

## Community College Students: Characteristics, Outcomes, and Recommendations for Success

THOMAS R. BAILEY

As the global economy demands more highly skilled workers, it is imperative that every student has access to postsecondary education, and once there, graduates. Community colleges serve as the gateway to opportunity for over 11 million Americans each year by providing them with the education necessary for living-wage jobs. The nation's 1,200 community colleges comprise the largest sector of American higher education in terms of institutions and numbers of students. They educate about half of all U.S. undergraduates, and are the entry point into higher education for most first-generation college students, particularly those from low-income, minority, and immigrant backgrounds. Community colleges are also often the first place individuals look to for occupational training, and are essential in preparing the nation's labor force for the rapidly changing needs of local, regional, and international labor markets. As open access institutions, they represent the country's commitment to providing an opportunity, for all who aspire, to attain a college education. However, despite community colleges' substantial enrollments, fewer than half of all attending students earn degrees. And, many of the students most "at risk" of not completing community college programs are the most educationally and economically disadvantaged.

To investigate the factors affecting student outcomes, CCRC conducted extensive analyses of nationally representative survey data in order to: identify the distinctive demographic and educational characteristics of community college<sup>1</sup> students (occupational and academic); assess different students' rates of educational outcome success and the factors impacting that success; and determine the economic benefits gained by students' enrollment and attainment in different programs.

**Student Characteristics.** Our findings show that, when compared to students at four-year institutions, community college students are more likely to come from households with lower incomes, to be from a minority population, to be first-generation college students, to be older than the average college

student, to have children, to delay enrollment after high school, to have had a less rigorous high school curriculum, and to have lower achievement in high school. They are also more likely to have non-traditional enrollment patterns, such as attending part-time, working while enrolled, or interrupting their schooling. In fact, among students who work, community college students are much more likely to self-identify as workers than as students.

Thus, when compared to their counterpart student populations, community college students—in general, and occupational community college students, in particular—are more likely to enter postsecondary education with weaker academic and economic backgrounds, and to have other major life responsibilities, like jobs and families. They often face a complex situation of juggling academic, family, and work commitments that make it difficult for them to succeed in school. In general, occupational community college students, and in particular, those in certificate programs, are more likely than other postsecondary students to have background characteristics that are

<sup>1</sup>In this analysis we consider community college students to be all students enrolled in two-year or less than two-year institutions and those enrolled in four-year institutions with the goal of earning an associate, certificate, or no degree. Nearly 90 percent of all community college students defined in this way are enrolled in two-year or less institutions.

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shown to be barriers to both access to, and success in, postsecondary education.

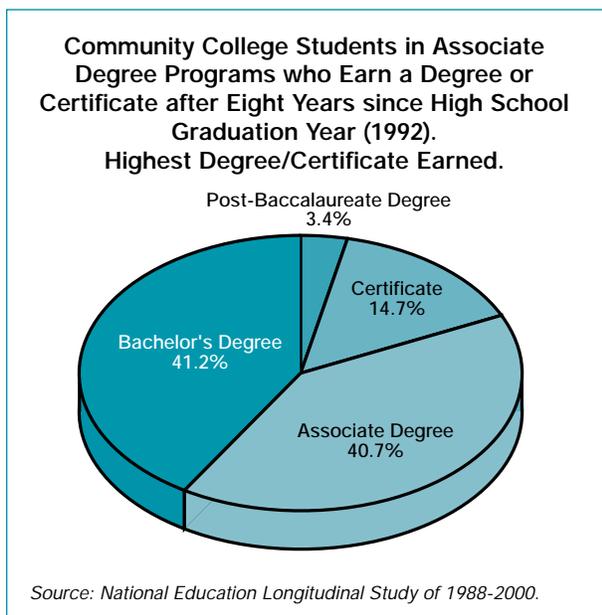
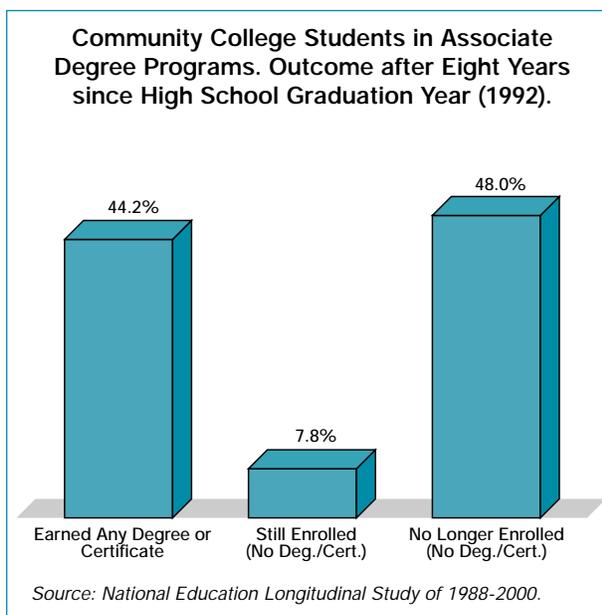
**Educational Outcomes.** Since many community college students do not complete degrees, or even accumulate many credits, it is clear that mere access to postsecondary education is insufficient for students to reap many of its benefits. Therefore, it is imperative to assess the educational outcomes of students in different types of programs and the factors that most affect those outcomes. Our analysis of the National Education Longitudinal Survey (a sample of students who were in eighth grade in 1988) shows that among community college students who state that they aspire to an associate degree or higher, about 53 percent earn an associate degree or transfer to a bachelor's degree-granting insti-

tuition within eight years of initial enrollment. Furthermore, occupational students in associate degree programs have lower rates of educational attainment than academic students in associate degree programs. About two-thirds of students in certificate programs complete a certificate or a higher degree; however, earning a certificate does not usually lead to higher levels of educational attainment.

The most important factors affecting outcome success are the background characteristics and educational preparation that students bring to their postsecondary education, as well as the enrollment pattern in which students engage while in school. Students who maintain full-time enrollment during the school year have a significantly higher probability of meeting or exceeding their outcome objective. Conversely, attending part-time, interrupting enrollment, and delaying enrollment after high school all have negative effects on educational goal attainment. Students' socio-economic and high school academic backgrounds are related to their educational attainment as well, though not independently of the enrollment patterns. That is, students with weaker academic preparation and aptitude, and those from lower SES households, are more likely to have enrollment pathways (delayed, part-time, and interrupted) that are detrimental to postsecondary completion. Since these characteristics are more common among community college and community college occupational students than among their counterpart populations (baccalaureates and academic community college students, respectively), such students have a lower likelihood of achieving their desired educational outcome (degree attainment or transfer to a baccalaureate program).

**Economic Outcomes.** In general, we find that economic outcomes improve with education in expected ways. Higher levels of education are associated with more stable and economically sustaining employment outcomes. For example, students who have attended community college are more likely to be employed, work full-time, and have higher pay rates than those who did not continue their education beyond high school. However, at similar levels of education, men enjoy a clear advantage over women.

Our findings also indicate that community college occupational education is an economically effective educational choice for many students. In general, students pursuing an occupational program do not suffer in the sense that they earn less than either baccalaureate or academic students with equivalent amounts of education. Indeed, there is some evidence that occupational students earn more than academic students. Attaining an associate degree is highly bene-



ficial for both women and men, and this benefit is higher for occupational students than it is for academic students. While community college students do benefit from years of postsecondary schooling even without completing a degree, for women there is a very large and statistically significant additional economic benefit from earning an associate degree. Although our analysis has shown that community college academic education has lower economic returns than occupational education, we suspect that this is because most of the benefits for academic community college students come from their transfer and completion of a bachelor's degree. Thus, program completion measured with either a credential or transfer is a necessary and important objective for community college students to achieve. Moreover, credentials are particularly important for occupational students in order to reap the economic benefits of postsecondary education.

**Recommendations.** Community colleges provide opportunities for large numbers of non-traditional students to attend higher education. These institutions play an important role in educating students from lower socioeconomic backgrounds and those who face various barriers to higher education. However, nearly half of all first-time community college students leave school without completing a degree or transferring to a baccalaureate-granting institution. In addition, it is important to note that students from low-income families are the most likely to drop out early.

Since part-time, interrupted, and delayed enrollment in postsecondary education negatively impacts the probability of completion for all students, both government and institutional policies must address this common, but largely detrimental, educational trajectory. Either more traditional enrollment patterns among postsecondary students must be encouraged, enabled, and supported, or institutions must develop practices that ensure improved outcomes among the increasing numbers of students who follow non-traditional enrollment paths. The former may be done with effective advisement and financial support that makes students aware of the benefits of educational persistence and completion, and provides them the financial assistance to realize that achievement. Promoting completion among students following non-traditional education pathways is a more challenging task because of the variety of reasons for taking such a path. Regular contact with students by the school, encouraging even minimal student involvement with the educational institution (for example, enrollment in a single course or part-time work on campus), and developing activities and programs to promote the integration of non-

traditional students into the campus and its activities might encourage slow but steady persistence among this group of students.

It is clear that employment outcomes improve as individuals complete more years of education, with the greatest return for those who complete a degree. Our dual findings of lower completion rates among occupational associate degree students, and the clear economic benefits of such degrees, suggest that this component of postsecondary education is crucial to the livelihood of a large number of community college students. High enrollment in these programs does indicate that it is an important mode of entry into postsecondary education for students who might not otherwise have access to higher education. A commitment to directing resources toward this group of postsecondary students, who are more likely to have the background and characteristics with the greatest barriers to educational achievement, should be a priority. While federal, state, and institutional programs might provide funds to target institutions and educational programs attended by such disadvantaged students, they must incorporate innovative resource allocations that maximize student benefit and success once enrolled. Academic preparation and counseling in high school, which get students through the front door of postsecondary institutions, must do more to help them succeed once enrolled in those institutions. Programs that inform students and prepare them for the academic demands of college will help to promote postsecondary education and the persistence of their graduates.

Community colleges are an essential component of the nation's higher education system, and are significant in helping learners of all ages and backgrounds earn higher incomes and participate in the American dream. Since these programs are highly concentrated with the most disadvantaged of postsecondary students, at the greatest risk of not completing, it is imperative that policies and practices are developed to ensure that these students achieve success in order to increase their educational and economic possibilities.

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***In the following pages, you will find descriptions of our current research and activities, announcements of upcoming projects and events, and a list of selected publications. Further information about our current and past research is available on the CCRC web site. As always, we welcome your feedback.***

## CCRC RESEARCH

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### *THE NATIONAL FIELD STUDY OF COMMUNITY COLLEGES*

CCRC researchers are currently writing a book, tentatively titled *Missions Accomplished? Multiple Perspectives on Access and Equity at the Community College*, which reports findings from the National Field Study of Community Colleges. This study, funded by the Alfred P. Sloan Foundation, involved detailed case studies of fifteen community colleges in the states of California, Washington, Texas, Illinois, Florida, and New York. Colleges were selected according to geographic location, so that they included rural, suburban/metropolitan, and inner city colleges, and because they were of substantive interest to the researchers. The book consists of eight diverse chapters, covering different facets of today's community colleges.

A chapter on the missions and roles of community colleges looks at the importance of the collegiate model to community colleges, in light of new developments in contract and continuing education. James Jacobs takes a closer look at continuing education, with a chapter on the growth of industry certifications at community colleges. In his chapter on accountability, Kevin Dougherty concludes that community colleges are changing in both large and small ways to adapt to the new demands of state and federal reporting. Norton Grubb analyzes student services, and finds that community colleges could be doing more to assist in the graduation of needy populations of students. In her chapter on remediation, Dolores Perin discusses the large but dispersed demand for remediation, and the delicate balance of maintaining standards without losing students. A chapter on dual enrollment analyzes how community colleges are working with a broader cross-section of high school students than in the past, and the growing centrality of community colleges in K-12 state policy. Finally, Rebecca Cox looks at the development of distance education with regard to its institutional and pedagogical challenges.

Overall, the book finds that community colleges play a crucial role in the American system of higher education that goes far beyond their quantitative importance as revealed by their large enrollments. They are the manifestation of the country's public commitment to open access to higher education. Yet, community colleges are caught in a paradox. They are simultaneously admired for the ideals that they represent and criticized when they do not live up to those ideals.

### *COMMUNITY COLLEGES AND MINORITY DEGREE ATTAINMENT*

In today's economy, most jobs that pay more than a subsistence wage and offer opportunities for advancement require at least some postsecondary training, even at the entry level. At the same time, a college degree is usually required to advance beyond a certain level in most fields. Having a degree generally allows new entrants to a field to start farther up the job ladder and advance faster than those without a degree. Degrees are particularly important for black and Hispanic students. While minority students with postsecondary degrees still earn less than comparable whites, the incremental value of degrees for minority students is at least as high and in many cases higher than it is for whites. Nevertheless, black and Hispanic postsecondary students complete degrees at lower rates.

In May 2003, CCRC received funding from the Ford Foundation to examine the role of community colleges in promoting educational attainment of blacks and Hispanics. For this project, CCRC is analyzing existing national, state, and local databases on students in undergraduate programs to better understand the patterns and correlates of degree completion and transfer among minority students who enter higher education through community colleges. Researchers are examining how degree completion and baccalaureate transfer differ among black and Hispanic students in community college occupational degree and academic transfer programs, with a special focus on science and technology and teacher education programs. CCRC researchers will also compare the effectiveness of community colleges in enabling minority students to earn degrees with that of other higher education institutions, including public and private two- and four-year institutions. A key focus of the study will be on how different approaches to organizing and managing undergraduate education impact degree completion by black and Hispanic students. A report of the findings of this study is expected to be available at the end of 2004.

### *EVALUATING THE COMMUNITY COLLEGE BRIDGES TO OPPORTUNITY INITIATIVE*

The Ford Foundation has launched a grant-making initiative designed to promote state policies that enhance the capacity of community colleges to

improve educational and economic opportunities for low-income adults. The Foundation believes that any effort to create a policy environment conducive to serving disadvantaged students has the best chance of succeeding if it is championed by a multi-stakeholder group that includes leadership from college, community, business, and organized labor constituencies. With this view, the Foundation awarded planning grants to teams in six states that convened groups of such stakeholders and engaged them in planning and advocating for more supportive policies in each state. The Foundation has now funded the six states to implement the plans they have developed over the next two years.

CCRC is currently assisting the Ford Foundation by evaluating the activities and impacts of the Bridges to Opportunity Initiative in the six pilot states. The project will both analyze the activities during the past planning year and track their progress over the next two years in order to assess the effectiveness of each state's approach to implementing its plan, with a focus on the stakeholder engagement process and the preliminary impact on public policy and institutional practice. Researchers will also explore the implications of these findings for community college policy and practice more generally, and, with examples from the pilot states, will present a framework that states and colleges can use to evaluate the effectiveness of efforts to improve service to low-income adults. The project will be completed in summer 2005.

### **ACCELERATING STUDENT SUCCESS THROUGH CREDIT-BASED TRANSITION PROGRAMS**

Dual enrollment (high school students receiving credit for community college courses) has emerged as a major reform initiative, and is the basis of initiatives involving tens of millions of dollars from the Bill and Melinda Gates Foundation and other foundations, as well as from the U.S. Department of Education. Although many community colleges, educators, policymakers, and foundations have enthusiastically embraced dual or concurrent enrollment, not enough is currently known about the effectiveness of these programs. Do the programs improve outcomes for students, especially middle- and lower-achieving students, and positively contribute to the functioning of the education system?

To examine these issues, CCRC has recently been awarded funding from the Office of Vocational and Adult Education, (OVAE) of the U.S. Department of Education, to study successful credit-based transition programs (CBTPs). The study builds on one of the

Center's recent publications, *Promoting College Access and Success*, also funded by OVAE. Using a case-study methodology, combined with a state policy scan, this research will: 1) describe the practices of successful credit-based transition programs; 2) identify state-level policies and statutes that support (or inhibit) the development and implementation of credit-based transition programs; 3) identify the programmatic characteristics of CBTPs that are most important in supporting middle- and low-achieving students in their college courses and their transition from high school to college; and, 4) explore program outcomes and develop an explanation for how and why CBTPs may support the secondary-to-postsecondary transition of middle- and low-achieving students. This project will be completed at the end of 2004. *Promoting College Access and Success: A Review of Credit-Based Transition Programs* and several related reports can be downloaded from the CCRC web site.

### **THE NATIONAL SCIENCE FOUNDATION'S ADVANCED TECHNOLOGICAL EDUCATION PROGRAM**

In response to the 1992 Scientific and Advanced Technology Act (SATA), the National Science Foundation (NSF) initiated the Advanced Technological Education (ATE) program to promote systemic reform of the nation's science, technology, engineering, and mathematics (STEM) education. It had the goal of expanding the pool of skilled technicians in advanced technology fields and increasing the quality of technical and scientific education, in order to increase the nation's productivity and competitiveness in these areas. The Act gave community colleges the central role for implementation of the ATE program.

This fall, CCRC was awarded funding from the NSF to build on its previous ground-breaking three-year study, which closely examined six Advanced Technological Education (ATE) projects and four national centers, to evaluate the ability of the ATE projects and centers to meet the program's goal of having a significant and permanent influence on the host colleges and on the system of STEM education in general.

This new project will evaluate the ATE program at six regional centers in California, Kentucky, Nebraska, Ohio, Pennsylvania, and Tennessee, as well as at two national centers (which function as regional centers), in South Carolina and Florida. The project will have several components. First, information will be gathered on the number of technicians produced by the initiatives funded by the centers, therefore

determining whether the capacity of the system to educate these technicians has increased. Second, through discussions with employers, the quality of the graduates and how that compares to the quality of technicians prepared through existing approaches will be assessed. Third, the changes brought about by the initiative in the overall programs and systems used to educate manufacturing and information technology technicians will be analyzed. Finally, the project will identify barriers to the types of organizational changes in the education system sought by the NSF and make suggestions for program improvement.

The current project will run through fall 2006. The report of the previous ATE study, *Institutionalization and Sustainability of the National Science Foundation's Advanced Technological Education Program*, can be downloaded from the CCRC web site.

### **EXPANDING ACCESS TO AND SUCCESS IN POSTSECONDARY EDUCATION**

Efforts to improve the educational opportunities and employment outcomes of low-income and minority students at community colleges have been receiving increased attention from researchers, policymakers, and funders. Since its inception, CCRC has been dedicated to the development of practice and policy that expands access to higher education and ensures success for all students. CCRC has conducted quantitative analysis of individual and institutional data, qualitative case studies, and policy studies. Recently, the Center has been focused particularly on using data and research to improve both institutional performance and state policy and regulation related to community colleges and higher education.

One such project, led by Kevin Dougherty, is a review of state policies that affect access to, and success in, community colleges for minority and low-income students. This project will be carried out in collaboration with the Teachers College Higher Education Program. The study will conduct intensive interviews in 6 to 10 states with state and local community college officials to determine the types and content of the policies those states have in place. This information will lay the basis for a survey of state and local community college officials in all 50 states. This comprehensive analysis will provide a thorough understanding of the current situation of state policy toward community college access and opportunity. The research will be completed in fall 2004.

Another related project aims to use publicly available data and rigorous research methods to identify key challenges facing community colleges and their stu-

dents, especially those from disadvantaged backgrounds. Specifically, the goal of this project is to use such data to identify the institutional determinants of community college success with low-income and minority students in order to improve institutional performance, which can then be used to improve those students' opportunities. At the project's conclusion, a comprehensive report that summarizes the existing literature and the new data analysis of the institutional determinants of community college success for low-income and minority students will be compiled. The preliminary analysis will be completed in summer 2004.

CCRC is committed to conducting research that will increase the opportunities for community college students, and to improving the use of data and research to enhance institutional performance.

### **EVALUATIONS AND RELATED RESEARCH**

CCRC has recently engaged in a series of short-term research projects with individual colleges and organizations. The goal of this endeavor is to study specific problems at community colleges, and to provide services that will be of practical value to other institutions.

In the fall of 2002, the Center completed an external evaluation entitled *Student and Faculty Experiences with Learning through Simulated Information Technology Enterprises (L-SITEs), Phase I*. This is an Advanced Technological Education program managed by Regional Technology Strategies, Inc. under a grant from the National Science Foundation. The program offers a simulated business experience to business and information technology students who can work together over the internet to wire buildings, develop web-marketing strategies, and conduct other business transactions. L-SITEs Phase II is currently being launched, and CCRC will also evaluate the implementation of this grant, which involves the wider dissemination of the simulated enterprises curriculum through the participation of faculty and students at up to 60 additional community colleges.

During the spring of 2003, a team of CCRC researchers led by James Jacobs and Joseph Hankin, President of Westchester Community College and adjunct faculty at Teachers College, conducted *A Benchmark Analysis of Rockland Community College*. This study was requested by the State University of New York (SUNY), and focused on a series of measures that could be used by SUNY's chancellor and Rockland's administration to help to get the troubled, though in many ways successful, college back on track.

In the summer of 2003, Vanessa Smith Morest undertook a *National Survey of Community College Involvement in Adult Education* for the Center for the Advancement of Adult Literacy (CAAL). This project involved interviews with officials in 35 states across the country, and an analysis of state and national adult education data. Findings of the report show that community colleges are major providers of adult education, serving as many as a third of all adult education students.

Aside from L-SITEs Phase II, which was previously mentioned, the future holds a series of new short-term projects for CCRC. These include additional work funded by the National Science Foundation's Advanced Technological Education program, as well as a project requested by the International Baccalaureate Organization and funded by the Department of Education.

### **NEW FOCUS ON COMMUNITY COLLEGE FINANCE, STUDENTS, AND NON-CREDIT STUDIES**

CCRC is moving into three areas that our current research suggests need further attention. First, furthering our analysis of the institutional behavior of community colleges, we will focus on college finance, a fundamental determinant of institutional behavior. Second, adding to our qualitative research, for which interviews were conducted with over 450 faculty and administrators across the country, we will turn to an emphasis on student perspectives. Third, we have found particular interest in the debates about mission integration, and will explore this further through the analysis of one controversial area—the relationship between credit and non-credit studies at community colleges. Descriptions of new research and preliminary findings will be posted on the CCRC web site as they become available.

## **ANNOUNCEMENTS**

### **ALFRED P. SLOAN FOUNDATION EXTENDS CCRC FUNDING**

In July 2003, the Alfred P. Sloan Foundation renewed CCRC's funding for an additional three years. The Center was created in 1996, and is housed at the Institute on Education and the Economy (IEE) at Teachers College, Columbia University. The Sloan Foundation has provided generous support for CCRC infrastructure and much of its research since its incep-

tion. During the initial years of work, the Center developed extensive knowledge of community colleges and the issues they face, and produced information that is relevant to individual colleges, as well as to the growing numbers of policymakers interested in their development. In the next phase of work, CCRC will continue to expand its research program, focusing primarily on issues that arose in previous projects; work collaboratively with individual community colleges, community college organizations, and the growing network of scholars involved with reform initiatives around the country; and disseminate project findings and related information through our web site, mailings, presentations at conferences, and the annual CCRC Seminar Series.

### **BRONX COMMUNITY COLLEGE COLLABORATES WITH CCRC**

Building on research into academic preparedness conducted in the National Field Study of Community Colleges, CCRC Senior Researcher Dolores Perin has been working with Bronx Community College (BCC) on several initiatives. A proposal has recently been submitted to the U.S. Department of Education's Institute of Education Sciences to develop and evaluate a reading comprehension intervention with developmental education students. Other submissions to fund this work are currently in preparation. If funding is received, Bronx Community College will be the first of three test sites for the intervention. One of BCC's stated goals is to establish the college as a "center for education and research," and provide "fundamental educational experiences that develop competence in basic skills including reading, writing, and mathematics." Working with BCC clearly provides CCRC with a valuable opportunity to learn first hand from college experience. The CCRC/BCC proposals are based on exploratory data collection with a group of BCC developmental education students in summer 2003. During this period, the students completed ten reading comprehension units, an early version of the intervention for which funding is being sought. These units provide practice in strategies to improve the understanding of biology textbooks.

Other collaborative work includes a paper that Perin is writing in collaboration with Nancy Ritze, the Associate Dean for Institutional Research and Planning, and Christopher Efthimiou, an Institutional Researcher at Bronx Community College, using BCC's institutional data, on academic outcomes for aspirants to the associate degree in nursing. Perin and Ritze will make several collaborative presentations in 2004.

### **CCRC TO ADVISE IN THE ESTABLISHMENT OF A TECHNICAL COLLEGE IN TANZANIA**

Recently, CCRC was approached by Elizabeth Mahiga, a Tanzanian national and wife of the Tanzanian ambassador to the United Nations, about providing consulting assistance in the establishment of a private, non-profit technical college in Dar es Salaam, Tanzania. Located on the east coast of Africa, Tanzania is among the poorest countries in the world. Yet with the implementation of a set of controversial economic structural adjustment policies, it has experienced steady growth in GDP (gross domestic product) and the emergence of several viable new economic sectors in the past decade. However, Tanzania remains highly dependent on agriculture and primary production, as well as tourism, for much of its income. Thus, among the many educational needs of the country is that of a skilled technical workforce to help develop the emerging sectors and to establish a vibrant secondary production component to its economy.

CCRC will act in an advisory role in the development plans for the college, and will assist the college to establish linkages with community colleges and other appropriate institutions in the United States. Center staff are enthusiastic about this new direction of applied research and the international development work that this project provides for CCRC.

### **CCRC SEMINAR SERIES**

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#### **ALL LEARNING IS LEARNING: THE ROLE OF CREDENTIALS AND NON-CREDIT EDUCATION IN COMMUNITY COLLEGES**

The final installment of the CCRC 2003-2004 Seminar Series will take place on April 22, 2004. The seminar will feature a discussion of alternative certification efforts at community colleges. Presentations will be made by James Jacobs, CCRC Associate Director and the Director of the Center for Workforce Development and Policy at Macomb Community College; Andrew Meyer, Vice President for Learning of Anne Arundel Community College; and Carol Brown, President of Waukesha County Technical College.

The CCRC seminars are an interactive forum where participants—community college faculty, administrators, presidents, and academic and institutional researchers—present research findings, exchange ideas, and explore new areas of study. Previous seminars have

focused on student services and counseling, nursing programs, community college leadership, equity and access, dual enrollment, and a presentation on vocational education given by Carol D'Amico, the former Assistant Secretary of Education for Vocational and Adult Education.

### **UPCOMING CONFERENCE PRESENTATIONS**

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#### **American Educational Research Association Annual Meeting April 12-16, 2004 San Diego, CA**

**Paper Title:**  
*The Academic Mission of Community Colleges:  
Structural Responses to the Expansion of Higher  
Education*

**Paper Session:**  
*"Emerging Issues for Community Colleges"*

**Presenter:**  
Vanessa Smith Morest  
Assistant Director for Postsecondary Research,  
Community College Research Center,  
Teachers College, Columbia University  
**Location:** To be announced

**Paper Title:**  
*Career Development in an Age of Accountability:  
A Review of Research on Comprehensive Career  
Development*

**Paper Session:**  
*"Contemporary Topics in Career Development"*

**Presenter:**  
Katherine L. Hughes  
Assistant Director for Work and Education Reform  
Research, Institute on Education and the Economy,  
Teachers College, Columbia University  
**Location:** To be announced

#### **American Association of Community Colleges Annual Convention April 24-27, 2004 Minneapolis Convention Center Minneapolis, MN**

**Presentation Title:**  
*New Tools for Change: The Regional Centers of  
the National Science Foundation's Advanced  
Technological Education Program*

**Panelists:**  
Thomas Bailey, Director, Community College Research

Center, Teachers College, Columbia University  
 Elizabeth J. Teles, Lead Program Director, Advanced  
 Technological Education (ATE), Division of  
 Undergraduate Education, National Science  
 Foundation

Elaine Craft, Director, SCATE Center of Excellence

**Date: Sunday, April 25, 2004**

**Room: M100C, Minneapolis Convention Center,  
 Mezzanine Level**

**Time: 11:15am-12:15pm**

**Presentation Title:**

***Promoting Access of Academically Underprepared  
 Students to Nursing Degrees***

**Panelists:**

Carolyn Williams, President, Bronx Community College  
 Nancy Ritze, Associate Dean of Institutional Research and  
 Planning, Bronx Community College  
 Jason Finkelstein, Director of Coordinated Freshman  
 Programs, Bronx Community College  
 Dolores Perin, Senior Research Associate, Community  
 College Research Center, Teachers College, Columbia  
 University

**Date: Sunday, April 25, 2004**

**Room: 101G, Minneapolis Convention Center,  
 Level 1**

**Time: 2:45pm-3:45pm**

**Presentation Title:**

***New Evidence on Community Colleges and  
 Minority Completion Rates: Implications for  
 Policies and Practice***

**Panelists:**

Thomas Bailey, Director, Community College Research  
 Center, Teachers College, Columbia University  
 Phyllis Coleman Mouton, Vice Chancellor, Baton Rouge  
 Community College  
 Margaret Rivera, Vice President, American Association of  
 Community Colleges

**Date: Monday, April 26, 2004**

**Room: M100A, Minneapolis Convention Center,  
 Mezzanine Level**

**Time: 11:45 am- 12:45pm**

**Presentation Title:**

***The Condition of Information Technology  
 Certification Programs at the American  
 Community College***

**Panelists:**

James Jacobs, Associate Director, Community College  
 Research Center, Teachers College, Columbia  
 University  
 Ruth Prather, Provost, Valencia Community College-  
 Winter Park Campus  
 Marjorie Bynum, Vice President for Workforce  
 Development, Information Technology Association of  
 America

**Date: Tuesday, April 27, 2004**

**Room: 200G, Minneapolis Convention Center,  
 Level 2**

**Time: 8:45am-9:45am**



*will be hosting an*

***Open Reception***

*at*

***The 84th AACC Annual Convention***

**Sunday, April 25, 2004**

**Director's Row 1**

**Level 3**

**Minneapolis Hilton**

**1001 Marquette Avenue South**

**6:30pm – 10pm**

*Please also visit the*



***Booth #207***

*at the*

***AACC Academic Marketplace***

**April 24-27, 2004**

**Minneapolis Convention Center**

***We hope to see you there!***

Please check our website  
 for details and updates  
<http://www.tc.columbia.edu/ccrc>

## SELECTED PUBLICATIONS

### Reports

#### ***The Organizational Efficiency of Multiple Missions for Community Colleges***

By Thomas R. Bailey and Vanessa Smith Morest  
Community College Research Center (February 2004)  
Using case study research conducted at eight community colleges in five states, this report examines the issue of, and controversy over, the ever-expanding missions of community colleges.

#### ***School-Based Career Development: A Synthesis of the Literature***

By Katherine L. Hughes and Melinda Mechur Karp  
Institute on Education and the Economy (February 2004)  
This report examines the effectiveness of school-based career guidance and development programs. Reviewing more than 50 research studies, the authors ask if there is evidence that career guidance programs influence students' academic and vocational achievement.

#### ***Outsourcing of Instruction at Community Colleges***

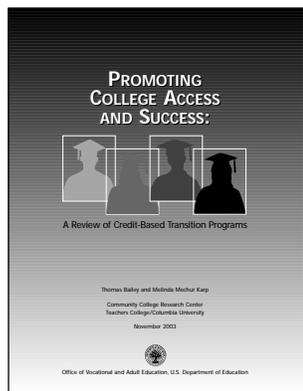
By Thomas Bailey, James Jacobs, and Davis Jenkins  
Community College Research Center (January 2004)  
This report presents the findings of exploratory research designed to identify the characteristics of the outsourcing of instruction at community colleges and the forces that promote or block its spread. It is the second in a series of reports by the National Center for Postsecondary Improvement and the Community College Research Center on the relationship between for-profit higher education and community colleges (see Bailey, Badway, & Gumpert, 2002).

#### ***Institutionalization and Sustainability of the National Science Foundation's Advanced Technological Education Program***

By Thomas R. Bailey, Yukari Matsuzuka, James Jacobs, Vanessa Smith Morest, and Katherine L. Hughes  
Community College Research Center (October 2003)  
This report examines the ability of the ATE projects and centers to meet the program's goal of having a significant and permanent influence on the host colleges and on the system of science, technology, engineering, and mathematics (STEM) education in general.

#### ***Promoting College Access and Success: A Review of Credit-Based Transition Programs***

By Thomas Bailey and Melinda Mechur Karp  
Office of Vocational and Adult Education, U.S. Department of Education (November 2003)  
Focusing on dual enrollment, Tech Prep, AP, IB, and middle college high schools, this report offers a comprehensive look at what is known and what is not



known about this rapidly growing group of education initiatives.

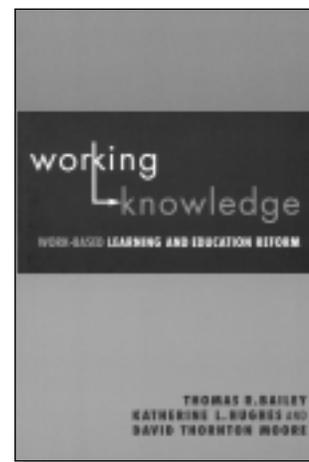
#### ***Implementing the "Education Consensus": The Federal Role in Supporting Vocational-Technical Education***

By James Jacobs and W. Norton Grubb  
Community College Research Center (March 2002)  
This report was written at the request of the Office of Vocational and Adult Education (OVAE) of the U.S. Department of Education, and examines the rationale for federal involvement in occupational education.

### Books

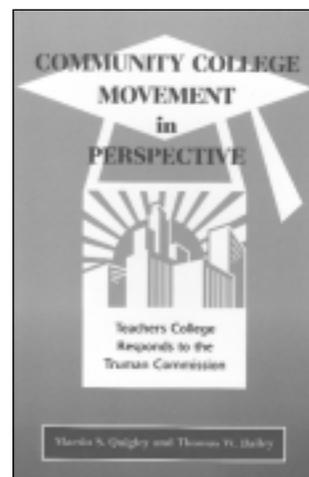
#### ***Working Knowledge: Work-Based Learning and Education Reform***

By Thomas R. Bailey, Katherine L. Hughes, and David Thornton Moore  
RoutledgeFalmer (2004)  
Based on over five years of research on work-based learning in high school and community college programs across the country, *Working Knowledge* explores the potential for using work-based learning as part of a broad education reform strategy.



#### ***Community College Movement in Perspective: Teachers College Responds to the Truman Commission***

By Martin S. Quigley and Thomas R. Bailey  
Scarecrow Press (2003)  
This book discusses the origin of two-year colleges, the vision of the Truman Commission's recommendation for the establishment of public postsecondary institutions, and the enduring role played by Teachers College, Columbia University in the community college movement.



***The Education Gospel: The Economic Roles of Schooling***

W. Norton Grubb and Marvin Lazerson  
Harvard University Press (2004)

This book examines the Education Gospel - the faith in education as a source of skills for the Knowledge Revolution - and its continuing influence on the economic roles of schooling. In addition to tracing the effects on several educational institutions including community colleges, the book details its consequences for private as well as public goals, for the correspondence between schooling and work, and for equity.

**Journals, Articles, and Book Chapters**

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