

2007

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Citation

Leigh, Duane E., and Andrew M. Gill. 2007. "How Responsive are Community Colleges to Local Needs?" *Employment Research* 14(4): 4–6. [https://doi.org/10.17848/1075-8445.14\(4\)-3](https://doi.org/10.17848/1075-8445.14(4)-3)

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How Responsive are Community Colleges to Local Needs?

This article provides an overview of some of the main findings in the authors' new book, Do Community Colleges Respond to Local Needs? Evidence from California, which is available now from the Upjohn Institute. Visit www.upjohninstitute.org to read the first chapter, and see p. 6 for details on how to order the book.

Do community colleges respond to local needs? At first glance, an affirmative answer to this question seems obvious. Of course community colleges respond to local needs—after all, community colleges are community-based institutions. Upon reflection, however, the answer is not so apparent, especially when one considers the multiplicity of community colleges' missions and the variety of stakeholders they serve. In addition to the traditional missions of supplying introductory college courses to transfer-oriented students and providing occupational training, the missions of today's community colleges include adult basic education and workforce development. Adult basic education provides a foundation of basic math, reading, and language skills on which students can proceed to college-level courses. In their workforce development role, community colleges supply training programs designed to assist their communities in retaining existing employers and attracting new ones.

The primary stakeholders of a community college are students, local employers, and local government officials. The broadening of community college missions to include workforce development has meant an expanded role for the local business community and government officials in curriculum development. This broadening of missions has also been accompanied by greater diversity within community colleges' student bodies. While

community colleges have historically served "traditional" students—that is, 18–22-year-olds attending college full time—they increasingly serve a variety of "nontraditional" students enrolled part time while they combine employment with school. Nontraditional students include adults returning to school to sharpen their skills or earn a college degree, dislocated workers and displaced homemakers seeking retraining, single mothers making the welfare-to-work transition, high school dropouts taking advantage of a "second chance" to join the mainstream labor force, and immigrants seeking to improve their language skills and obtain occupational training required for better-paying jobs.

Most studies examining community college responsiveness proceed by visiting selected campuses and conducting focus group interviews with students, faculty and administrators, and representatives of the local business community. While this research strategy often yields interesting examples of linkages between college programs and the needs of local residents and employers, it may be difficult to generalize these insights. The objective in our research is to move beyond site visits at particular campuses to examine responsiveness using a comprehensive dataset that includes data supplied by all campuses in a statewide system. For several reasons, including the diversity of the state's population and the size of its economy, we choose to study the campuses in the California Community College System (CCCS). Our dataset includes information on all first-time freshmen (FTF) students who enrolled in 1996 in any 1 of 106 CCCS campuses.

To examine community college responsiveness, one must ask what services does a responsive community college provide and to whom? To answer

these questions, we build on a definition laid out in the recent U.S. Department of Education (DoED) Community College Labor Market Responsiveness Initiative. Focusing on labor market responsiveness, the DoED definition emphasizes that a responsive community college delivers programs that are consistent with and seek to anticipate the changing dynamics of the labor market it serves, where dynamic labor markets are generated by change on both the demand side and the supply side (MacAllum, Yoder, and Poliakoff 2004).

We attempt to implement this definition empirically by considering community colleges' responsiveness to major sources of change on both sides of the labor market. On the demand side, we ask whether community colleges respond to continually fluctuating demand conditions by providing occupation training programs that produce skills marketable in the local economy. On the supply side, we argue that the main source of change is a massive shift in the number and national origin of immigrants. Hence, the question we address is whether community colleges are successfully meeting the education and training needs of current and recent generations of immigrants.

Responsiveness to the Needs of Immigrants

High percentages of California community college students are of either Latino or Asian descent, and Table 1 documents that Latino students lag behind whites in terms of the three community college outcome variables we study, measured during a six-year window beginning in 1996. In contrast, Asian students typically perform better than whites. Our analysis indicates that factors important in explaining Latino-white gaps include a lower high school graduation rate (both U.S. and foreign), lower community college course loads, less initial interest in transferring to a four-year college, and poorer academic performance while attending college. We are less successful in using these student-level variables to explain the superior performance of Asians.

Table 1 Descriptive Statistics for Community College Outcome Variables by Broad Race or Ethnicity Categories and Gender

Outcome variable	Latinos	Whites	Blacks	Asians
Males				
Transfer (%)	7.4	14.9	9.5	25.4
A.A. degree (%)	5.7	8.1	5.2	10.7
Total credits earned	21.8	24.9	17.3	35.6
Number of students	42,070	63,551	14,482	21,957
Females				
Transfer (%)	9.0	16.3	8.9	27.7
A.A. degree (%)	9.6	11.8	6.6	15.8
Total credits earned	27.2	28.1	20.0	38.0
Number of students	45,962	65,668	16,563	22,231

To extend these results, we first concentrate on the academic performance of first-generation immigrants. Recent Asian immigrants are found to perform much better on our outcome measures than other first-generation immigrant students. Indeed, we find for Asians that there is little difference in the superior outcomes observed, in comparison to white immigrants, for first-generation immigrants and for other Asians. On the other hand, first-generation Latino immigrants do less well than other first-generation immigrants and other Latinos.

Moving from the individual student level to the college level, a second extension of our basic results asks whether particular campuses are especially effective, or especially ineffective, in promoting the academic success of their Latino and Asian students. Measured across colleges, we present evidence that a concentration, or "clustering," of Latino students decreases the transfer rate of Latinos after adjusting for differences in student characteristics. At the same time, a clustering of Asian students appears to increase the transfer rate of Asians.

One of the advantages of our FTF dataset is the detailed breakdown by ethnicity available for Latino and Asian students. We exploit this advantage in a third extension of our basic results. Among Latinos, we report only small differences in outcome variables between Central American and South American students and Mexican students despite the fact that a much lower percentage of Mexicans are first-generation immigrants. Our student-specific explanatory

variables are sufficient to explain most of the Latino-white gaps in outcome variables for each of the three categories of Latinos. On the other hand, variation in outcome variables for the eight categories of Asians we can distinguish is much larger, as is variation in our success in explaining observed Asian-white gaps. We are able to substantially explain observed gaps in outcome variables for Cambodian, Filipino, Japanese, and Laotian students, while we are less successful—particularly for transfer rates—for Chinese, Indian, Korean, and Vietnamese students.

Responsiveness to the Needs of Local Employers

To measure responsiveness to the needs of local employers, we compare the quality of matches between the occupational distribution of completed credits supplied by community colleges to the occupational distribution of projected new jobs in counties in which colleges are located. We are able to pursue this matching strategy because both occupational labor demand projections and community college credits completed are classified by the same Taxonomy of Programs (TOP) classification system. Match quality is captured by a measure of responsiveness (R) that compares the occupational distribution of credits supplied with occupational demand projections. R scores range from 100 percent, indicating a perfect match between labor demand and supply across all fields of study, to 0, indicating the unlikely scenario of

all students receiving training in fields for which there is zero projected labor demand.

Not surprisingly, we find that community colleges differ considerably in terms of our measure of responsiveness. The maximum R score is 81.7 percent, indicating a highly responsive college, while the minimum is 32.4 percent. It is interesting to note that some of the colleges with the highest R scores are also those found to enroll large proportions of Asian students.

To better understand the variation in calculated R scores, we investigate intercollege differences in the external constraint measures identified by Jacobson et al. (2005) as being important in characterizing labor market-responsive colleges. Consistent with their analysis, more responsive colleges tend to have larger student enrollments, more local funding, higher per student revenue, and a suburban location. The predictive ability of our statistical model is, however, quite modest, suggesting important roles for such unmeasured factors as college leadership, organizational structure, and culture.

Since California community colleges are organized into districts, we also examine responsiveness at the district level. Most rural communities are served by a single college that comprises its own district. In urban areas, districts often include more than one campus. Our analysis carried out at the district level continues to find a positive effect of local revenue share on labor market responsiveness. But our most important result is that, holding constant the effects of external constraint variables, multicampus community college districts are more labor market responsive than single-campus districts. We find that even colleges that, by themselves, would appear to rank low in terms of labor market responsiveness are frequently combined in districts in which member colleges as a group are much more responsive.

Concluding Thoughts

Our examination of the experience in California community colleges of current and recent generations of immigrants

points to some dramatic successes and some disturbing instances of lack of success. Asian students, especially first-generation Asian immigrants, generally do very well. We are unable to satisfactorily explain the success of Asian immigrants with such student-level measures as academic background and financial need and find, holding constant the effects of these measures, a substantial positive effect of the “clustering” of Asian students. We associate this effect with a commitment to the U.S. labor market and a culture that emphasizes the importance of education. The most disturbing lack of success is found for Latino immigrants. While much of this lack of success can be explained by inadequate academic preparation and financial need, we also find a negative effect for the clustering of Latino students. These contrasting effects of our clustering variable for Asians and Latinos suggest the need for mentoring, counseling, and peer support programs targeted specifically to Latino students. We provide some general guidelines for the design of such programs and note that a comprehensive review of existing community college programs should be a research priority.

In terms of assessing community colleges’ performance in meeting the needs of local employers, we introduce a novel methodology that assesses the quality of matches between the occupational distribution of credits supplied by colleges and the occupational distribution of projected new jobs in the local area. Our finding that community colleges differ substantially in responsiveness is probably to be

expected. Less expected is the result that, at least for some multicampus districts, member colleges seem to specialize in their occupational training programs, and, further, that these specializations are complementary within districts. This result suggests that district affiliation should be taken into account in evaluating the performance of individual campuses. We also raise the possibility that our methodology might lead to more evidence on the success of community colleges in providing occupational training for particular categories of students—say, first-generation Latino and Asian immigrants—that is a good fit to job opportunities in the local labor market.

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