



COMMISSION_{ON}
DIVERSITY_{AND}
INCLUSION

Recommendations for Diversity-Related Data

Submitted to:
Chancellor Mark S. Wrighton
Provost Holden Thorp

June 26, 2017

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BACKGROUND

On August 14, 2015, the Steering Committee for Diversity & Inclusion recommended that, per action item #5: “The university will create a repository with the goal of having a single location that supports the integration and analysis of diversity-related data and resources...” On January 25, 2017, Vice Provost Adrienne Davis, the William M. Van Cleve Professor of Law, convened the Data Framing Working Group and charged it with the task of conceiving a framework for the University’s creation of a data repository organized to address pressing diversity-related questions. The eleven-person working group offers the recommendations in this report as a response.

Our recommendations include, but extend beyond, the development of a diversity and inclusion repository. Without the benefit of an approved university-wide diversity strategic plan at the time of our commissioning, the working group viewed its charge as a unique opportunity to think broadly. We hope our recommendations align with those of the other working groups operating concurrently.

We recognize several ongoing data-intensive efforts focused on diversity and inclusion across campus. The scale and visibility of these projects, and the resources available to them, vary widely. We aim to foster greater synergy and coordination of ongoing efforts, while recommending new opportunities for measuring progress.

The need for a repository of indicators concerning diversity and inclusion flows directly from two governing institutional principles. Washington University in St. Louis has undertaken “to welcome students, faculty and

staff from all backgrounds to create an inclusive community that is welcoming, nurturing and intellectually rigorous,”¹ while our mission statement specifies our intention to “focus on meaningful measurable results for all of our endeavors.”² Since progress cannot be gauged without indicators, decision-making in the pursuit of inclusion should be based on evidence and should entail the pursuit of more evidence. Too often individual and collective decision-making based on assumption and inflected by biases lead to systemic and predictable errors in judgment.³ Our mission statement commits us to challenging bias so that we can confront misconceptions and move forward with optimal wisdom and efficiency.⁴

PRESUPPOSITIONS AND IMMEDIATE BENEFITS OF A DATA REPOSITORY

To guide its efforts and shape the development of this report, the working group agreed to a set of presuppositions. While not

recommendations, the presuppositions reflect our hope and aspirations for the institution and the context for working with the repository.

We propose a data repository to house individual and system-level metrics of diversity and inclusion as well as the corresponding technological infrastructure to support data collection and analysis.

Scholarly Study of Diversity. The working group aspires to collect data preparatory for formulating and acting on a strategic plan for increasing diversity and inclusion at the University, for assessing the adequacy of our plan and our implementation, and for recalibrating or (if need be) overhauling our implementation. While we recognize that our efforts were primarily meant to serve such immediate, instrumental, actionable ends, we have adopted larger goals: we would like to provide a foundation for the longitudinal study of the social dynamics of institutions of higher

¹ Retrieved from <https://wustl.edu/about/mission-statement/>.

² Retrieved from <https://wustl.edu/about/mission-statement/>.

³ Amos Tversky & Daniel Kahneman, “Judgment Under Uncertainty: Heuristics and Biases,” *Science* 185, no. 4157 (Sept 27, 1974): 1124-1131

⁴ Michael J. Mauboussin, “The True Measure of Success,” *Harvard Business Review* 90, no. 10 (October 2012): 46-56.

education, our own and others. To state this differently: while the data customarily produced by offices of institutional research at institutions of higher education is often limited by narrow institutional goals, we aspire to assemble data of long-term, and far less limited, scholarly utility.⁵ In keeping with this ambition, it is necessary to make all data as easily and as widely accessible as allowable within the constraints of FERPA regulations.

Infrastructure. Robust technology and system support are crucial to the analysis of diversity and inclusion topics.⁶ But it is equally important that such systems be accompanied by appropriate policies for data use, so that necessary information can be retrieved, data analysis performed, and visualizations created. Establishing a common set of data parameters represents a challenge for all organizations. The working group

assumes the repository develops in an environment whereby policy and procedures to ensure consistency in data sourcing and usage across University units exists. Data governance represents a foundational activity for the recommendations in this report. Other institutions offer examples to serve as starting points.⁷ Breadth and, to the greatest degree possible, freedom of access will be crucial engines of our diversity efforts.

RECOMMENDATION #1

Develop a university-wide diversity and inclusion repository akin to such comprehensive systems as that of Pennsylvania State University (PSU).⁸ Our review suggests that PSU generated one of the most robust repositories of diversity indicators within the American Association of Universities. Their repository represents a model to guide our efforts, but since the University and PSU already engage in quite similar internal institutional research, adapting the PSU model for monitoring diversity and inclusion is in easy reach. We recommend the swift development of the following metrics and qualitative data to be assessed consistently over time.

- campus climate survey-faculty/staff/students⁹
- data relevant to recruiting and retaining a diverse student body (undergraduate, graduate, and professional) and post-doctoral research community (including the demographics of those that applied, interviewed, accepted and declined)
- document student's academic experiences, attainment, and career outcomes (e.g., intended majors versus final major; reasons for academic switchers or talent loss)¹⁰
- student aid data (undergraduate and graduate aid recipients by gender, by race/ethnicity, by low-income, by

first-generation, and other relevant categories)

- diversity rankings assessed by selected publications
- recruiting and retaining diverse human resources (e.g., demographic characteristics and tenure rates/successful probationary periods/years of service/reasons for leaving the University: faculty members, post-doctoral researchers, exempt staff, non-exempt staff, contractors)
- census of diversity related curriculum and student support services (e.g., Cornerstone, career centers, and student health services) and participation rates
- composition of sponsored events (e.g., research lecturers by demographic background and mentoring workshops)
- composition of the executive and management teams across the administrative and academic units at the University
- biennial reports on coordination of organizational leadership to foster diversity objectives
- strategic data collection to enable the assessment of economic contribution of the University to the community including longitudinal studies of the impact on diverse populations (employees and vendors).

⁵ See for example, the College and Beyond survey, https://cspsc.sanford.duke.edu/sites/default/files/descriptive/college_and_beyond_database.pdf

⁶ Appendix A offers greater specificity related to this presupposition.

⁷ Stanford University Data Governance Program, available at <http://web.stanford.edu/dept/pres-provost/cgi-bin/dg/wordpress/>

⁸ A Framework to Foster Diversity at Penn State, available at <http://equity.psu.edu/indicators/list-indicators>.

⁹ Throughout the document the term "student" includes matriculates at the undergraduate and graduate level including professional schools unless otherwise specified.

¹⁰ Elaine Seymour & Nancy M. Hewitt, "Talking about Leaving: Why Undergraduates Leave the Sciences," Westview Press (August 2000).

RECOMMENDATION #2

Track the diversity of research teams and human subject pools. One of the University's governing objectives calls for excellence in research. A positive association exists between diverse teams and effective problem-solving, innovation, and high performance.¹¹ With respect to human subject pools, race, class, gender, or ethnicity may cause

different treatment effects.¹² In some areas of study, the lack of diversity in the sampling process introduces bias and compromises the diversification of the pool of those who can benefit from the research.¹³ Our institutional commitment may therefore dictate higher standards of inclusion in research teams and in subject pools than currently stipulated by granting agencies and research boards.

RECOMMENDATION #3

Implement affirmative action monitoring guidelines across schools consistent with the standards in place in Arts & Sciences.¹⁴ Collect data across the University and track trends over time. The effort should not be limited to faculty hires. We recommend tracking Post-Doctoral Researcher recruitment and hiring as well.

RECOMMENDATION #4

Establish a process for accessing repository data for the evaluation and the study of diversity in higher education by University investigators. This recommendation is implied from the presuppositions; we state it as a recommendation to highlight its importance. Successful organizations provide members at all levels with the resources to develop concrete

learning processes and practices. If leadership communicates the value of investing time on identifying and analyzing problems, and in sharing and reflecting on knowledge in order to shape, and reshape, policy, then it positions members of the community to grow as professionals and to offer new ideas.¹⁵

RECOMMENDATION #5

Secure and align the human resources in the form of data scientists and engineers devoted to this endeavor.¹⁶

CONCLUSION

The presuppositions and recommendations in this report offer a framework for strengthening our capacity to learn and to better understand diversity and inclusion at Washington University in St. Louis. Chancellor Mark S. Wrighton captures the urgency of this undertaking:

The shortfall in achievement by higher education in being both diverse and inclusive has contributed a "crisis" in higher education. Serving our growing and more diverse population by

providing the highest quality education possible requires conscious effort, considerable investment of time and resources, and creativity...and given our track record of achievement in dealing with other challenges, we have committed to building the more diverse and inclusive community we aspire to be.¹⁷

Our commitment to building a more diverse and inclusive University requires an aligned investment in the capacity to understand patterns, experiences, and the lived realities

of individuals associated with the institution and the surrounding community. We regard it as axiomatic that, in the pursuit of diversity and inclusion, our reach should exceed our grasp. That axiom should inevitably encompass our data-collection. Data on undergraduates will be relatively easy to collect; for a variety of reasons, it will be more difficult to gather data on graduate students and post-graduates; and substantial obstacles exist to studying the demographics of the faculty, staff, and suppliers, or the impact of the University's people

¹¹ Vivian Hunt, Dennis Layton & Sara Prince, "Diversity Matters," McKinsey & Company (November 24, 2014), available at <http://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters>

¹² Mark Allmark, "Should Research Samples Reflect the Diversity of the Population," *Journal of Medical Ethics* 30, no. 2 (April 2004): 185-189.

¹³ Alice B. Popejoy & Stephanie M. Fullerton, "Genomics is Failing on Diversity," *Nature* 538, no. 7624 (October 12, 2016): 161-164.

¹⁴ Washington University in St. Louis, Arts & Sciences, The Affirmative Action Monitoring Committee Guidelines and Departmental Search Process and Procedures, available at <https://artsci.wustl.edu/about/committees/affirmative-action>.

¹⁵ David A. Garvin, Amy C. Edmondson, & Francesca Gino, "Is Yours a Learning Organization?" *Harvard Business Review* 86, no. 3 (March 2008): 109-116.

¹⁶ Highlighted to reflect its importance as a foundational recommendation. The long-term success of the proposed data repository depends on aligned human resources.

¹⁷ Mark S. Wrighton, "Afterword," in *The Crisis of Race in Higher Education: A Day of Discovery and Dialogue*, edited by William F. Tate, Nancy Staudt, and Ashley Macrander, 355-366. United Kingdom: Emerald Group Publishing, 2017.

and of the research it produces on the diversity and inclusiveness of the networks in which it is enmeshed. Yet we should extend ourselves to discover and analyze such data, since evidence-based efforts to achieve consequential

diversification and inclusiveness depend on expansive inquiry and analysis.

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APPENDIX

1. Technology should neither be a barrier, nor used as an excuse for why data cannot be accessed or shared. The University should invest resources to build a federated repository framework. Data may be stored on a variety of systems and software; however, if data cannot be accessed or staff does not know how systems operate, then it limits its use in understanding the diversity and inclusiveness of our campus community.
2. Data descriptions\metadata (also known as "code books") should be created for all data used in the analysis and products created from the data repositories. Data that are not described cannot be vetted or in many cases used in research. At a minimum, undescribed data are of uncertain use in research, teaching, and in making evidence-based and actionable decisions for the University.
3. We envision that the codebooks explain a variable's type and properties (e.g. ordinal data, values bounded by 0-100, etc.) and the data dictionary as a document containing the labels and definitions of the variables (e.g. transgender (adj) = umbrella term including a range of identities that transgress socially defined gender norms; a person who lives as a member of a gender other than that expected based on biological sex).
4. The working group acknowledges that there may be discomfort in sharing certain data. Data management should generally address the following areas:
 - Compliance
 - Teaching opportunities
 - Oversight\governance
 - Research opportunities (see recommendation four)
 - IRB
 - Evidence-based decisions and policy at institutional level
 - Data Dictionary
 - Default to "open data" transparency

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To view the full report click [here](#);
to view the Executive Summary of the report, click [here](#).