IMPACT OF GUEST WORKER VISAS ON HISPANIC STEM WORKERS

Hispanic computer professionals are struggling to maintain their already small foothold in computer-related occupations. Labor market trends are difficult to predict, but both the number and proportion of science, technology, engineering, and mathematics (STEM) jobs are expected to grow faster than average for all occupations from 2010 to 2020. Many of these jobs should be held by Hispanics as they are a relatively young population and are expected to make up half of the labor force growth between 2005 and 2020. Yet Hispanics are struggling to enter computer-related occupations dominated by temporary guest workers.

Overview of Hispanic Professional Employment

Between 2003 and 2012 Hispanics increased their density in professional and related occupations by two percent (from 6.2 to 8.2 percent), that’s approximately 840,000 new Hispanic professionals. Among architecture and engineering occupations, Hispanics increased their density by 2.2 percent (from 5.2 to 7.4 percent) even though there were only 119,000 jobs added over the 10-year period. From 2003 to 2012:

- Hispanic density in business and financial operations occupations grew by 1.8 percent (from 6.2 to 8 percent);
- Among legal occupations, Hispanics increased their density by 1.4 percent (from 6 to 7.4 percent);
- Among health care practitioner and technical occupations, Hispanics increased their density by 2.4 percent (4.9 to 7.3 percent);
- Among life, physical, and social science occupations, Hispanics saw a 0.8 percent increase (from 5.9 to 6.7 percent) despite an overall decline in employment in the sector; and
- Among computer and mathematics occupations, Hispanics increased their density by just 0.6 percent (from 5.5 to 6.1 percent) despite the addition of nearly 700,000 new computer and math jobs.

Slow Growth among Hispanics in Computer Occupations

STEM jobs include professionals employed in accounting and auditing occupations, computer and mathematical occupations, architecture and engineering occupations, and life, physical, and social science occupations. Together, in 2012, these occupations employed 9.74 million workers, of which, just 6.7 percent were Hispanic (652,000 workers).

- From 2003 to 2012, Hispanics increased their density in computer and mathematical occupations by just 0.6 percent. At the same time, Asians increased their density by 4.6 percent. African American density decreased by 0.7 percent.
• Examining specific occupations shows that employment density of Hispanics working as computer scientists and systems analysts declined by 0.3 percent from 2003 to 2010, although total employment among those occupations grew by 8.6 percent.* Asians increased their density by 4.1 percent.

• Among computer programmers, Hispanics increased their density by just 0.2 percent from 2003 to 2012. Asians increased their density by 5.8 percent.5

From 2003 to 2012, Hispanic employment in computer and mathematical occupations increased by just 61,000 jobs even though nearly 700,000 jobs were added.6 While Hispanics struggled to increase their density in computer-related occupations from 2003 to 2012, over 450,000 H-1B guest worker visas were issued to employers to hire guest workers in computer-related occupations.7 The vast majority of these H-1B visas were issued for guest workers in systems analysis and computer programming, precisely the occupations that have seen Hispanics struggle to increase their density.

The Education Pipeline
Hispanics earn more computer-related degrees than Asians, yet Asians have far outpaced Hispanics in computer-related employment.

• In 2010, 3,124 Bachelor’s degrees were awarded to Hispanics in computer science, 109 more than Asians.
• In 2010, Hispanic students earned 3,337 Associate’s degrees in computer sciences, 1,816 more than Asians.
• Also in 2010, Hispanic students earned 651 Master’s degrees in computer sciences, 819 fewer than Asians.8

Unemployment
• In December 2012, of the nearly 19,000 Hispanic computer systems analysts, 14.5 percent were unemployed.
• In December 2012, of the nearly 28,000 Hispanic network and computer systems administrators, 10 percent were unemployed.9
• In December 2012, of the nearly 12,500 computer network architects, 24 percent were unemployed.
• Overall, in December 2012, among all computer-related occupations, Hispanics had a 5.4 percent unemployment rate.10

Conclusion
With so many Hispanics entering the workforce every year, we must ensure their access to high-skilled jobs. This is simply not happening in computer-related occupations that are dominated by temporary labor, mostly from India and China.

Increasing the number of H-1B visas available to employers will continue to hold the Hispanic high-tech workforce back. Unfortunately, legislation has been proposed that would do

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* In 2011, the Bureau of Labor Statistics reclassified this occupation and it is now “computer systems analysts.”
just that. Senators Hatch and Klobuchar are proposing the Immigration Innovation (I²) Act of 2013 (S.169), which would greatly increase the number of H-1B visas and provide no protection for our domestic workforce.

Hispanic high-tech professionals would benefit from comprehensive immigration reform. But comprehensive immigration reform must include the creation of an independent commission that would assess and manage future labor flows based on labor market shortages that are determined on the basis of actual need.¹¹ Managing future immigration flows based on labor market shortages would increase the number of Hispanics in high-tech jobs.

³ Ibid.
⁶ Ibid.

For more information on professional and technical workers, check DPE’s website: www.dpeaflcio.org.

The Department for Professional Employees, AFL-CIO (DPE) comprises 21 AFL-CIO unions representing over four million people working in professional and technical occupations. DPE-affiliated unions represent: teachers, college professors, and school administrators; library workers; nurses, doctors, and other health care professionals; engineers, scientists, and IT workers; journalists and writers, broadcast technicians and communications specialists; performing and visual artists; professional athletes; professional firefighters; psychologists, social workers, and many others. DPE was chartered by the AFL-CIO in 1977 in recognition of the rapidly growing professional and technical occupations.

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