Transfer and the Role of Two- and Four-Year Institutional Partnerships in Addressing the Nation's Workforce and Educational Equity Needs

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Five years ago, the *Journal of Applied Research in the Community College* devoted an entire issue to the topic of transfer and articulation. The articles were written by several of the most influential researchers in this area, who addressed a variety of topics influencing transfer and bachelor's degree attainment, such as student aspirations, institutional policies and practices, curriculum, and student academic preparation. The message underlying all of these articles was the important role that transfer played in addressing the persistent academic achievement gap among students from different ethnic, racial, and income groups.

In 2011, this message remains fundamental to our work in transfer, but the stakes are higher. Although closing the achievement gap remains critically important, it is but one component of a larger set of national education needs that the transfer process will be called upon to address. This issue, then, could not be timelier.

The research in this issue comes primarily from California. It is a cliché, but truer than we might wish that "whatever starts in California, unfortunately has a tendency to spread" (attributed to former President Carter). With a bulging and cash-strapped community college system that enrolls a quarter of all students in two-year institutions, the challenges facing California are immense, but not unique compared to other states. What ails the Golden State ails the nation. Fortunately the researchers in this issue have useful news to share about how to make the transfer process more efficient for students and more productive for states and postsecondary institutions throughout the US.

Challenges at Home and Abroad

American higher education is stressed. For the past 60 years, colleges and universities in the US have

benefited from a remarkable rise in funding and enrollment (Cohen and Kisker, 2010). Fueled in part by the GI Bill and federal research dollars to maintain this nation's Cold War readiness, our colleges and universities became (and remain) the envy of the world. During this time, the American community college was engraved in the higher education landscape, as imagined by visionary leaders who saw (correctly) that the Truman Commission report represented a blueprint for the expansion of the greatest educational experiment of the 20th Century. During this period, the United States became the best-educated country in the world.

Times have changed. According to the Organization of Economic Cooperation and Development (OECD, 2008), the United States ranked sixth among developed nations in the percentage of adults aged 25 to 64 years with an associate's degree or higher. Although the United States ranked fourth among developed countries in the postsecondary degree achievements of 55 to 64 year old adults, our position rank slips to 12th when we look at the academic productivity of 25-to 34-year olds. Moreover the OECD analyses revealed that the United States ranked near the bottom of industrialized nations in the percentage of students entering college who completed a degree program (National Center for Higher Education Management Systems [NCHEMS], 2007; Jobs for the Future 2007). The implications, as noted by the Commission on Access, Admissions, and Success in Higher Education, are historic: "we face the prospect that the educational level of one generation of Americans will not exceed, will not equal, perhaps will not even approach, the level of its parents" (College Board, 2008b, p. 5).

The uneven productivity of college degrees and credentials comes at a time when the need for highly skilled workers is growing. According to Jobs of the Future (2007), by 2025, the United States must produce 25.1 percent more AA degree-holders and 19.6 percent BA degree-holders, over and above current production levels, to meet our nation's workforce needs. Moreover, to effectively address this degree gap, our nation must increase the number of degrees earned by individuals coming from groups who have been traditionally underrepresented in higher education, including American Indian, African American, Hispanic, low income, and first- generation students (Jobs for the Future, 2007, NCHEMS, 2007). This disparity in higher education degree productivity for individuals from some underserved groups has been difficult to ameliorate, yet doing so is essential to meet this nation's need for a better educated population.

Anyone remotely associated with the educational enterprise in the country will not be surprised to hear that our country's educational productivity is being eclipsed by other industrial nations. What may be genuine news, however, is the extent to which this issue has galvanized the business, policy-making, and philanthropic communities. The US Chamber of Commerce and the Business Roundtable have highlighted the essential role that higher education must play in strengthening the American economy (US Chamber of Commerce, 2010; Business Roundtable, 2010). The Lumina Foundation has challenged the nation to increase the proportion of Americans who possess high-quality degrees or credentials from 39 percent to 60 percent by 2025 (Lumina Foundation, 2008, 2009). And in 2008, the Commission on Access, Admissions, and Success in Higher Education recommended that "by the year 2025, fully 55 percent of young Americans [should] complete schooling with a community college degree or higher" (College Board, 2008b, p. 5).

Still, the most ambitious challenge has come from the federal government. During his 2009 State of the Union address, President Barack Obama challenged every American "to commit to at least one year or more of higher education or career training" and pledged this nation to have the highest proportion of college graduates in the world by 2020-fully five years before the Lumina and College Board proposals. NCHEMS subsequently estimated that to meet this goal the United States must produce an additional 8.2 million postsecondary degreeholders by 2020 (Carnevale, Smith, and Strohl, 2010). Not since the passage of the GI Bill has an administration placed such an emphasis on higher education and pledged the support to provide opportunity to a greater number of students (Berube, Goldrick-Rab, Rouse, Jones, Mellow, and Dawson, 2009).

Spotlight on Community Colleges and Transfer

In the midst of this national hand-wringing over educational productivity, the American community college-and the transfer process that forms a major component of its mission-has been placed in an unprecedented spotlight. Only two years ago, the National Commission on Community Colleges lamented, "Despite a 100-year record of success and productivity, community colleges are largely overlooked in national discussions about education" (College Board, 2008a, p. 16). Not anymore. President Obama has appointed a number of community college leaders to serve in key positions within the U.S. Department of Education. Moreover in the past 24 months, a slew of reports have been issued emphasizing the promise of community colleges in addressing the need for more degree holders, including publications from the Brookings Institute (Rab-Goldrick, Harris, Mazzeo, and Kienzl, 2009), The College Board (2008a), Center for American Progress (McIntosh and Rouse, 2009), Jobs for the Future (2008), and the New Democratic Leadership Council (Milano, Reed, and Weinstein, 2009).

The reason for community colleges' "sudden" popularity is the result of a unique confluence of events that have focused attention more keenly on two-year institutions. First, as I described above, our nation is buffeted by the increased educational productivity of other industrialized nations. As amplified in bestselling books, such as Thomas Friedman's *The World is Flat* (2005) and Fareed Zakaria's *The Post American World* (2008), international comparisons reveal not so much the weaknesses of the American education system but rather the rapid progress of other nations in educating their youth. At home and abroad, education remains the driver of economic prosperity and healthy democracies. In the United States, community colleges are central to both of these goals – and have been for decades.

A second reason for the current national interest in community colleges is the impact of the most severe recession in our nation's history. Since 2007, when the recession "officially" began, major banks collapsed, the mortgages of thousands of Americans were in foreclosure, and the stock market was in free-fall. Unlike previous recessions, however, there seems to be a collective understanding that this downturn is different. This is true not only because of the recession's scale, but also because of its dramatic reshaping of the American economy; a capstone of a transformation that began more than six decades ago as the nation shifted to a predominantly service-oriented economy (Milano, Reed, and Weinstein, 2009). As part of this transformation, many unskilled jobs have been "off-shored" or eliminated entirely, while the demand for skilled labor has risen significantly (nearly three quarters of this nation's Gross Domestic Product comes from service-produced economy, up from 48 percent following World War II). To gain necessary credentials, under- and un-employed workers have been flocking to community colleges. These new students are lured by what two-year institutions have to offer – geographic convenience, lowcost, and marketable certificates and degrees.

Finally, community colleges are in the spotlight because political leaders see the low overhead of community colleges as places to accommodate increasing numbers of students without raising taxes. Since the beginning of this recession, state funding for higher education has fallen from \$80.7 billion to \$75.2 (although federal stimulus funds have offset some of this loss) while enrollment growth in many states continues to rise, sometimes by as much as 10 percent (State Higher Education Executive Officers [SHEEO], 2009). A report by the Pew Research Center recorded a significant spike in higher education enrollments nationally from 2007 to 2008 and attributed nearly all of that growth to community colleges rather than four-year colleges and universities (Pew Research Center, 2009). This report also noted that most of this growth was comprised of students between the ages of 18 and 24 years. A more recent survey by the American Association of Community Colleges [AACC] estimated that community college enrollment (headcount) increased 11.4 percent from 2008 to 2009. This jump was fueled by a significant increase in the enrollment of full-time students, which increased 24 percent (AACC, 2009).

For these reasons, then, community colleges across the country are being asked to accommodate many more students - and the transfer process is especially affected. As noted in the Pew and AACC enrollment reports cited above, community college enrollment increases include a significant portion of traditional-aged students and students who attend college full-time. Both characteristics reflect the majority of students whose goal is to transfer to a four-year institution. Moreover, middle-class families, whose college funds have been battered in the recent recession, are seeking ways of leveraging their higher education resources. Such families – who in the past might not have considered a community college as a viable higher education option for their children-are giving these institutions a second look (Anderson, Alfonso, and Sun, 2006; College Board, 2008a). As a Brookings Institution study concluded, "Confronted with high tuition costs [at four-year institutions], a weak economy, and increased competition for admission to four-year colleges, students today are more likely than at any other point in history to choose to attend a community college" [emphasis added] (Goldrick-Rab, et. al. 2009, p. 10).

Transfer and the U.S. Higher Education Agenda

As the largest postsecondary segment in the United States, community colleges must play a significant role in meeting this nation's degree productivity goals. But what is the capacity of the current transfer pathway to address the nation's need for bachelor's degrees? The supply of available students has rarely been in question. Transfer has been and continues to be a popular goal for a large proportion of incoming community college students. Surveys indicate that at least 50 percent (and perhaps more) of all incoming community college students seek to transfer and earn a bachelor's degree (Provasnik and Planty, 2008). Moreover, many students intending to earn sub-baccalaureate credentials at a community college often increase their educational aspirations after starting college (Rosenbaum, Deli-Amen, and Person, 2006). Thus, the potential of the transfer pathway to contribute to the nation's college completion goals is significant.

Still, while transfer remains a popular option for students, history has shown that it is an uneven pathway to the baccalaureate. Researchers generally agree that, compared to students who begin at four-year institutions, students who begin at community colleges are less likely to earn the baccalaureate degree. As Pascarella and Terenzini (2005) conclude from their comprehensive review of the literature: "Beginning pursuit of a bachelor's degree at a two-year rather than a four-year institution reduces the chances of ultimately earning that degree by 15 to 20 percentage points, even after statistical adjustments are made for students' pre-college characteristics, including ability, socioeconomic status, and motivation" (p. 592). (See also Bowen, Chingos, and MacPherson 2009, Dougherty, 1994, Dougherty and Kienzl 2006, Lockwood, 2008, Long and Kurlaender, 2008, and Melguizo, 2009.)

Although community college students are less likely to earn a baccalaureate degree compared to their four-year institution peers, students who successfully transfer to a four-year college or university are as likely to earn the bachelor's degree as those who begin at four-year institutions. Most recently, Bowen and his colleagues (2009) report that students who transfer to a four-year institution are, in fact, likely to do better academically than "homegrown" students attending four-year institutions (see also Adelman, 2006; Melguizo and Dowd, 2009).

Thus, in the language of economists, we have both the supply of students who wish to earn the baccalaureate degree as well as a national demand to increase the number of bachelor's degree completers. The problem, then, is not supply and demand, but the machinery that links the two. To help the transfer process to work more effectively, the researchers in this issue have advanced our understanding in three pivotal areas: 1) Improving the use and analysis of data that relates to the progress and academic performance of students at the community college and the four-year institution; 2) Assessing the potential of new transfer pathways to address the need for more bachelor's degree holders in this country; and 3) Identifying the institutional characteristics at community colleges and four-year institutions that support transfer student success.

First: Improving the Use and Analysis of Transfer Data

Researchers and policymakers who study transfer are often frustrated by the lack of basic information about the number of students who transfer and earn the bachelor's degree. While the current federal data-collection protocol (IPEDS) captures a wide variety of educational outcomes, it is insufficient in describing a large portion of students who attend community colleges, such as students who attend part-time. Furthermore, there is no agreed-upon definition of a transfer student, so it is difficult to assess the effectiveness of interventions designed to improve transfer from state to state. The Lumina Foundation makes clear the link between collecting reliable and useful data and enhancing postsecondary outcomes:

Improving higher education success rates is a critical national priority, particularly in community colleges, where most low income, first generation students begin higher education. However, making such improvements will be impossible without better data. In most states it is difficult or impossible to calculate accurate graduation rates, track student flows from K-12 education into higher education or from higher education into the workforce, determine the relationship between spending and results, or say anything at all about what students are learning in postsecondary education. In today's environment, this situation is intolerable (Lumina 2009, p. 5).

Given that the federal government is unlikely to authorize the development of a national unit record system to track the educational progress of students (indeed, it outlawed the very idea in 2008), the burden will be placed on states to account for the progress of their transfer students (SHHEO, 2010). Craig Hayward in this issue has made good use of readily available data in California that may serve as a model for other states. Hayward describes the progress of California's Transfer Velocity Project, whose aim is to use existing data sources to tackle the formidable problem of identifying a pool of students likely to transfer and earn a B.A. degree. Unlike high school cohorts that begin and end at roughly the same time, transfer cohorts are notoriously difficult to capture. Some students begin community college directly from high school, but many do not. Some students complete two years of community college coursework before transferring, but many others take three or more years to complete a transfer program. Complicating matters further, many students do not pursue a transfer goal until later in their community college careers, having enrolled initially for a certificate or associate's degree. The variability in student intentions, course-taking behavior, and enrollment intensity (e.g., part-time enrollment) has bedeviled researchers who seek to study the transfer process.

Hayward, in partnership with colleagues at the California Community College Chancellor's Office, uses a definition of a transfer student developed by Bahr, Hom, and Perry (2005) that incorporates both student intentions and behavior. Students included in the transfer cohort must have completed at least 12 credits and enrolled in at least one transfer-level math course and one transferlevel English course within six years of initial enrollment. While some critics may argue that this definition is too restrictive, it nevertheless allows researchers to analyze the academic behavior of students likely to transfer compared to students whose intentions and behaviors indicate other education goals; in effect, to isolate variables having a direct bearing on transfer behavior. Hayward's research reveals how relationships among students' educational goals, course-taking behavior, and enrollment commitment (full-time/part-time) support or detract from successful transfer. His findings advance previous research about the importance of specific student behaviors that promote "academic momentum" (Adelman, 1999, 2006; Moore, Shulock, and Offenstein, 2009; Shulock, Moore, Offenstein, and Kuhn, 2008), such as completing transfer math and English courses. But this research also stakes new ground by providing support for an emerging theory about the characteristics of "high transfer" institutions, as outlined by Schiorring and Mery in this issue (described below).

Second: Analyzing New Transfer Pathways

President Obama's ambitious degree completion goals will challenge higher education's ability to find space for all of the students who need postsecondary credentials. This is especially true at community colleges, which serve the needs of the widest range of students. The articles by von Ommeren and Karandeff and Schiorring in this issue describe the potential of two relatively new transfer pathways that may increase overall higher education capacity while addressing the needs of students from non-traditional backgrounds.

Alice van Ommeren's research extends our understanding of the students who choose for-profit institutions as their transfer destination; a destination that has received scant empirical attention. Although for-profit institutions have garnered headlines recently - primarily around their recruiting strategies and the degree of student loan debt that their students incur-van Ommeren's findings shift our focus to the students who are attracted to these institutions and how they differ from students who select more traditional transfer destinations. She notes that there are important demographic characteristics of students who transfer to for-profit colleges, even when the influence of academic background and socio-economic factors are held constant. Van Omeeren outlines the implications of her findings for community college administrators and describes where additional research is needed. Most importantly, however, van Ommeren stresses the need for policymakers, researchers, and higher education administrators to take seriously the role of for-profit colleges in serving the needs of transfer students and to consider the trade-offs that occur when students of differing backgrounds and academic expertise choose this route to the baccalaureate.

Karandjeff and Schiorring's article also presents research focusing on a non-traditional transfer pathway that of students who initially enroll at a community college to complete a career or technical education (CTE) program. Community colleges have a long and productive history in developing CTE programs that allow students to earn certificates or associate's degrees in dozens of industryspecific fields. Karandjeff and Schiorring demonstrate the potential of advancing CTE-trained students toward the baccalaureate as a way of meeting California's workforce needs, especially in several key STEM areas, such as computer and information technology, engineering, health sciences, logistics, and nanotechnology.

Karandjeff and Schiorring's research is also valuable because it examines a long-standing divide between twoand four-year institutions concerning the value of CTE programs. For decades, community colleges have viewed their CTE programs, along with their close connections with the business community, as the sine qua non of the community college movement. For their part, however, four-year institution faculty are often reluctant to accept credits from CTE-related courses, viewing them as "too vocational" and not sufficiently academic for the bachelor's degree. Yet, in spite of these divergent world views, Karandjeff and Schiorring's findings provide evidence that CTE students represent a large and important transfer constituency - a constituency that has the potential to link, rather than divide, two and four-year institutions around the issue of transfer. Moreover, this pathway may have special value to students from underserved groups, who disproportionately enroll in CTE programs.

Third: Identifying the Institutional Characteristics of Effective "Transfer-Going" and "Transfer-Receiving" Institutions.

If transfer is to gain increasing prominence as a pathway to the bachelor's degree, there is a need for research that describes the optimal institutional conditions and structures that support student progress (Jain, Herrera, Bernal, and Solorzano, 2010; Handel and Herrera, 2006). Although considerable attention has been focused on the characteristics of high schools that support college-going (McDonough, 1999), we know comparatively little about the elements of a "transfer-going" culture at community colleges that propel students towards the baccalaureate degree. And data focusing on four-year colleges and universities as "transfer-receiving" institutions are almost non-existent. It is gratifying, then, to find two other articles in this issue that describe important elements of the twoand four-year institution academic cultures that support transfer and reveal the richness of this research strategy.

Research by Schiorring and Mery provides us with a framework to think about "transfer-going" cultures in systematic ways. Using a definition of transfer described earlier (Bahr, et. al. 2005), these researchers identified seven community colleges with higher than expected transfer rates. A research team then visited each college, interviewing a wide-range of stakeholders, including administrators, faculty, and students, in search of common elements that support transfer. This qualitative approach yielded six "transfer-promoting" factors: 1) transfer culture; 2) student-focused environment; 3) commitment to the institution; 4) strong, strategic high school relationships; 5) strong four-year college relationships; and 6) effective support services.

The value of Schiorring and Mery's research is twofold: First, they establish a foundation for the development of theory that will allow researchers to test their ideas about institutional variables that support transfer. Although the transfer process is receiving greater empirical attention, the field lacks a set of unifying principles or themes to help researchers synthesize the extant literature and guide them toward the most pressing research questions. Schiorring and Mery's conceptualization promises, at the very least, to organize our thinking around transfer and focus attention on institutional practices that serve students' educational ambitions. Such efforts, in turn, will refine Schiorring and Mery's framework (for example, how does a "robust transfer culture" differ from a "student focused environment?"), while linking it to more established theories of organizational effectiveness. (Indeed, Schiorring and Mery's conceptualization has already received some empirical support, as described in Hayward's article in this issue.) Secondly, in the absence of extensive empirical verification, Schiorring and Mery's six transfer promoting factors nonetheless provide college leaders with cues about how best to create more effective transfer colleges, perhaps serving as a catalyst for the creation of institutional strategic plans that spur the work of the entire campus community toward transfer.

Finally, the article by Mourad and Hong in this issue extends our understanding of the transfer process by analyzing the student and institutional dynamic. These researchers focused on a single, but pivotal, question: Do transfer students who earn the bachelor's degree display characteristics or behaviors that are significantly different from students who transfer but do not earn the bachelor's degree? Mourad and Hong investigated a sample of students who had transferred from a large Midwestern community college to one of several public four-year institutions. Their findings suggest that students' academic engagement – as measured by such variables as number of semesters enrolled at two- and four-year institutions, academic attainment (GPA), and credits earned-plays a role in the achievement of the bachelor's degree. Although Astin (1997), Tinto (1994) and others have come to the same conclusion, Mourad and Hong demonstrate this at a community college. Interestingly, however, their findings do not always occur in the predicted direction. For example, Mourad and Hong discovered that students who spent more than four semesters at a community college were *less* likely to earn a bachelor's degree compared to students who spent fewer than four semesters there. Moreover, Mourad and Hong report different bachelor's degree attainment rates depending on whether students transferred to a selective or regional four-year institution, an intriguing result that suggests there may be important differences among four-year institutions that influence transfer student success. These findings raise important questions about how community colleges can best prepare students for transfer and provide clues about the role of four-year institutional environments in advancing transfer students toward the bachelor's degree.

Conclusion

As you study the articles in this issue, you will discover a commitment on the part of the researchers represented here to highlight the place of transfer as a legitimate and fruitful area of research. Often overlooked by the mainstream research community that prefers to pay more attention to four-year institutions and the traditional-aged students who attend them, this issue demonstrates that the transfer process deserves greater attention. Although the findings collected here do not always point to a system in perfect working order for students or institutions, they nonetheless reveal a system poised for exceptional educational productivity — assuming we continue to give this process the empirical scrutiny it deserves. It seems a reasonable prediction that in light of the international educational challenges facing the United States, which, in turn, compel us to close the persistent academic achievement gap, an efficient transfer pathway to the baccalaureate will take center stage in a reenergized American higher education system.

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