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Cover Photo: Westcott Building at Florida State University; Constructed in 1910 as the Administration Building for the Florida State College of Women, and renamed in 1936 as the James D. Westcott Memorial Building in honor of the Florida jurist who bequeathed his entire estate to the Florida State College in 1887, the Westcott Building serves as the architectural centerpiece of the Florida State University campus and houses the university's central administrative offices, including the Offices of the President and Provost.

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A Profile of and Generational Change in the Leadership of American Research-Intensive Universities

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American research-intensive universities are among the most prestigious and influential in the world. Their presidents and provosts rightly cite the work of professors, researchers and students as the element that makes their universities what they are.

But it also makes a difference who holds leadership roles in such universities, so who they are and where they hail from and are educated are matters of importance. Moreover, comparing characteristics of presidents over time makes possible an assessment of the extent to which change has taken place and provides a basis for more informed speculation about what future change might take place in the profile of institutional leadership of these organizations.

Here, I examine the current 60 American institutional members of the Association of American Universities (AAU; www.aau.edu; Table 1) across a small set of personal/demographic and professional characteristics of their presidents one generation apart, 1992 and 2017. AAU has long been the "gold standard" of American universities, and as such, their leadership merits attention.

In addition, the same characteristics are considered for the current provosts of the same universities. The inclusion of provosts was prompted by the extent to which analysis indicates that that position became the launching point in the professional advancement journey of nearly half of the current group of presidents (but not so in the 1992 cohort) and, again, invites speculation as to the degree of change that might be expected in the near future.

Two further notes pertaining to the universities used in this analysis are in order. First, some of the universities included here were not members of AAU in 1992. However, those not members in 1992 were well on the way to becoming the research-intensive institutions required for AAU membership and are therefore included for 1992 and 2017.

A second note is one of caution related to the small number of American universities considered here. AAU membership criteria are quite stringent (see https://www.aau.edu/who-we-are/membership-policy) and omit many institutions in which research is nevertheless a priority. A more comprehensive survey of 840 American university presidents is available in Selingo, Chheng and Clark (2017). But for the purpose of taking a "snapshot" of leadership in research-intensive universities, AAU membership is representative of that particular institutional type.

The Data Analyzed

The data used here are straightforward for the most part and include gender, race. foreign-born and foreign-educated, positions held, and principal discipline or profession of the president and the provost. The data were drawn from institutional websites and are generally quite reliable.

Table 1 – American-Member Institutions of the Association of American Universities

Boston University Brandeis University

Brown University California Institute of Technology
Carnegie Mellon University Case Western Reserve University

Columbia University

Duke University

Georgia Institute of Technology

Indiana University

Cornell University

Emory University

Harvard University

Iowa State University

Johns Hopkins University Massachusetts Institute of Technology

Michigan State University
Northwestern University
Pennsylvania State University
Purdue University
Rutgers University
Stony Brook University
Tulane University
New York University
Princeton University
Rice University
Stanford University
Texas A&M University
University of Arizona

University at Buffalo University of California, Berkeley University of California, Davis University of California, Irvine

University of California, Santa Barbara
University of Colorado, Boulder
University of Illinois
University of Illinois
University of Illinois
University of Minnesota

University of Missouri University of North Carolina, Chapel Hill

University of Oregon
University of Pennsylvania
University of Pittsburgh
University of Southern California
University of Virginia
University of Wisconsin
University of Wisconsin
University of Washington
University of Washington
Vanderbilt University
Yale University

Foreign-born is an unambiguous attribute and to a lesser extent so is foreign-educated, this latter defined here as undergraduate or graduate enrollment in a country outside the United States. It does not include post-doctoral studies or research abroad or subsequent involvement in international higher education or affairs. These universities were and are all actively engaged in a variety of programs and relationships with entities of numerous types located around the world.

Moreover, many of the 1992 cohort of presidents are described as children of immigrant parents and often were first-time college attendees in their families from homes in which mothers and fathers spoke in native tongues, not English. They thus represent and reflect the American experience of the past century, especially its latter third.

With very few exceptions, the administrative and other positions held by the presidents and provosts were generic academic titles comparable across the institutions and to other research-intensive universities.

The academic specialization of the presidents and provosts was determined by the terminal degree. As is discussed below, the number of fields of specialization has increased and many

senior administrators hold faculty appointments in multiple departments. In the latter cases, the discipline/professional field that corresponded with that of the terminal degree is used here.

While the age of presidents and provosts was not examined in this analysis, three cases raise the interesting scenario of "senior" persons serving in those roles well beyond what has usually been seen as customary retirement in the mid- to late-60s. Henry Yang, Chancellor of the University of California, Santa Barbara, is age 77. Dr. Yang's fellow chancellor at Berkeley until very recently, Carol Christ, accepted appointment at age 73 after serving as the interim provost there. Wallace Loh, President of the University of Maryland is, by comparison, a mere stripling at age 71. For the persons who become provosts and presidents in the near future, longer life expectancies for their generation as well as improvements in overall health may well raise the age at which they assume posts and the length of their tenure in those posts.

Analysis

Notwithstanding the limitations of a small number of universities, some generational change is apparent from analysis of the data. But the primary result from analysis indicated in Table 2 is that the presidency of AAU universities was and remains the domain of white males. Indeed, the 20 percent of women who are AAU presidents or chancellors at present is actually lower than the

Table 2 – Demographic Attributes

	Presidents	Presidents	Provosts
	<u>1992</u>	<u>2017</u>	<u>2017</u>
Female	5% (3)	20% (12)	37% (22)
LBGTQ	(0)	(0)	2% (1)
Male	95% (57)	80% (48)	61% (37)
African-American	(0)	5% (3)	7% (4)
Foreign-born or <u>-educated</u>	18% (11)	23% (14)	22% (13)
Australia		2%(1)	
Canada	2% (1)	3% (2)	
China	2% (1)	3% (2)	
Cuba		2% (1)	
Cyprus		2% (1)	
Germany	5% (3)		
India		3% (2)	5% (3)
Iran	3% (2)	2% (1)	
Netherlands		2% (1)	
New Zealand			2% (1)
Norway	2% (1)		
South Africa			2% (1)
Sweden	2% (1)		
United Kingdom	3% (2)	3% (2)	13% (8)
Venezuela		2% (1)	

30 percent of current female presidents of all American postsecondary institutions (American Council of Education, 2017). Moreover, recent changes in AAU presidencies announced or

taking place since this analysis was performed during late 2017 do not change the percentage of presidents who are women. Women made gains over the generation analyzed here, but they remain under-representative of their numbers in society as a whole and in student populations. This condition appears to sustain the "pipeline myth",

the persistent idea that there are too few women qualified (e.g., degree holding) for leadership positions. However, the data indicate that there are more than enough qualified women to fill available leadership positions. In fact, the pipeline is preparing women at a greater rate than it does men. For example, female students have earned half or more of all baccalaureate degrees for the past three decades and of all doctoral degrees for almost a decade (Johnson, 2016: 1).

The three current African-American AAU presidents are especially noteworthy for their actual number but all the more so because they represent a three-fold increase from the complete absence of persons of color from the presidency in 1992.

Other changes can be observed over the span of a generation. The seven countries from which presidents in 1992 hailed from and/or were educated in were European or Canadian and increased to ten from a more diverse group of countries (although the actual number of presidents born or educated outside the United States remained similar).

Since the position of provost is the major source of presidents (more below), the change observed between a generation of presidents remains roughly the same in the case of foreignborn and foreign-educated provosts, (albeit, from a smaller number of countries), with a small increase in the number of African-American provosts. But women constitute more than one-third of current provosts and it seems reasonable to expect there will be more women presidents of this particular group of universities.

By contrast, it is difficult to project an increase in African-American presidents of these universities comparable to that of women, unless, of course, some of the women provosts of 2017 were African-American. They are not.

Elsewhere, Skinner (2018) makes the case that governing boards apparently see increased value in the experience of being a foreign-born and/or foreign-educated president, at least among universities ranked highly internationally. Data for the 50 highest-ranked institutions in the Times Higher Education World Rankings of Universities for 2017 (which include 25 of the American AAU members analyzed here) offer support for that case. The number of foreign-born and second-generation deans (the position from which nearly half of all provosts move) who come from Asia and most prominently India augur for increased numbers of provosts and then presidents/chancellors with those origins.

Between the cohorts of presidents in 1992 and those who now hold those posts (see Table 3), the path of professional advancement in American AAU institutions changed. First, service as a provost became the jumping-off point for most presidents in 2017. Whereas 38 percent of presidents in 1992 came into the presidency directly from service as a provost, 53 percent of presidents in 2017 took that route.

A change of comparable size took place over the period 1992-2017 as one quarter of presidents in 2017 had been a chancellor, president or acting/interim president, 39 percent in 1992 arrived in the presidency from having served as a president or in an acting capacity. By 2017, nearly half of all presidents had been provosts immediately prior to their appointments, whereas the number and proportion of deans remained unchanged over the same period.

While the numbers are small, it is of note that among presidents in 1992, only one came from outside of academia; four presidents (three of whom served in government) were "outsiders" in 2017. None of the current provosts assumed that office from service outside academia, but the path to becoming a provost is diverse *within* universities. Still, service as a dean remains the more frequent path to becoming a provost of these institutions.

Table 3 – Professional Advancement of Presidents and Provosts

	Presidents	Presidents	Provosts
Immediately Prior Post	<u>1992</u>	<u>2017</u>	<u>2017</u>
Chancellor/President	34% (21)	22% (13)	3% (2)
Acting/Interim Chancellor/President	5% (3)	3% (2)	5% (3)
Provost	31% (19)	46% (28)	3% (2)
Acting/Interim Provost		2% (1)	8% (5)
Associate Vice Chancellor/Provost	2% (1)		6% (4)
Vice Chancellor/Provost	5% (3)	5% (3)	15% (9)
Dean	16% (10)	15% (9)	43% (26)
Acting/Interim Dean			2% (1)
Deputy/Vice Dean			3% (2)
Department Chair			2% (1)
Director	2% (1)		2% (1)
Professor	2% (1)		5% (3)
CEO (non-academic)	2% (1)		2% (1)
Governor (government)		2% (1)	
Deputy Secretary (government)		3% (2)	
Executive Vice President (foundation)	2% (1)		
Managing Principal (private firm)	. ,	2% (1)	

The story to be told when it comes to which fields and disciplines presidents of research-intensive universities emerge from should offer comfort to those who relish tradition and consistency of a sort (Table 4). The traditional "professions" – by which are meant architecture, clergy, engineering, law and medicine – maintain something of a hold on university presidencies of the types of institutions considered here. The relative importance of any one varies vis-à-vis the others, but they persist as preparation for and backgrounds of academic presidencies.

Architecture is the exception that proves the rule. Observers of higher education are hardpressed to name an architect who is a university president, but they will readily attest to the interest and joy presidents have in planning and opening new buildings and those may compensate in spirit for a lack of formal training in architecture.

Clergy are hard to come by among academic presidents, save for religious-affiliated institutions which are not now AAU members. Still, in 1992, two presidents of the 60 institutions studied here held doctorates in theology. No such expertise is present among current presidents and provosts and therein, no doubt, tells a tale . . . untold here.

In 1992, presidents from law, medicine, engineering and theology made up nearly onethird of American AAU leaders. A generation later, presidents from the professions constituted almost half. Conspicuous is the growth in the number of engineers who preside over researchintensive universities today.

Table 4 – Doctoral Disciplines/Fields

Discipline 1992 2017 2017 Law 13% (8) 20% (12) 2% (1) History 12% (7) 2% (1) 8% (5) Medicine 8% (5) 10% (6) 3% (2) Engineering 8% (5) 18% (11) 15% (9) Political science 8% (5) 2% (1) 3% (2) Psychology 7% (4) 5% (3) 5% (3) Computer science 7% (4) 5% (3) 10% (6) Economics 5% (3) 5% (3) 10% (6) Languages 5% (3) 5% (3) 10% (6) Languages 5% (3) 3% (2) 5% (3) Physics 5% (3) 3% (2) 5% (3) Physics 5% (3) 3% (2) 2% (1) Biology 3% (2) 3% (2) 2% (1) Geology 3% (2) 3% (2) 2% (1) Hatematics 3% (2) 2% (1) 3% (2) Biochemistry 2% (1) 2% (1) 2% (1) Lingui		Presidents	Presidents	Provosts
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But signs that might be omens suggest that the traditional professions' hold on the academic presidency may not prevail into the next generation. Among current provosts of the 60 universities, the professions are represented by only 20 percent, as law and medicine declined and engineering slipped slightly.

One other observation that emerges from analysis of the data here deals with the fragmentation of many of the traditional academic disciplines and their remixing into partially-or wholly new fields. In any one of the 60 universities studied here it is common to have a professor whose appointments include neuroscience, linguistics, electrical engineering, philosophy, ethics. And if the professor is a medical doctor, the conventional business card cannot contain all the characters that describe her/his appointment.

Very seldom does a university president—especially at one of the 60 AAU institutions—lack experience as a faculty member. It therefore seems plausible that some of these multi- and inter-disciplinary professors will find their way to administrative posts, including the presidency given the scope of research and scholarship represented in research-intensive universities. And this rather bifurcated fragmentation and expansion of disciplines could serve to "squeeze out" traditional disciplines and the professions from the provost and president posts.

Discussion

Universities are often caricatured as graveyards where everyone knows their place and very little changes, save for the periodic addition of another member whose arrival makes only a bit of commotion for a very short while.

Some have noted that overhead projectors were ubiquitous in bowling alleys long before making their way into university classrooms.

After raucous controversy over online learning spanning much of the generation studied here, virtually every institution now offers such courses and they "count" for credit the same as conventional classroom instruction. What were once academic anathema are now just another way of teaching and learning. Change comes, but it comes slowly.

With respect to the sorts of people who become leaders of universities, that too can be viewed as changing gradually. After all, a quarter century during which women became the majority of students in college and women of color showed tremendous gains in higher education finds the sector one in which the leadership is predominantly male and white.

At the same time, analysis here reveals the growth in the number of women presidents in American AAU universities from three to twelve between 1992 and 2017. In addition, 22 of the women who are now provosts of those institutions are likely to become presidents of their current institutions, one of the other universities studied here or another, non-AAU research-intensive institution. The degree of change is, again, likely to be gradual.

The small representation of persons of color among presidents and provosts reveals again an incremental change of leadership. Anecdotal evidence suggests that the pipeline of African-American, Latina/o and Chicana/o deans may accelerate the growth in their numbers who are provosts and presidents, but here too the increase will likely be modest and gradual.

To the extent the experiences of women and persons of color imbue these leaders in decidedly different ways than those of white men, it seems reasonable to expect those differences will unfold in a variety of manners, some of which will depart from those of previous eras. A commitment to access, for example, while by no means the province of any demographic group, does nevertheless seem likely to inform the processes and substance of decisions and actions for persons denied or afforded limited access to and/or progression in higher education and leadership therein.

At the same time, the gradual rate by which the diversity of university leadership changes will place a premium on presidents' skills for listening and communicating to student

populations, staff and perhaps faculties much more diverse than the ones presidents engage with now.

Every generation of students passing through colleges and universities bring with them different perspectives than those of their predecessors and their successors. At present, "hate speech," freedom of speech and the clash of competing ideas have fueled confrontations and clashes between presidents and provosts, on one hand, and students on the other, the latter frequently, including under-represented racial and ethnic students. As the latter increase in number and if the leadership of universities remains primarily male and white, presidents and provosts will need to possess strengths that enable them to work with diverse groups. America's record of racial and ethnic relations tempers and gives pause to expectations of immediate or dramatic success.

The trend of globalization of higher education may slow for a time as more nationalist and less international sentiments seem to prevail. But it is difficult to imagine that a force of such scope and such duration as globalization will be reversed. Students will still seek to study abroad, professors will teach and research in places different than their native countries and talented leadership will be sought out by governing boards seeking presidents of research-intensive institutions without much in the way of limits on geography or places of origin.

Fragmentation of universities into less conventional forms and names than the disciplines and professions that served as bases for organizing those institutions and giving identity to professors and students may make the work of provosts and presidents somewhat more difficult to communicate beyond the academy. New fields with unfamiliar names and research and scholarship on newly-discovered or -defined subjects do not lend themselves to "sound-bite" explanations.

One recourse will be to borrow a page from the National Academy of Engineers and its "Grand Challenges" which serve to organize and orient the research and pedagogy for that profession by making explicit the types of issues and challenges academic engineering take on (http://www.engineeringchallenges.org/challenges/16091.aspx, or http://www.engineeringchallenges.org/File.aspx?id=11574&v=34765dff). Recent capital campaigns of AAU member institutions reflect this approach with universities staking out selected areas such as "individualized, precision medicine," "more just redevelopment of cities," and the "causes and consequences of climate change" and then attaching philanthropy that supports the people and processes by which the areas are addressed.

The analysis performed for this model study enabled a most curious bit of happenstance, one related to the discipline/field origins of AAU presidents. A striking change in the disciplines of presidents over the generation 1992-2017 is the near disappearance of historians from university presidencies. Ironically and only because a generation usually equates to 25 years, 1992 was the point in time by which to frame this data collection and their analysis. That same year, the historian Francis Fukuyama published his often-cited book, **The End of History and the Last Man**. As detailed in Table 4, between 1992 and 2017, historians-as-presidents dropped in number from seven to one.

It turns out that Fukuyama's title may be more prescient and precise than could ever be imagined, what with the absence of historians from academic presidencies and the continued (albeit, gradual) growth in the number of women presidents. Where Clio, the muse of history and not the award, resided remains a matter of some dispute, but this analysis suggests the Office of President is not now a likely residence. Or, if one historian does call the place home

at present, *he* (although, in fact, he is actually *she*–Drew Gilpin Faust) may well be, as Fukuyama's title portends, the last man.

Finally, the 60 universities examined here are not representative of all of the 5,000 or so colleges and universities in the United States, with the rich diversity of missions among them. But these 60 are the institutions to which the nation turns when it seeks to tackle problems and seize opportunities. And while such universities are rich in tradition and complex in operation, their futures do depend on who leads them. Who leads them is changing.

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