The Loophole in Affirmative Action Hiring of Engineering Faculty

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Introduction

Over the past twenty years engineering administrators have come under increasing pressure, due to affirmative action, to hire minority and women faculty. This has posed a problem due to the very small pool of minority and women Ph.D. graduates in engineering across the country. One solution to this problem that has been implemented is to augment the hiring pool with foreign-born minorities holding (or nearly holding) permanent residence status. Though at first glance this seems a tenable solution, in fact, it cuts at the very heart of the rationale many of us use to justify affirmative action programs. With the current growing political opposition to affirmative action and the real possibility of the dismemberment of affirmative action programs, any approach that seems to weaken the justification for affirmative action can be and probably will be used in promoting its demise. I believe that such is the case presented by utilizing the foreign born as affirmative action candidates.

This paper continues with a brief discussion as to the reasons behind affirmative action, and presents a primary rationale for affirmative action. Evolving from this rationale is the argument that those who benefit from affirmative action should have a historical tie to the group that was originally disadvantaged. Data is then presented that shows a large fraction of affirmative action engineering faculty in the Big 10 are foreign born. Some anecdotal observations are provided that further emphasize the problem. Final remarks concerning the situation conclude this paper.

Why Affirmative Action?

It would be presumptuous to try to address the above question in all of its complexity. This question is addressed from the personal perspective of one who has struggled with the concept of affirmative action during his academic career. Those of us who have supported affirmative action must also be supportive of equal opportunity. However, there is a real conundrum between affirmative action and equal opportunity. The primary thrust of equal opportunity is to make decisions concerning people based upon their abilities, talents, and achievements and not based upon color, ethnic heritage, or gender. That is, to be non-discriminatory. In affirmative action we do give preference to individuals because of their color, ethnic heritage, or gender. This appears to be in direct conflict with the efforts to achieve a non-discrimatory society in this country and certainly is contradictory to the basic premise of equal opportunity. Realizing that the university must be at the leading edge of promoting and establishing affirmative action, many of us, especially those who are more conservative by nature or upbringing, have had to develop rationalizations to justify affirmative action in the face of this contradiction with equal opportunity.

This paper considers three of the rationales supporting affirmative action. First, we focus on the rationale that affirmative action serves to redress past wrongs of discrimination against various racial, ethnic, and gender groups. Then clearly, the beneficiaries of affirmative action should have a historical tie to this historical discrimination. The hiring of foreign nationals flies in the face of this assertion. Second, it is desirable to have a diverse faculty in engineering education. I believe that the future of engineering education is very tied to the participation from all segments of the population. Engineering education is strengthened by a diverse faculty, that includes individuals from around the globe. Third, women and minority engineering faculty can serve as role models for attracting woman and minorities in to the engineering profession. An African-American student once commented to me how "it would be awesome to have a brother as the professor for a class". On the other hand our own college's affirmative action officer has stated that she believes anyone can serve as a role model for women and minorities, whether or not they share the same gender or ethnic, racial heritage.

From my own perspective it is the first rationale that provides the strongest argument in support of affirmative action. It is also this rationale that is most inconsistent with counting the foreign born as affirmative action faculty. I first become aware of this situation in reviewing the human resources report for the college, while a member of the college's affirmative action committee. This report stated that my own department was fully utilized in three of the four affirmative action categories (we were underutilized in Native Americans) with appropriate kudos for our excellent record. But then I recognized that the three individuals in the count were all foreign nationals, which lead to the discrepancy between our department's stellar affirmative action record and my own rationale for supporting affirmative action. Over the years I have observed a continuation of this strategy, and find it most interesting that many faculty and administrators do not view this as an issue or problem. Of course, a consequence of this strategy has been a significant lessening of the pressure to expand the pool of woman and minorities in graduate school that are potential faculty.

Faculty Data Analysis

To really address this problem it is essential to have some data that indicate the extent of the use of foreign faculty in affirmative action counts. The author is unaware of such data being readily available, so that this data collection was undertaken by the author. The four traditional engineering programs, Chemical, Electrical, Mechanical, and Civil, were surveyed for the ten engineering colleges in the Big 10. Data was collected by visiting the web site of each department. Faculty photographs and names were used to identify women, blacks, and Hispanics on the department's faculty. To determine the nationality of the woman or minority faculty member, the location of the members B.S. granting institution was used. That is, a woman who received her bachelor's degree from the National Technical University of Athens would be identified as foreign born. Clearly, this approach is not without pitfalls. Americans do receive undergraduate degrees from overseas, and the foreign born receive undergraduate degrees from American universities. However, I believe that this approach will provide numbers that are close to the actual situation. Also, where there was any doubt concerning the nationality, such as no undergraduate institution being listed, the faculty member was considered to be an American. Another flaw in this approach is that Hispanic faculty were exclusively identified by surname, which is not always an indication of Hispanic heritage. Certainly, the approach of using the

faculty member's B.S. granting institution to classify their nationality, ignores the possibility of the faculty member being a naturalized citizen. I would argue that naturalized citizens do not have an historical tie to the groups for which affirmative action is argued as a redress for past dissemination, and they should not be included in the affirmative action count.

In Table 1 the percentage of women and minority faculty, including those classified as foreign faculty, for the four traditional engineering programs in the Big 10 is provided. Immediately, we see that the program data is fairly consistent with national trends in engineering faculties. That is, Chemical Engineering has the best record in faculty diversity, followed closely by Civil Engineering, with Mechanical Engineering and Electrical Engineering trailing far behind. This consistency gives us some reason to feel that our data has some validity. The African-American and Hispanic percentages are somewhat disappointing. However, when one considers that there is not a large Hispanic population in the geographical area of the Big 10, the data for Hispanic faculty is actually quite promising. Similarly, with only about 15%-20% of woman in engineering undergraduate programs, that data for women can be viewed as positive.

Table 1. Percentage of Women and Minority Engineering Faculty in the Big 10

Department:	Mechanical	Chemical	Electrical	Civil	All
African-American	1.0%	3.1%	1.3%	0.3%	1.2%
Women	5.8%	10.7%	6.7%	11.1%	8.0%
Hispanic	1.0%	2.0%	1.3%	3.8%	1.9%

Table 2 shows the percentage of women and minority faculty that were determined by the data analysis to be foreign faculty. It is significant that a quarter of African-American faculty are foreign faculty, one third of woman faculty are foreign faculty, and nearly all of the Hispanic faculty are foreign faculty. Table 3 shows an adjusted percentage for women and minority faculty, where the foreign faculty have not been included in the count. Comparing to Table 1, it is clear that much less progress has been made through affirmative action programs than would be reported in a typical Big 10 human resource analysis.

Table 2. Percentage of Women and Minority Faculty Classified as Foreign Faculty

Department:	Mechanical	Chemical	Electrical	Civil	All
African-American	25%	17%	33%	0.%	24%
Women	33%	14%	34%	34%	30%
Hispanic	100%	100%	83%	100%	96%

Table 3. Percentage of Women and Minority Faculty Excluding Foreign Faculty

Department:	Mechanical	Chemical	Electrical	Civil	All
African-American	0.7%	2.6%	0.8%	0.3%	0.9%
Women	3.9%	9.2%	4.4%	7.3%	5.6%
Hispanic	0%	0%	0.2%	0%	0.1%

Anecdotal Observations

Some of the problems associated with this strategy include the appropriateness of foreign-national minorities and women serving as role models for minority and women students. At a college affirmative action committee meeting several years ago, an African-American student questioned this strategy of hiring the foreign born as affirmative action faculty with his comment that he could not imagine what an man from Africa would know about growing up in the hood. Several other African-American students at the meeting concurred. A Hispanic student at this meeting also observed that growing up in Latin America is a very different experience than growing up in the American barrio. In the years since this meeting I have heard these type of comments consistently from our African-American and Hispanic students. Just recently I overheard a woman student that had just looked at a display case with faculty pictures that the department had only one woman and (said with some disdain) she was from China.

Also, by boosting the affirmative action personnel counts through their use of foreign nationals, administrators have relieved much of the pressure upon themselves to address the shortage of minority and women faculty in engineering that would be best handled by increased efforts in recruiting minorities and women into engineering doctoral programs. Several years ago a department chairperson confided in me that the Dean had told him that his merit pay raise for the year was smaller due to his inability to hire a black faculty member. During that year, this chairperson had shown considerable initiative in starting a program that would nurture the department's best minority undergraduate students to go on to graduate school and eventually academic careers. It was anticipated that the department could home grow its future minority faculty. During the next year, following the Dean's statement, the chairperson identified and hired an African for a faculty position in the department. During the same year the program initiated the previous year ended.

Final Remarks

The argument in this paper should in no way be viewed as a xenophobic attack on foreign born faculty. The argument does not deal with whether American universities should have foreign born faculty, but rather should the foreign born be able to reap the benefits of affirmative action. I believe that the American higher education system, especially in engineering and the sciences, has benefited greatly from the presence of international faculty. It is clear that the global nature of the world's economy requires that the sons and daughters of America have an internationalism in their higher education, which can be effectively accomplished through the presence of and interaction with international faculty.

Besides providing a false sense of progress in affirmative action by hiring the foreign-born into affirmative action positions, a result of this strategy has been the decrease in efforts to nurture and attract women and minorities in to engineering graduate programs and, eventually, into engineering academic careers. Since legally, permanent residents are entitled to the same affirmative action opportunities as citizens, the only real way to close this loophole is to raise the awareness of the academic community and to ask administrators not to use this loophole from a moral and ethical standing. I hope that this paper can contribute to raising this awareness.

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