rise of noncredit job training courses. Other topics covered throughout the week included financing and financial aid, what makes a community college successful, and competition with for-profit institutions.

Pictured from left to right: (bottom row) Elizabeth Willen, Hechinger Institute; Catalina Garcia, Univision; LaRaye Brown, The Clarion-Ledger (Jackson, MS); Kathleen Carroll, The Record (Bergen County, NJ); (middle row) Colby Sledge, The Tennessean; Encarnacion Pyle, The Columbus Dispatch (OH); Laura McCandlish, freelance writer; Amy Rolph, Seattle Post-Intelligencer; Amy Dalrymple, The Forum (Fargo, ND); Camille Esch, Washington Monthly; Richard Coberly, Hechinger Institute; (top row) Larry Gordon, Los Angeles Times; Robert Chaney, The Missoulian (MT); Tom Marshall, St. Petersburg Times (FL); Aaron Glantz, freelance writer; and Lygia Navarro, Latino USA on NPR.
UPCOMING CONFERENCE PRESENTATIONS

League for Innovation in the Community College
12th Annual Conference, Reno, Nevada
March 15-18, 2009

Learning Communities: A Promising Strategy for Developmental Education Students
Sunday, March 15, 2009, 11:00 AM–12:00 PM
Grand Sierra, Nevada 2, Arcade Level
Session Participants:
  Thomas Bailey, Director, CCRC
  Mary G. Visher, Senior Research Associate, Young Adults and Postsecondary Education Policy Area, MDRC
  Donna McKusick, Dean of Developmental Education and Special Academic Programs, The Community College of Baltimore County

Accelerating the Transition from Basic Skills to College and a Career Pathway through I-BEST
Monday, March 16, 2009, 8:00–9:00 AM
Grand Sierra, Nevada 3, Arcade Level
Session Participants:
  Davis Jenkins, Senior Research Associate, CCRC
  Tina Bloomer, Workforce Education Policy Associate, Washington State Board for Community and Technical Colleges
  Karen Johnson, Dean for Developmental Education, Edmonds Community College

Career-Focused Dual Enrollment: Partnering to Prepare California’s Future Teachers
Monday, March 16, 2009, 8:00–9:00 AM
Grand Sierra, Nevada 6, Arcade Level
Session Participants:
  Katherine L. Hughes, Assistant Director, CCRC
  Dennis Davino, Special Projects Director, Teacher Preparation, Educational Interpreter, and Paraprofessional Programs, Cypress College

Students’ Voices are the Loudest: Involving Your Students in Advocacy for State Higher Education Funding
Monday, March 16, 2009, 11:00 AM–12:00 PM
Grand Sierra, Silver State Pavilion, Arcade Level
Session Participants:
  Katherine L. Hughes, Assistant Director, CCRC
  James Jacobs, President, Macomb Community College
  Bonnie Greathouse, Head Organizer, Nevada Association of Community Organizations for Reform Now (ACORN)

Industry Demand for Entry-Level IT Employees and the Role of Community College IT Programs
Monday, March 16, 2009, 12:30–1:30 PM
Grand Sierra, Silver State Pavilion, Arcade Level
Session Participants:
  James Jacobs, President, Macomb Community College
  Sandra Mikolaski, Associate Director, National Workforce Center for Emerging Technologies, Bellevue Community College

Digital Bridge Academy: Accelerating the Transition to College for At-Risk Students
Monday, March 16, 2009, 5:00–6:00 PM
Grand Sierra, Nevada 1, Arcade Level
Session Participants:
  Davis Jenkins, Senior Research Associate, CCRC
  Diego Navarro, Director, Digital Bridge Academy, Cabrillo College
  Renée Kilmer, Vice President, Instruction, Cabrillo College
  Craig Hayward, Director of Planning, Research, and Knowledge Systems, Cabrillo College

Developmental Summer Bridges: Young Texans on the Road to College
Tuesday, March 17, 2009, 2:30–3:30 PM
Grand Sierra, Silver State Pavilion, Arcade Level
Session Participant:
  Elisabeth A. Barnett, Senior Research Associate, CCRC

Breaking Through/Jobs for the Future and National Council for Workforce Education
Wednesday, March 18, 2009, 8:00–9:00 AM
Grand Sierra, Nevada 2, Arcade Level
Session Participants:
  Judith Taylor, Program Director, Jobs for the Future
  Elisabeth A. Barnett, Senior Research Associate, CCRC

Please visit
CCRC/NCPR Booth #315
at the
12th Annual Innovations Conference
March 15-18, 2009
Grand Sierra Resort, Reno
American Association of Community Colleges

89th Annual AACC Convention, Phoenix, Arizona
April 4-7, 2009

Building Bridges to Credentials and Careers for Underprepared Adults: Lessons (and Tools) from the Ford Foundation’s Bridges to Opportunity Initiative
Sunday, April 5, 2009, 3:15–4:15 PM
Phoenix Convention Center, Room 232C
Session Participants:
- Davis Jenkins, Senior Research Associate, CCRC
- Jennifer Hahn, Principal, Douglas Gould and Co.
- Kay McClennen, Director, Community College Survey of Student Engagement, University of Texas at Austin

Developmental Education: Using Research to Inform Institutional Change for Student Success
Monday, April 6, 2009, 8:45–9:45 AM
Phoenix Convention Center, Room 132C
Session Participants:
- Thomas Bailey, Director, CCRC
- Karen Stout, President, Montgomery County Community College
- Preston Pulliams, District President, Portland Community College

Industry Demand for Entry-Level IT Employees and the Role of Community College IT Programs
Monday, April 6, 2009, 3:00–4:00 PM
Phoenix Convention Center, Room 227B
Session Participants:
- Michelle Van Noy, Research Associate, CCRC
- James Jacobs, President, Macomb Community College
- Sandra Mikolaski, Associate Director, National Workforce Center for Emerging Technologies, Bellevue Community College

American Educational Research Association

2009 Annual Meeting, San Diego, California
April 13-17, 2009

Relation of Academic Ability and Language Proficiency in Urban Community College Developmental Education Students
Monday, April 13, 2009, 4:05–4:45 PM
San Diego Marriott, Salon 4
Session Participants:
- Dolores Perin, Senior Research Associate, CCRC
- Rachel Hare, Project Coordinator, CCRC

Community College Students’ Progression in Developmental Education
Tuesday, April 14, 2009, 12:25–1:55 PM
San Diego Convention Center, Room 14A
Session Participants:
- Thomas Bailey, Director, CCRC
- Sung-Woo Cho, Senior Research Assistant, CCRC

Building a Culture of Evidence in Community Colleges: Influences on Data Use for Student Success
Tuesday, April 14, 2009, 2:15–3:45 PM
San Diego Convention Center, Room 14A
Session Participant:
- Monica Reid Kerrigan, Research Associate, CCRC

Whither State Performance Funding for Higher Education: A Symposium on Its Current and Future Status
Wednesday, April 15, 2009, 10:35 AM–12:05 PM
San Diego Convention Center, Room 24A
Session Participants:
- Kevin Dougherty, Senior Research Associate, CCRC
- Rebecca Natow, Senior Research Assistant, CCRC
- Alicia C. Dowd, Assistant Professor of Higher Education, USC Rossier School of Education
- Estela Bensimon, Professor of Higher Education, USC Rossier School of Education
- William Zumeta, Professor of Public Affairs and Education, Evans School of Public Affairs and College of Education, University of Washington
- Davis Jenkins, Senior Research Associate, CCRC
- Todd Ellwein, Senior Research Assistant, CCRC
- Monica Reid Kerrigan, Research Associate, CCRC
- Patrick Callan, President, National Center for Public Policy and Higher Education

Join our researchers, staff, and affiliates at the CCRC/NCPR Open Reception at the 89th Annual AACC Convention Sunday, April 5, 2009 7:00 pm – 9:00 pm Sheraton Phoenix Downtown Hotel Encanto B
See you there!

REPORTS AND PAPERS

Faculty and Administrator Data Use at Achieving the Dream Colleges: A Summary of Survey Findings
Davis Jenkins and Monica Reid Kerrigan. Achieving the Dream, Community College Research Center, and MDRC, Report No. 3 in the Culture of Evidence Series, February 2009.

This report summarizes findings from a study based largely on a 100-item survey instrument developed by CCRC and MDRC. More than 4,000 faculty and administrators at 41 Achieving the Dream colleges were surveyed about what kinds of student data they use, how accessible data on students are at their college, how they use data in their jobs, and what types of data they find most useful. Full report findings are also available.

Referral, Enrollment, and Completion in Developmental Education Sequences in Community Colleges

Students entering community colleges are often referred to a sequence of two or more developmental courses in a given subject, yet little research has examined student progression through multiple levels of developmental education and into entry-level college courses. This paper analyzes patterns and determinants of student progression through sequences of developmental education starting from initial referral. The study relies primarily on a micro-level longitudinal dataset from Achieving the Dream colleges that includes detailed information about student progression.

Challenge and Opportunity: Rethinking the Role and Function of Developmental Education in Community College

This paper reviews evidence on the number of students who enter community colleges with weak academic skills and on the incidence of developmental education. It then reports on what happens to developmental students and reviews the research on the effectiveness of programs designed to strengthen weak academic skills. A broad developmental education reform agenda is recommended, based on a comprehensive approach to assessment, more rigorous research, a blurring of the distinction between developmental and “college-ready” students, and strategies to streamline developmental programs and accelerate students’ progress toward engagement in college-level work. A final version of this working paper will appear in a forthcoming issue of New Directions for Community Colleges.

Bridges to Opportunity for Underprepared Adults: A State Policy Guide for Community College Leaders
Bridges to Opportunity Initiative, October 2008.

Based on lessons learned from the Community College Bridges to Opportunity Initiative, this guide describes what states can do to break down barriers that stand in the way of success of underprepared adult students at community colleges. Funded by the Ford Foundation, Bridges was a multi-year, six-state effort designed to bring about changes in state policy that improve education and employment outcomes for educationally and economically disadvantaged adults.


In September 2007, the Washington State Board for Community and Technical Colleges launched the Student Achievement Initiative (SAI), a system-wide policy to reward colleges for improvements in student achievement. This report presents findings from an independent qualitative review of the initiative conducted by CCRC during the 2007-08 SAI learning year. College personnel at 17 colleges were interviewed about their understanding of the initiative and their responses to it, and key stakeholders and policymakers were interviewed to better understand the policy context within which SAI was conceived and is now being implemented.

Noncredit Enrollment in 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 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.

**Dual Enrollment Policies and Practices: Earning College Credit in California High Schools**


This report is intended to inform educators, policymakers, administrators, and researchers about current policies and practices that shape dual enrollment in California. The report clarifies and summarizes current policy on dual enrollment in California, reviews the research on dual enrollment, and shares examples of existing programs that are successfully providing college credit opportunities to California high school students. The report also discusses how this information has informed the development of the Concurrent Courses Initiative funded by The James Irvine Foundation.

**Towards a Community College Research Agenda: Summary of the National Community College Symposium**


This paper summarizes the proceedings of the National Community College Symposium, which brought together experts in the field to identify promising practices and to help establish a community college research agenda. Attendees were practitioners and researchers from around the country, selected for their expertise and breadth of experience in the community college sector.

**A Typology of Community College-Based Partnership Activities**


Community colleges collaborate with other institutions in order to streamline their services and meet the needs of students more efficiently and effectively. Partnerships can take many forms and serve many purposes. They can also be supported — or hindered — by local, state, and federal policies. This paper presents a typology of partnership activities, providing guidance for fiscal and regulatory policy.

**From Compliance to Capacity Building: Community Colleges and Federal Workforce Education Policy**


The federal role in workforce development is likely to include interaction with community colleges, where much workforce preparation occurs. This paper describes the policy levers used by the U.S. Department of Education in recent years and argues for a new paradigm that promotes a more cohesive workforce education system.

**Shifting Gears: Community Colleges and Adult Basic Education**


This paper explores some of the barriers faced by adult basic education (ABE) students in obtaining postsecondary credentials and describes lessons learned from three state-level policy initiatives. The paper also makes suggestions for a federal role in promoting better ABE outcomes.

**Making the Transition to Four-Year Institutions: Academic Preparation and Transfer**


This study examines the role of academic preparation in the transition from community colleges to four-year institutions. Through analyses of Florida’s unit record data of first-time community college students, the paper addresses two specific questions: To what extent do academically unprepared students transfer to four-year institutions? And, can positive experiences in community colleges diminish the role of inadequate academic preparation?

**An Exploration of Tinto’s Integration Framework for Community College Students**


Tinto’s integration framework is often assumed to be inapplicable to the study of student persistence at community colleges because one of the linchpins of the framework — social integration — is considered unlikely to occur for students at these institutions. Community college students are thought to lack the time to participate in activities that would facilitate social integration. Using in-depth interviews with students at two urban community colleges in the Northeast, this paper examines the ways that first-year community college students engage with their institutions.

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


With its NCPR partners, MDRC has launched a multi-college demonstration of learning communities that tests six different models in six community colleges across the country, all but one of which are designed to help developmental students succeed. This report describes the goals and methodology of the study.
A Short Guide to “Tipping Point” Analyses of Community College Student Labor Market Outcomes


This guide is designed for community colleges and state agencies that are interested in analyzing the labor market outcomes of their programs and in identifying opportunities for improving employment outcomes of their students. The “tipping point” refers to a study conducted by David Prince of the Washington State Board for Community and Technical Colleges (SBCTC) and Davis Jenkins of CCRC and is the point of accumulated credits and credentials beyond which students experience significant earnings advantages.

The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach: Addressing Endogenous Sorting and Noncompliance


This paper reports findings from a study that uses a detailed dataset and a regression discontinuity design to identify the causal effect of remediation on the educational outcomes of nearly 100,000 college students in Florida. It also discusses concerns about endogenous sorting around the policy cutoff, which poses a threat to the assumptions of the regression discontinuity model in multiple research contexts.

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. This paper serves as a discussion of the research literature on the effectiveness of financial aid with special attention to its implications for policy.

Conducting Research to Answer Your Questions about Dual Enrollment


As states and local education authorities (LEAs) devote resources to dual enrollment, it is important to evaluate the effectiveness of these programs. Doing so presents challenges in terms of data requirements and coordination among high schools, colleges, LEAs, and states. This paper outlines why research is important and discusses how policymakers can support research activities.

ARTICLES AND BOOK CHAPTERS


