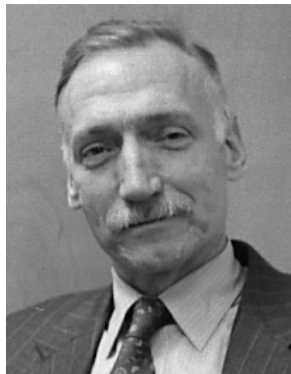


# CCRC Currents

COMMUNITY COLLEGE RESEARCH CENTER

## DIRECTOR'S COLUMN

THOMAS R. BAILEY



In 2003, the big news concerning community colleges is the condition of state budgets. Public higher education throughout the country is experiencing widespread cutbacks as many states try to reduce multi-billion dollar budget gaps. In January, the California State Board

of Education proposed more than doubling the per credit tuition for the state's one million-plus community college students. The New York State Board of Regents proposed a 34 percent (\$1,400) increase in tuition for the state's four-year system, and pressure on community college tuition seems inevitable. Even more troublesome, despite tuition increases, colleges have to cut their budgets.

This financial situation has complicated an already difficult environment for community colleges. The colleges have traditionally enrolled students who face significant challenges to their educational success, and they have had to do so with fewer resources than other institutions of higher education. In attempts to meet the broad mandates of the community college system, and in a search for additional revenues, colleges have taken on a wide array of functions and missions, requiring them to work with a heterogeneous set of students who differ drastically in their academic preparation and career goals.

Despite these burdens, community colleges have strengthened opportunities for millions of students. Community college students who complete an associate degree earn on average between 15 and 40 percent more than a high school graduate with no postsecondary education. And the economic value of one year of studies in a community college is about equivalent to the value of

a year in a baccalaureate-granting college or university. Nevertheless, degree completion rates at many community colleges are still low, especially for students from families with low socioeconomic status.

Whatever the past successes and challenges for the community college system, the next few years will be characterized by less money, increasing complexity, and students who face even greater challenges. At the Community College Research Center, we are committed to helping faculty, administrators, and policy makers navigate these difficult times, while improving the quality of education and maintaining the college's commitment to access and equity. In order to accomplish our goals, we are building on the program of research and outreach that we first developed when we were established in 1996 by a generous grant from the Alfred P. Sloan Foundation. During the last seven years, we have combined qualitative and quantitative research based on fieldwork at over 50 community colleges and analysis of many national- and state-level data sets. We have sought to explore the challenges these colleges face in meeting their goals and defining their role within this new and more difficult environment of higher education. We have

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looked at these data from two perspectives: examining the functioning and organization of the colleges and exploring, from the students' perspective, how students move through the education system and the conditions that enable them to benefit most from a community college education.

In this issue, we describe several CCRC projects. For the last three years, our National Field Study of Community Colleges has been examining eight research topics at fifteen community colleges across the country. With funding from the Alfred P. Sloan Foundation, researchers have conducted over 400 interviews with college administrators, faculty, and students to examine key issues facing community colleges today.

CCRC is also in the process of completing a major quantitative study with the U.S. Department of Education on the National Assessment of Vocational Education (NAVE). Our researchers are analyzing data on the characteristics and educational and economic outcomes of postsecondary occupational students.

Researchers are also completing a project for the National Science Foundation (NSF). We have been examining the impact and sustainability of Advanced Technological Education (ATE) programs at community colleges, which were designed to increase the number of skilled technicians in the advanced technology fields.

In addition to these projects, with funding from the Office of Adult and Vocational Education (OVAE) of the U.S. Department of Education, researchers have been analyzing the information available on dual enrollment programs to determine how they affect high school students' transition to postsecondary education and future success in college.

In conjunction with the American Association of Community Colleges (AACC), CCRC has been developing research on the skill requirements and workplace demands of novice nurses. Researchers have recently completed a monograph on the topic, *Credentials, Curriculum, and Access: The Debate Over Nurse Preparation*, which explores the question of nurse licensure and the controversy over associate- versus baccalaureate-educated nurses.

Finally, CCRC continues to work with community colleges, professional organizations, foundations, and government agencies to promote discussion, research, and dissemination of information about community colleges. Every fall and spring, CCRC holds a series of seminars at which

researchers, experts from the field, and invited guests present and discuss topics of significance to community colleges. Our final seminar for the 2002-2003 academic year, to be held on March 26, 2003, will be on the topic of *Equity and Access in Community Colleges*. We also continue to collaborate with the American Association of Community Colleges (AACC) and the League for Innovation in Community Colleges in developing joint projects, and CCRC participates annually in the conventions of AACC, the League for Innovation, the Council for the Study of Community Colleges (CSCC), the National Council for Workforce Education (NCWE), and the American Educational Research Association (AERA), among others.

In the following pages, we describe in more detail the projects mentioned above and announce our recent publications and upcoming events and conference presentations. Reports on our completed work are available on CCRC's website. We welcome your comments and suggestions.

## **CCRC RESEARCH**

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

CCRC researchers are concluding work on the National Field Study of Community Colleges. With funding and support from the Alfred P. Sloan Foundation, data collection for this project began in October 2000. It brought together senior and junior CCRC researchers interested in a variety of areas of study for the purpose of collaborating on case studies of the same fifteen community colleges. Topics analyzed through this research include the multiple missions and roles of community colleges, accountability and performance-based funding, counseling and student support services, developmental education, distance education, industry certifications and workforce development, the rise of new competitors, and K-14 partnerships. CCRC researchers met in the summer of 2000 to plan the project and then frequently thereafter, both in the field and at planning meetings, for the purpose of sharing observations and interpretations.

The fifteen community colleges participating in the National Field Study are distributed across the country, in California, Washington, Texas, Illinois, Florida, and New York. Institutions were

intentionally selected to include a combination of rural, suburban, and urban colleges for each state. Within these broad categories, colleges were identified for study on the basis of having programs or characteristics that would help guide our research in one or more of the eight areas listed above. Teams of three to five researchers made three- or four-day visits to the colleges. We conducted a total of 458 interviews with 630 community college administrators (45.1 percent), faculty (44.1 percent), and students (10.8 percent). These interviews were then transcribed, in order for each researcher to have access to the full content of all of the case studies.

This study could not have been conducted without the agreement of community college presidents to open up their colleges for analysis. Although individual participants and colleges remain anonymous through confidentiality agreements, it is important to note that considerable labor was involved in arranging site visits. Much of the effort was contributed by college staff, who have been enthusiastic, welcoming, and hard-working on our behalf. We are all grateful to the staff and students who took time to participate in the study.

Our research has provided much evidence about the growing challenges that colleges face: increasing enrollments, restricted resources, an array of new competitors, and growing heterogeneity among their students. Nevertheless, colleges continue to expand the scope of their activities by, for example, increasing their work with high school students; expanding their non-credit and workforce development activities; introducing honors programs; and, in a growing number of them, developing applied baccalaureate programs.

In addition, our research has led to findings regarding many important areas within community colleges. For example, although there is a consensus among researchers and college administrators concerning ways to organize student services and developmental education, in many colleges, these models were not implemented. While most colleges had good student services programs, the majority of their students were not able to or were unwilling to use them. We also found that traditional developmental education was only one among several approaches to addressing problems caused by weak academic preparation. Many colleges have absorbed prepa-

ration for certifications into their non-credit and core credit programs, although the number of students seeking information technology (IT) certificates has declined with the contraction of this sector. But while the colleges have been initiating many new programs, the core credit-granting functions, academic or general education instruction in particular, have not shrunk, and in some cases have actually grown.

These are just a few of our conclusions and insights from this project. Final reports and non-technical briefs reporting on this research will be available in the summer of 2003. The reports will appear on the CCRC website as well as through a variety of other outlets, such as the American Association of Community Colleges (AACC), the League for Innovation in Community Colleges, and the American Educational Research Association (AERA) conferences. In addition, CCRC researchers are in the process of preparing a book on this study.

### **EDUCATIONAL OUTCOMES OF POSTSECONDARY OCCUPATIONAL STUDENTS**

For the past two years, CCRC has been working with the U.S. Department of Education on the National Assessment of Vocational Education (NAVE), as called for by the Carl D. Perkins Vocational and Applied Technology Act of 1998. Our role has been to carry out the quantitative analysis of postsecondary occupational education using national-level data sets made available from the National Center for Education Statistics. The project has involved the following major components: a description of the characteristics of postsecondary occupational students (primarily in community colleges) and analyses of educational and economic outcomes for students.

Results from our analyses of student characteristics were incorporated into the NAVÉ interim report published in September 2002 and available on their website (<http://www.ed.gov/offices/OUS/PES/NAVE/reports.html>). Using information from the 1996 and 2000 National Postsecondary Student Aid Study datasets and the 1995 and 1999 National Household Education Surveys, we found that community college students, when compared to students in baccalaureate programs, were on average older and more likely to be minority, to attend part-time,

to work, to have weaker educational preparation, and to be from a lower socioeconomic background. The same differences were found in a comparison of occupational to academic students in community colleges. Nevertheless, the contrast between baccalaureate and community college students was greater than between academic and occupational students within community colleges. Our analysis also confirmed the growing importance of non-credit instruction at community colleges.

Our report on educational outcomes makes use of the 1989-1994 and the 1995-1998 Beginning Postsecondary Student Longitudinal Study and the 1988-2000 National Education Longitudinal Study. We compare degree completion rates among academic and occupational students pursuing associate degrees and certificates. Our use of multiple data sets allows us to compare trends over time. Certificate students account for about 30 percent of community college occupational students, but little reportable analysis of their educational outcomes has been carried out to date.

CCRC's analysis of economic outcomes sought answers to the following questions: How do the earnings of students who complete an occupational associate degree compare to those of high school graduates with no additional schooling, those who complete an academic associate degree, and those who complete a bachelor's degree? We also consider whether there is a "sheepskin" or program effect for occupational students—whether students earn more if they complete a degree than if they finish an equivalent amount of education without completing a degree. We also compared the value of a year of community college education, for academic and occupational students, to a year of education in a baccalaureate-granting institution.

The Department of Education is scheduled to release the NAVE final report in spring 2003. It will be a comprehensive analysis of postsecondary occupational education based on our findings and the results from other analyses, including research based on extensive state-level data sets that combine administrative educational data with earnings data from the unemployment insurance systems. CCRC's detailed reports will be available as soon as the Department's report is released.

Project findings will also be presented at the 2003 conferences of the American Educational Research Association (AERA) and the Comparative and International Education Society (CIES).

Upcoming newsletters and CCRC Briefs will report additional findings and policy implications.

### **THE INSTITUTIONAL IMPACT OF ADVANCED TECHNOLOGICAL EDUCATION GRANTS ON COMMUNITY COLLEGES**

Since 1992, the Advanced Technological Education (ATE) program funded by the National Science Foundation (NSF) has been promoting systematic reform of science, technology, engineering, and mathematics (STEM) education at two-year colleges in order to expand the pool of skilled technicians in the advanced technology fields.

Since April 2000, CCRC has been engaged in a research project for NSF that studies the institutional impact of ATE on community colleges. Through in-depth field research at ten community colleges with ATE funding, CCRC researchers have been investigating the process through which the ATE activities can become institutionalized into the broader activities of the colleges, and the ways they can be sustained after NSF funding runs out. The institutionalization and sustainability of grant-funded innovations are issues that confront many educational reforms.

The ATE-funded projects in our study have been engaged in many innovative and excellent activities in the area of curriculum and course development, professional development, and partnership development with industry and educational institutions. The ATE program encourages strengthened academic content of occupational courses in order to develop technical skills that are effective for students both in the workplace and in matriculation to four-year institutions. Better coordination between academic and occupational faculty is an important component of this strategy. The ATE projects have involved occupational faculty, but some sites found it difficult to develop substantive and ongoing interaction between the ATE-funded projects and the college academic faculty and departments. Many of the ATE sites emphasized the importance of articulation with four-year programs, but academic courses taken by students in the ATE program sometimes did not transfer, and students could not advance seamlessly to four-year programs. One of the most useful means by which ATE programs have worked to encourage high school students to



prepare for technical careers is through the use of Tech Prep programs.

We also found a tendency among some of the colleges studied to move the ATE-funded projects toward the area of workforce development, particularly in short-term, non-credit-type programs and contract training. This makes the ATE activities more responsive to industry needs, but complicates the integration of ATE innovations into the normal functioning of the college.

In the last two or three years, ATE projects and centers, and NSF in general, have focused more on post-NSF sustainability of the ATE-funded activities. Confronting the end of initial NSF funding, colleges have pursued several strategies, including sales of products, appeals to other funders, additional institutional support from the community college, and seeking additional support from NSF. In some cases, colleges have considered that the initial objectives have been met or that there is no need for further work in the area and have therefore not sought to perpetuate the explicit program activities. Indeed, perhaps the most successful perpetuation of the innovations would be to simply incorporate the activities into the on-going operation of colleges without use of special resources or funding. This appears to have happened in one of our study sites, although in many cases it is too early to determine whether most projects have, or will achieve, this level of institutionalization.

The NSF's ATE program continues to evolve. NSF staff and program and center operators continue to discuss issues such as the substantive and organizational relationship between academic and occupational instruction, the importance of transfer, and the nature of the long-term changes brought about by the ATE-funded activities. We have found that progress has been made in all of these areas, although reformers continue to face significant barriers. Continued clarification and discussion of overall ATE objectives will play an important role in overcoming those barriers.

A final report that includes the above findings will be available from CCRC.

## **DUAL ENROLLMENT**

Increasing focus on the need for high academic standards, coupled with the growing importance of attaining a postsecondary education, has led to the growth of programs—called dual enrollment or dual credit in most areas—that allow high school stu-

dents to take college-level classes and earn college credit while still in high school. Although this broad range of programs, which includes advanced placement (AP) and international baccalaureate (IB) as well college-based initiatives, have traditionally been the purview of the most academically advanced students, educators and policymakers have begun to focus on their potential for less successful students. Proponents, including the National Commission on the High School Senior Year and the Bill and Melinda Gates Foundation, see dual enrollment programs as meeting a myriad of needs, including: promoting rigorous high school academics; increasing student motivation and making the senior year of high school more meaningful; expanding the curriculum for advanced and vocational students; socializing students into the role of a college student; and lowering the costs of postsecondary education for students and their families. It is assumed that by meeting these various needs dual enrollment programs can help young people successfully transition from secondary to postsecondary education by ensuring that they graduate from high school with the academic and social skills necessary for college success.

The wide-ranging enthusiasm for dual enrollment programs is reflected in their rapid growth. All but three states now offer some support for dual credit/dual enrollment programs and the number of participating students has swelled as well. The evidence so far is not wholly compelling, however. Though some research finds that dual enrollment students have better GPAs during their first year of college than other students, and there is growing evidence that students and parents like dual enrollment and feel that it benefits them, systemic analysis of program outcomes is rare. Moreover, the wide range of programs included under the “dual enrollment” rubric makes evaluation difficult. And, current research does not address which mechanisms lead to the success of dual credit students—or which types of dual credit programs are the most effective. Thus, we do not yet have a clear understanding of how dual enrollment impacts students' high school experiences and their transition to postsecondary education and success in college, or how these programs change the institutional structure of the high school itself.

CCRC has completed some preliminary exploration of the topic, including two papers for the U.S. Department of Education's Office of Vocational and Adult Education (OVAE), which are available on

the CCRC and OVAE websites. Brief summaries based on these papers are also available from CCRC. We are currently preparing a third set of papers on the topic for OVAE. In addition, CCRC staff will be presenting research, using data from the National Field Study, which explores dual enrollment as an extension of school choice programs at the 2003 American Educational Research Association (AERA) conference.

### **NURSING PROGRAMS**

Building on prior research regarding the skill requirements of work, and education reforms designed to address the changing needs of the workplace, CCRC is pleased to announce new research in nurse preparation and the workplace demands of novice nurses. Concerns about the growing nursing shortage, changes in the health care profession, and the increasing importance of professional credentials in the workplace make this area of research of critical import. CCRC researchers have recently completed a monograph on the topic: *Credentials, Curriculum, and Access: The Debate over Nurse Preparation*. It explores the debate over nurse licensure, what is known about the programmatic differences among pre-licensure programs, and current research on the differential job performance of associate- versus baccalaureate-educated nurses. Copies of the monograph can be ordered from CCRC.

To more fully understand the issues facing nurse education programs, particularly those located at community colleges, the CCRC Seminar Series included a session devoted to nurse education. The well-attended session, held on November 6, 2002, "Nursing Programs in Community Colleges: Equity, Access, and Workforce Development," included panelists from CCRC, Borough of Manhattan Community College, the National Association for Associate Degree Nursing, and Teachers College's program in Nursing Education. Slides from the evening's presentations and notes from the ensuing discussion can be found on the CCRC website.

CCRC is currently seeking funding to expand our research in this area. In particular, we are interested in exploring the paths that individuals take through nurse education and entry to practice, as well as questions of transfer between associate degree and baccalaureate programs and the ability of members of disadvantaged and minority groups to access nursing education programs.

## **ANNOUNCEMENTS**

### **CCRC SEMINAR SERIES**

The final installment of the CCRC 2002-2003 Seminar Series will take place at Teachers College, Columbia University on Wednesday, March 26, 2003, from 2:30-5:00 pm. The seminar will feature presentations on *Equity and Access in Community Colleges* by Davis Jenkins, Director, Workforce Development Partnerships, Great Cities Institute, University of Illinois at Chicago; David Crook, University Associate Dean for Institutional Research at CUNY; and Sanford C. Shugart, President of Valencia Community College.

The 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, and a presentation on the federal role in vocational education by Carol D'Amico, the Assistant Secretary for Vocational and Adult Education of the U.S. Department of Education.



*Thomas Bailey, Carol D'Amico, James Jacobs (left to right).*

Information about upcoming seminars, as well as past presentations and summaries can be found on the CCRC website.

## **CCRC STAFF RECEIVE FELLOWSHIP AWARD**

CCRC is proud to announce that two of our researchers, Mariana Alfonso and Gregory Kienzl, were awarded Community College Research Fellowships from the College Board. This was the inaugural year for the College Board Fellowship and only two grants were awarded.

Mariana and Gregory are doctoral candidates in the Economics and Education program at Teachers College, Columbia University, and this fellowship will assist them in their dissertation research and dissemination. Mariana's proposal, "Understanding the Transfer Enigma: College Choice and Educational Attainment of Community Colleges' Baccalaureate Aspirants," and Gregory's proposal, "The Triple Helix of Education and Earnings: The Effect of Schooling, Pathways, and Work on the Economic Outcomes of Subbaccalaureate Students," both deal with issues related to the research currently being conducted by CCRC.

## **UPCOMING CONFERENCE PRESENTATIONS**

**Comparative and International  
Education Society  
March 13 -16, 2003  
Hotel Inter-Continental  
New Orleans, LA**

***Students on the Margin: How to Promote  
College Access and Attainment of Non-traditional  
Students – Evidence from Three Countries***  
**Thursday, March 13th, 1:30 – 3:00PM**  
**Cabildo Room**

### **Panelists:**

Gregory Kienzl, CCRC Research Associate  
Mariana Alfonso, CCRC Research Assistant  
MoonHee Kim, CCRC Research Assistant

**League for Innovation  
in the Community College  
March 16 – 19, 2003  
Phoenix Civic Plaza  
Phoenix, AZ**

***Degrees Matter: How Minorities Fare in  
Occupational Programs***

**Monday, March 17th, 12:15 – 1:15PM**  
**Tucson 42 Room**

### **Panelists:**

James Jacobs, CCRC Associate Director & Director  
for the Center of Workforce Development and  
Policy, Macomb Community College  
Marjorie Bynum, Vice President, Information  
Technology Association of America (ITAA)  
Davis Jenkins, Senior Fellow and Director,  
Workforce Development Partnerships, Great  
Cities Institute, University of Illinois at Chicago

***Reshaping Student Services: The Current State  
of Innovation***

**Wednesday March 19th, 8 – 9AM**  
**Phoenix 14 Room**

### **Panelists:**

Vanessa Smith Morest, CCRC Assistant Director  
Cynthia Heelan, Retired President, Colorado  
Mountain Community College  
David Wain Coon, Executive Dean of Student  
Services, Green River Community College

**American Association of Community  
Colleges 83rd Annual Convention  
April 5 – 8, 2003  
Adam's Mark Hotel  
Dallas, TX**

***Upholding the Promise: How Community  
Colleges Contribute to the Equity Agenda***

**Monday, April 7th, 3:45 – 4:45PM**  
**City View Room 6**

### **Panelists:**

Thomas Bailey, CCRC Director & Professor of  
Economics and Education, Teachers College,  
Columbia University  
James Jacobs, CCRC Associate Director & Director  
for the Center of Workforce Development and  
Policy, Macomb Community College  
Mariana Alfonso, CCRC Research Assistant  
Nan Poppe, Dean of Adult and Continuing  
Education, Portland Community College

**American Educational  
Research Association  
April 21 – 25, 2003  
Sheraton Chicago Hotel & Towers  
River Exposition Halls A&B  
Chicago, IL**

**Educational Attainment of Occupational  
Postsecondary Students**

**Panelists:**

Thomas Bailey, CCRC Director & Professor of  
Economics and Education, Teachers College,  
Columbia University  
Mariana Alfonso, CCRC Research Assistant  
Marc Scott, Assistant Professor of Educational  
Statistics, New York University

**Integration of Vocational and Academic  
Curricula through the NSF Advanced  
Technological Education Program**

**Panelists:**

Thomas Bailey, CCRC Director & Professor of  
Economics and Education, Teachers College,  
Columbia University  
Yukari Matsuzuka, CCRC Research Associate

**Transfer from Community Colleges to Four-year  
Colleges: Temporal and Geographic Variation**

**Panelists:**

Kevin Dougherty, CCRC Senior Research Associate  
& Associate Professor of Higher Education,  
Teachers College, Columbia University  
Gregory Kienzl, CCRC Research Associate

**The Structural Development of Comprehensive  
Community Colleges: Administrative Accretion  
and Mission Expansion**

**Panelists:**

Vanessa Smith Morest, CCRC Assistant Director

**Merging College and High School: The  
Institutional Realities of Implementing PK-16  
Reform**

**Panelists:**

Vanessa Smith Morest, CCRC Assistant Director  
Melinda Mechur Karp, CCRC Senior Research  
Assistant

**Trends in Community College Assessment  
and Placement Approaches: Implications  
for Educational Policy**

**Panelists:**

Dolores Perin, CCRC Senior Research Associate &  
Associate Professor of Psychology and Education,  
Teachers College, Columbia University  
Kerry Charron, CCRC Research Assistant &  
Lecturer, English Department, Hostos  
Community College

**Please visit the**



**booth at**

**The League for Innovation in the  
Community College  
2003 Innovations Conference  
March 16-19, 2003  
Phoenix Civic Plaza, Phoenix, AZ  
Booth 221**

**and**

**The 83rd Annual AACC Convention  
April 5-8, 2003  
Adam's Mark Hotel, Dallas, TX  
Booth 1212**

**and**

**The American Educational  
Research Association  
84th Annual Meeting  
April 21-25, 2003  
Sheraton Chicago Hotel & Towers  
Chicago, IL  
River Exposition Halls A&B  
Booth 407**

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**The**



**will be hosting a reception at**

**The 83rd Annual AACC Convention  
Sunday, April 6, 2003  
8:00 pm to 11:00 pm  
Adam's Mark Hotel, Dallas, TX  
Austin Ballroom 1**

**We hope you will be able to attend**

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



## RECENT PUBLICATIONS

### Journal Articles

- Bailey, T.R. & Weininger, E. (2002). Performance, graduation, and transfer of immigrants and natives in City University of New York community colleges. *Educational Evaluation and Policy Analysis*, 24(4).
- Bailey, T.R., Hughes, K.L., & Karp, M.M. (2002). What role can dual enrollment programs play in easing the transition between high school and postsecondary education? *The Journal for Vocational Special Needs Education*, 24(2), 18-29.
- Bailey, T.R. & Averianova, I. (2001). Multiple missions of community colleges: Conflicting or complementary. *The Catalyst*, 30(2), 5-12.
- Bragg, D.D. (2001). Opportunities and challenges for the new vocationalism. *New Directions for Community Colleges: The New Vocationalism in Community Colleges*, 115(3), 5-16.
- Dougherty, K. (in press). The uneven distribution of employee training by community colleges: Description and explanation. *Annals of the American Academy of Social and Political Science*.
- Dougherty, K. & Bakia, M. (2000). Community colleges and contract training: Content, origins, and impact. *Teachers College Record*, 102(1), 197-243.
- Grubb, W.N. (2001). From isolation to integration: Postsecondary vocational education and emerging systems of workforce development. *New Directions for Community Colleges: The New Vocationalism in Community Colleges*, 115(3), 27-37.
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- Jacobs, J. (2001). What is the future for postsecondary occupational education? *Journal of Vocational Education*, 26(2), 172-205.
- Orr, M.T. (2001). Community colleges and their communities: Collaboration for workforce development. *New Directions for Community Colleges: The New Vocationalism in Community Colleges*, 115(3), 39-50.
- Perin, D., Keselman, A., & Monopoli, M. (2003). Effects of text, domain, and learner variables on the academic writing of developmental reading students. *Higher Education*, 45(1), 19-42.
- Perin, D. (2002). Curriculum and pedagogy for academic-occupational integration in community colleges: Illustrations from an instrumental case study, parts I-IX. *Teachers College Record*. Available at: <http://www.tcrecord.org>
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- Perin, D. (2002). The location of developmental education in community colleges: A discussion of the merits of mainstreaming vs. centralization. *Community College Review*, 30(1), 27-44.
- Perin, D. (2001). Academic-occupational integration as a reform strategy for the community college: Classroom perspectives. *Teachers College Record*, 103(2), 303-335.
- Perin, D. (2001). Promising approaches for remediation. *Community College Journal*, 72(1), 53-56.
- Perin, D. (2000). Integration and collaboration: Views of community college instructors and administrators. *Update on Research and Leadership*, 8-9.
- Scott, M., Bailey, T.R., & Kienzl, G.S. (forthcoming). Institutions afloat? Determinants of college graduation rates with a focus on the public urban college. *Educational Evaluation and Policy Analysis*, 24(4).

### Book Chapters

- Anderson, G. (2002). Access to higher education. In J. Forest & K. Kinser (Eds.), *Higher education in the United States: An encyclopedia* (pp. 19-27). Santa Barbara, CA: ABC-CLIO.
- Bailey, T.R. (2003). The research perspective. In A. McCormick & R. Cox (Eds.), *New Directions for community colleges: Classification systems for the 21st Century*. San Francisco, CA: Jossey Bass.
- Bailey, T.R. (2002). Community colleges in the 21st century: Challenges and opportunities. In P.A. Gram & N. Stacey (Eds.), *The knowledge economy and postsecondary education: Report of a workshop* (pp. 1-10). Washington, DC: National Academy Press.
- Bailey, T.R. (2002). The evolving community college: The multiple mission debate. In N. Thomas, A. Lorenzo, & M. Milliron (Eds.), *Perspectives on the community college* (pp. 47-50). Phoenix, AZ: League for Innovation in the Community College.
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- Bragg, D.D. & Laanan, F. (2001). Clark Kerr: A biographical profile. In J. Palmer (Ed.), *Fifty key contemporary thinkers on education* (pp. 69-75). London: Routledge.
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