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Applying Indices Post-*Grutter* to Monitor Progress Toward Attaining a Diverse Student Body

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ABSTRACT

The Supreme Court decision in Grutter v. Bollinger provided more definitive guidance for institutions of higher education desiring to use racial preferences in an effort to achieve a diverse student body. This Article first examines Grutter and other relevant cases to set forth the parameters established by the Supreme Court concerning how university preferences, including but not limited to race, may be used in an admissions policy. This Article then provides a framework for creating and using diversity indices that can help institutions implement the guidelines found in these court decisions and monitor whether or not the goal of diversity has been met. The Article describes a hypothetical situation, illustrating how diversity indices can be used in a manner that conforms to the admissions policy parameters established by the Supreme Court.

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“One day our descendants will think it incredible that we paid so much attention to things like the amount of melanin in our skin or the shape of our eyes or our gender instead of the unique identities of each of us as complex human beings.” —*Franklin Thomas*¹

I. INTRODUCTION

In 2003 the United States Supreme Court agreed to hear two affirmative action cases, both filed against the University of Michigan. The first case, *Gratz v. Bollinger*, was filed against the University of Michigan’s College of Literature, Science and the Arts, claiming that its undergraduate point-based admissions policy violated the Equal Protection Clause of the United States Constitution.² The second case, *Grutter v. Bollinger*, challenged the University of Michigan’s Law School admissions policy on essentially the same legal grounds.³ The Court in *Gratz* decided that the points-based admission policy that the college used was unconstitutional. However, the Court in *Grutter* upheld the law admissions policy, essentially “updating” its position on affirmative action.

The decisions in *Gratz* and *Grutter* came a quarter of a century after the Court’s decision in *Regents of the University of California v. Bakke*,⁴ and provided much more definitive guidance for institutions of higher education desiring to use racial preferences in an effort to achieve a diverse student body.⁵ In 2007, the Court provided further insight into permissible versus impermissible use of racial preferences when it decided *Parents Involved in Community Schools v. Seattle School District No. 1 (PICS)*.⁶

This Article begins with an examination of the foregoing cases, most notably *Grutter*, to set forth the parameters established by the Supreme Court in regard to whether and to what extent university preferences, including but not limited to race, may be used in an admissions policy. Although reviewing these cases will highlight the principles underlying the decisions, such principles remain abstract until implications for practice are also considered. Note that much has already been written about the *Grutter* decision and the focus of the bulk of this discourse has been to debate the legal aspects of the decision from a constitutional viewpoint, including the question of permissible

¹ KEVIN RYAN & JAMES M. COOPER, *THOSE WHO CAN, TEACH* 66 (12th ed. 2010) (quoting Franklin Thomas, former president of the Ford Foundation).

² *Gratz v. Bollinger*, 539 U.S. 244 (2003).

³ *Grutter v. Bollinger*, 539 U.S. 306 (2003).

⁴ *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265 (1978).

⁵ See Lackland H. Bloom, Jr., *Grutter and Gratz: A Critical Analysis*, 41 HOUS. L. REV. 459, 460 (2004).

⁶ *Parents Involved in Cmty. Sch. v. Seattle Sch. Dist. No. 1 (PICS)*, 551 U.S. 701 (2007).

categories.⁷ Therefore, we have chosen to focus instead primarily on the more practical aspect of monitoring the admissions process post-*Grutter*.

In the existing literature on *Grutter*, only one article seriously considers the decision's practical implications on measurement in the admissions process.⁸ That article proposes that universities use metrics to assess various dimensions of diversity in order to satisfy the Court's pronouncement of the importance of considering a full range of factors. However, it does not provide sufficient detail as to how these factors might be combined into a diversity metric, leaving many unanswered questions.

Given these uncertainties, we specify how exactly one could develop a measuring system designed to assess compliance with the spirit of *Grutter*. As such, this Article then provides a framework as to how diversity indices can be used to help institutions implement the guidelines found in these court decisions and monitor whether or not the goal of diversity has been met and/or maintained, including a hypothetical that utilizes diversity indices in a manner that conforms with the admissions policy parameters established by the Supreme Court.

II. THE SUPREME COURT ON ATTAINING A DIVERSE STUDENT BODY IN HIGHER EDUCATION

A. Regents of the University of California v. Bakke

The litany of Supreme Court cases regarding the use of race in admission policies by institutions of higher education began in 1976, when the Court decided *Regents of the University of California v. Bakke*. In *Bakke*, an applicant denied admission to the University of California at Davis sued the institution, claiming its policy of reserving sixteen of one hundred seats in its medical school for members of specified minority groups was unconstitutional.⁹ While no majority opinion emerged in *Bakke*, Justice Powell's opinion was joined by separate panels of four justices in reaching two key holdings: 1) attaining a diverse student body is an appropriate goal for institutions of higher learning, with race being one factor that may be considered in achieving such a goal; and 2) an admissions policy that uses a quota type system based upon race is not an acceptable means upon which to attain a diverse student body.¹⁰ The *Bakke* Court also failed to reach a majority opinion regarding the appropriate standard of review under the

⁷ See, e.g., L. Darnell Weeden, *After Grutter v. Bollinger Higher Education Must Keep Its Eyes on the Tainted Diversity Prize Legacy*, 19 BYU J. PUB. L. 161 (2004); Joshua M. Levine, *Stigma's Opening: Grutter's Diversity Interest(s) and the New Calculus for Affirmative Action in Higher Education*, 94 CALIF. L. REV. 457 (2006); Peter Caldwell, *Defining the New Race-Conscious Frontier in Academic Admissions: Critical Perspectives on Grutter v. Bollinger*, 31 T. MARSHALL L. REV. 197 (2006); Vikram David Amar & Evan Caminker, *Constitutional Sunsetting?: Justice O'Connor's Closing Comments in Grutter*, 30 HASTINGS CONST. L.Q. 541 (2003); Joel K. Goldstein, *Justice O'Connor's Twenty-Five Year Expectation: The Legitimacy of Durational Limits in Grutter*, 67 OHIO ST. L.J. 83 (2006); Patrick M. Garry, *How Strictly Scrutinized?: Examining the Educational Benefits the Court Relied Upon in Grutter*, 35 PEPP. L. REV. 649 (2008). A LEXIS search of all law review articles containing "Grutter" in the title resulted in 234 hits (last search January 6, 2012).

⁸ Christine Chambers Goodman, *A Modest Proposal in Deference of Diversity*, 23 NAT'L BLACK L. J. 1 (2010).

⁹ *Bakke*, 438 U.S. at 274–75.

¹⁰ *Id.* at 269–72.

Equal Protection Clause that should be applied when a university uses race as a factor in admissions decisions. Four justices opined that such cases should be subject to intermediate scrutiny,¹¹ while Justice Powell wrote that the more exacting strict scrutiny standard should apply.¹²

B. *Gratz v. Bollinger*

The issue in *Gratz v. Bollinger* was the legality of the University of Michigan's undergraduate admissions policy, which was based on a points system that automatically awarded twenty points to applicants from underrepresented minority groups.¹³ The Supreme Court began its analysis by endorsing the rationale set forth by Justice Powell twenty-five years earlier in *Bakke* that attainment of a diverse student body is a compelling state interest and that cases challenging a university's admissions policy that uses race as a factor should be decided under the strict scrutiny standard.¹⁴ Therefore, a university could craft an admissions policy that was narrowly tailored to achieve a diverse student body. The *Gratz* Court held, however, that the policy in question at the undergraduate level was unconstitutional, finding that by simply adding twenty points for underrepresented minorities, it guaranteed minorities would be admitted.¹⁵ The Court viewed such a policy as a quantitative rather than a qualitative assessment as to whether an underrepresented minority applicant would help the University attain a diverse student body. The majority opinion stressed "the result of the automatic distribution of 20 points is that the University would never consider student A's individual background, experiences, and characteristics to assess his individual 'potential contribution to diversity.' Instead, every applicant like student A would simply be admitted."¹⁶ Therefore, the Court rejected an admissions policy that sought to achieve diversity through a points system, because the compelling state interest is not just having minority students, but creating a diverse student population in the interest of the educational benefits that diversity can create.

C. *Grutter v. Bollinger*

The admissions policy scrutinized in *Grutter* was different than that challenged in *Gratz v. Bollinger* because rather than automatically awarding points to underrepresented minority applicants, the law school conducted a holistic, individualized review of the applicant's file to determine whether such applicant would help the school achieve its goal of attaining a diverse student body. The *Grutter* Court endorsed this method because, unlike the arbitrary points-based system at issue in *Gratz*, it addressed a broad concept of diversity, with race being merely one of the factors. The *Grutter* Court noted that "[the] hallmark of that policy [the University of Michigan's Law School] is its focus on academic ability coupled with a flexible assessment of applicants' talents,

¹¹ *Id.* at 361–62 (Brennan, White, Marshall, and Blackmun, JJ., concurring in the judgment in part and dissenting in part).

¹² *Id.* at 287–91.

¹³ *Gratz v. Bollinger*, 539 U.S. 244, 249–51, 255 (2003).

¹⁴ *Id.* at 270–72.

¹⁵ *Id.* at 271–72.

¹⁶ *Id.* at 273–74 (citations omitted).

experiences, and potential ‘to contribute to the learning of those around them.’”¹⁷ The law school’s admissions policy required that decisions be made by considering a number of “soft variables,” discussed later in Part III of this Article, when determining whether a student was likely to make a contribution to attaining a diverse student body.¹⁸ The Court further opined that because the law school’s admissions policy had many possible bases for diversity admissions, the use of race was indicative of the school’s longstanding commitment to “‘one particular type of diversity,’ that is, ‘racial and ethnic diversity with special reference to the inclusion of students from groups which have been historically discriminated against, like African-Americans, Hispanics and Native Americans, who without this commitment might not be represented in our student body in meaningful numbers.’”¹⁹

D. Parents Involved in Community Schools v. Seattle School District No. 1

In 2007, the Supreme Court heard *Parents Involved in Community Schools v. Seattle School District No. 1 (PICS)*,²⁰ a case which challenged the Seattle public school district’s use of race in a formula known as the “Seattle Plan” to determine student placement in its high schools.²¹ While the *PICS* decision addressed the use of race in attaining diversity in secondary education, it is pertinent to this Article in three aspects. First, the *PICS* Court held the Seattle Plan unconstitutional, finding, as it had in *Gratz*, that using race as a sole factor is not narrowly tailored to achieve the compelling state interest of attaining diversity in the classroom.²² Second, the Court emphasized that institutions of higher education hold a “special niche in our constitutional tradition”²³ due to their encouragement of freedom of speech and thought, which further supports the notion that attaining a diverse student body to promote a wide array of views and beliefs is a compelling state interest. Third, the Court affirmed the importance that universities engage in a broad assessment of factors through “highly individualized, holistic review” narrowly tailored toward attaining diversity, rather than simply using race as a factor in “an effort to achieve racial balance.”²⁴

III. ATTAINING A DIVERSE STUDENT BODY AFTER *GRUTTER*

Grutter stands for the notion that to some extent race may be considered in a higher education admissions policy. Before *Grutter* and *Gratz*, most institutions of higher learning relied on *Bakke* to create an admissions policy that emphasized a diverse student body, with race being a major factor in most such policies.²⁵ However, those more race

¹⁷ *Grutter v. Bollinger*, 539 U.S. 244, 315 (2003).

¹⁸ *Id.* (citations omitted).

¹⁹ *Id.* at 316 (citation omitted).

²⁰ *Parents Involved in Cmty. Sch. v. Seattle Sch. Dist. No. 1 (PICS)*, 551 U.S. 701 (2007).

²¹ *Id.* at 709–15.

²² *Id.* at 722.

²³ *Id.* at 724–25 (citations omitted).

²⁴ *Id.* at 722–23 (citations omitted).

²⁵ Bingham McCutchen LLP et al., *Preserving Diversity in Higher Education: A Manual on Admissions Policies and Procedures after the University of Michigan Decisions 1* (2004), http://www.equaljusticesociety.org/compliancemanual/Preserving_Diversity_In_Higher_Education.pdf

conscious plans needed to be re-examined after *Grutter*, because *Grutter* made it clear that the purpose of an admissions policy that uses race as a factor is to ensure a diverse student population, not just minority representation. Therefore, race may only be one factor in an array of candidate attributes considered in an admissions policy for the purpose of achieving a diverse student body. Since race may not be either the sole or determining factor, it becomes important for institutions of higher learning to understand how race may be considered. The *Grutter* Court referred to *Bakke* to begin to establish how race can be included in a narrowly tailored admissions policy that advances the compelling state interest of attaining a diverse student body, emphasizing that the term diversity encompasses much more than ethnic diversity.²⁶

The critical message to universities from *Grutter* is that diversity, not racial minority representation, is a compelling state interest in higher education and the admission criteria may reflect that state interest. Diversity is a compelling state interest because of the educational benefits it can provide to all students. Therefore, race may be considered in admission standards, but not by adding points or some similar system that simply assures that minorities will be admitted. A narrowly tailored policy may only consider whether the minority candidate will help a university attain a diverse student body. Recall that the difference between the undergraduate policy in *Gratz* and the law school's policy in *Grutter* is that admission at the undergraduate level focused on input, without considering the result. The underlying assumption of the undergraduate policy was that diversity (result) would be created by guaranteeing a percentage of minorities would be admitted (input). By contrast, the law school's policy emphasized the admission of minorities as one factor, albeit a very important one, in creating a diverse student body. The law school's focus was diversity (result), with minorities being one important aspect (input), yet the law school also considered additional factors that would create a diverse student body. In other words, the compelling state interest of attaining a diverse student body means more than adoption of admissions policies that are designed to increase enrollment by underrepresented minorities, and the law school's input, addressing a wide array of factors, was more directly related to the goal of achieving a diverse student body.

While strict scrutiny and its narrowly tailored requirement is the most exacting standard in equal protection cases, the *Grutter* Court noted that the standard is still "designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decision-maker for the use of race in that particular context."²⁷ The *Grutter* Court provides guidance as to how a university can implement an admissions policy narrowly tailored to withstand a strict scrutiny

("Many institutions modeled their plans after the Harvard undergraduate admissions policy, described by Justice Powell in *Bakke* as an exemplary plan.")

²⁶ *Grutter v. Bollinger*, 539 U.S. 306, 324–25 (2003) (referring to Justice Powell's opinion in *Bakke*, which stated, "[i]t is not an interest in simple ethnic diversity, in which a specified percentage of the student body is in effect guaranteed to be members of selected ethnic groups, that can justify the use of race. Rather, '[t]he diversity that furthers a compelling state interest encompasses a far broader array of qualifications and characteristics of which racial or ethnic origin is but a single though important element.'") (citations omitted).

²⁷ *Id.* at 327.

analysis and attain a diverse student body.²⁸ A well-conceived admissions policy would (1) require an “individualized, holistic review” of a number of factors (which may include race) that do not insulate certain applicants from competition with all other applicants,²⁹ and (2) “not restrict the types of diversity contributions” that would receive consideration in the admissions decision.³⁰ Therefore, race needs to be part of a holistic approach, without acceptance or rejection on a single characteristic, but rather part of the objective of having a diverse student population that contributes to the overall learning environment. Additional factors could include the following “soft variables” set forth in *Grutter*:

- The student’s grades
- The student’s test scores (LSAT, GRE, GMAT, etc.)
- Enthusiasm of the student’s rater
- The quality of the undergraduate institution
- The quality of the applicant’s essay
- The difficulty of the undergraduate course selection
- Racial diversity
- Ethnic diversity
- Historically discriminated against (e.g. African-American, Hispanic and Native American)³¹

The above variables are a representative, rather than exclusive, list of factors to consider in development of an admissions policy that adheres to the principles contained in *Grutter*. Note, for example, that *Grutter* also refers to factors set forth in *Bakke*, such as living or traveling widely abroad, being fluent in several languages, having overcome personal adversity, having extensive community service, and having had successful careers in other fields.³² Indeed, as acknowledged by the *Grutter* Court, a well-drafted

²⁸ In response to the *Grutter* decision, Michigan voters approved a ballot proposal that created a constitutional amendment banning the use of sex- and race-based preferences in public education. In 2011, the Sixth Circuit Court of Appeals heard *Coalition to Defend Affirmative Action, Integration and Immigrant Rights and Fight for Equality by Any Means Necessary (BAMN) v. Regents of the University of Michigan*, a case that challenged whether the amendment to Michigan’s constitution violated the United States Constitution. 652 F.3d 607 (6th Cir. 2011). Given that the Sixth Circuit found the amendment violated the United States Constitution, the case is not directly relevant to our discussion. Should the *Coalition* decision be overturned by the Supreme Court, it certainly presents the possibility that states will enact amendments to their constitutions prohibiting any type of affirmative action in public education. The uncertainty regarding whether the Supreme Court will reverse *Coalition* and, if so, how many states will respond by amending their constitutions suggests, however, that universities desiring to attain a diverse student body should continue to develop admissions policies that comport with the framework established in *Grutter*.

²⁹ *Grutter*, 539 U.S. at 337.

³⁰ *Id.* at 315–16.

³¹ *Id.* at 315.

³² See Christine Chambers Goodman, *A Modest Proposal in Deference of Diversity*, 23 NAT’L BLACK L. J. 1 (2010); see also *Grutter*, 539 U.S. at 337.

admissions policy aspires to “achieve that diversity which has the potential to enrich everyone’s education and thus make a . . . class stronger than the sum of its parts.”³³

IV. THE FOUR TYPES OF FACTORS DISCUSSED IN *GRUTTER*

After examining the various factors discussed in *Grutter* as being components of a holistic, individualized review, we realized that they can be categorized into four types, two of which help predict academic potential and two of which concern diversity. This segmenting of factors into predictors of ability and measures of diversity is clear in *Grutter* when the Court cites the Brief for Respondent reference to the goal of “assembling a class that is both exceptionally academically qualified and broadly diverse.”³⁴ The decision also recognizes that the law school’s admission policy “focuses on academic ability coupled with a flexible assessment of applicants’ talents, experience, and potential to ‘contribute to the learning of those around them.’”³⁵

The first type of factor predicting academic potential consists of the numerical indicators that have been found in countless studies to be correlated with academic performance, namely GPA and LSAT: “In reviewing an applicant’s file, admissions officials must consider the applicant’s undergraduate grade point average and Law School Admission Test score because they are important (if imperfect) predictors of academic success in law school.”³⁶ The second type of factor related to academic potential concerns the other indicators of academic potential that are not so easily measurable. Admissions officials at the law school looked beyond grades and test scores to other criteria such as the enthusiasm of the student’s rater, the quality of the undergraduate institution, the quality of the applicant’s essay, and the difficulty of the undergraduate course selection in an effort to assess an “applicant’s likely contributions to the intellectual and social life of the institution.”³⁷

Then there are the factors that assess the contribution of the candidate to the diversity of the student population. Race and ethnicity are two obvious factors that are usually considered. In fact, the discussion in *Grutter* centers on these two factors.³⁸ However, as mentioned earlier, *Grutter* refers back to *Bakke* to note additional important factors that could be collectively termed diverse life experience, namely factors such as living or traveling widely abroad, being fluent in several languages, having overcome personal adversity, having extensive community service, and having had successful careers in other fields.³⁹ It is not our intent to define which racial and ethnic categories and diverse life experiences are important for creating diversity in the classroom as we view this as being in part a function of the mission and goals of each particular university. Instead, this Article primarily focuses on how to assess an institution’s progress towards having a diverse set of students once that set has been defined.

³³ *Grutter*, 539 U.S. at 315.

³⁴ *Id.* at 329.

³⁵ *Id.* at 315 (citation omitted).

³⁶ *Id.* (citation omitted).

³⁷ *Id.* (citation omitted).

³⁸ *See id.* at 330–37.

³⁹ *Id.* at 338; *see also* Regents of Univ. of Cal. v. Bakke, 438 U.S. 265, 312 (1978).

V. DISPARITIES IN THE ADMISSIONS PROCESS

Before discussing this focus, it is important to raise some issues concerning the assessment of academic potential that were not raised in the *Grutter* decision.⁴⁰ The assessment of academic potential, particularly the use of standardized test scores but also the use of more holistic measures, can result in disparities in the admissions process. This issue has relevance for our discussion of the assessment of progress toward diversity because it can create a situation that hampers this progress. If measures of academic potential create disparities in terms of the selection of different groups of candidates, this decreases diversity in the candidate pool being considered, thereby increasing the difficulty of achieving diversity goals.

A. Educational Disparity and Insufficient Measures of Academic Potential

First, racial and ethnic differences in mean test scores are evident in standardized tests used for college admissions, including the LSAT, with African-Americans and Hispanics scoring below non-Hispanic whites.⁴¹ African-Americans average 142 or 143 on the LSAT and Hispanics average 145 or 146 as compared with 152–154 for whites.⁴² This has been attributed by some to differences in what has been termed the opportunity to learn, which refers to the resources that have been available over time to facilitate student learning.⁴³ This explanation is supported by studies that found that differences in standardized test scores for whites and non-whites are reduced when school quality and course-taking patterns are taken into account.⁴⁴

Also, standardized test scores, while robust predictors of in-class exam scores, are relatively weak predictors of performance on take-home exams and papers.⁴⁵ On the other hand, the GPA, which shows a smaller mean difference between white and minority students, is a fairly good predictor of all three.⁴⁶ The use of the LSAT beginning in the 1970s has been associated with the depressed admissions rates for African-American “high achievers”⁴⁷ and it has been estimated that if LSAT alone were used, it would cut

⁴⁰ *But see generally Grutter*, 539 U.S. at 349–50 (Thomas, J., concurring in part and dissenting in part).

⁴¹ Amy Elizabeth Schmidt & Wayne J. Camara, *Group Differences in Standardized Test Scores and Other Educational Indicators*, in *RETHINKING THE SAT: THE FUTURE OF STANDARDIZED TESTING IN UNIVERSITY ADMISSIONS* 189, 191–92 (Rebecca Zwick ed., 2004).

⁴² *See id.* at 191; Susan P. Dalessandro et al., *LSAT Technical Report 10-03, LSAT Performance with Regional, Gender, and Racial/Ethnic Breakdowns: 2003–2004 Through 2009–2010 Testing Years*, LAW SCHOOL ADMISSION COUNCIL, 19 (2010), <http://www.lsac.org/LSACResources/Research/TR/TR-10-03.pdf>.

⁴³ Eric Grodsky et al., *Testing and Social Stratification in American Education*, 34 *ANN. REV. OF SOC.* 385, 388 (2008).

⁴⁴ Stephen Klein et al., *Gender and Racial/Ethnic Differences on Performance Assessments in Science*, 19 *EDUC. EVALUATION & POL. ANAL.* 83, 92 (1997). This is also referenced in Schmidt & Camara, *supra* note 41, at 196.

⁴⁵ William Henderson, *The LSAT, Law School Exams, and Meritocracy: The Surprising and Undertheorized Role of Test-Taking Speed*, 82 *TEX. L. REV.* 975, 975 (2004).

⁴⁶ *Id.*

⁴⁷ William C. Kidder, *The Struggle for Access from Sweatt to Grutter: A History of African American, Latino, and American Indian Law School Admissions, 1950–2000*, 19 *HARV. BLACKLETTER L.J.* 1, 26–27 (2003).

in half the number of African-American and Puerto Rican students who would be admitted based on undergraduate GPA.⁴⁸ For these various reasons, there has been a call to rely less on the LSAT.⁴⁹ Also, the American Psychological Association, American Educational Research Association, and test makers such as the Educational Testing Service state that high-stakes decisions should not be made based on tests alone.⁵⁰ This warning is echoed by the Law School Admissions Council regarding use of the LSAT.⁵¹

However, despite these warnings, there is a reluctance to abandon traditional admissions practices.⁵² In fact, there has been a tendency of law schools to give greater consideration to standardized test scores, probably due to the manner in which media such as *U.S. News and World Reports* have ranked law schools in part based on LSAT scores.⁵³ This may have resulted in decreased diversity in law schools. Decreases in enrollment of various racial and ethnic groups have been noted, including at most top-ranked law schools.⁵⁴ Decreases in enrollment of African-Americans and Mexican-Americans in law schools have occurred even with an increase in the number of their applications, a rise in their average GPA, and an increase in their average LSAT score.⁵⁵ This decrease is attributable not only to the increased reliance on the LSAT, but also to the dismantling of affirmative action programs at many law schools in response to a number of state propositions, court decisions, and public criticisms.⁵⁶

B. Opportunities for Unconscious Bias

This reluctance of universities to abandon the traditional emphasis on standardized test scores, coupled with several lawsuits concerning alleged misuse of tests in admissions, have caused some to caution universities to avoid rigid cutoffs and view test scores within the context of the candidates' entire background.⁵⁷ This appears to be wise advice and in keeping with the *Grutter* decision, which emphasizes the importance of a holistic appraisal. However, other indicators of academic potential—those referenced in

⁴⁸ See Theodore Cross & Robert Bruce Slater, *Why the End of Affirmative Action Would Exclude All But a Very Few Blacks from America's Leading Universities and Graduate Schools*, J. BLACKS IN HIGHER EDUC., Autumn 1997, at 8, 12 (noting, "at every one of the 174 law schools in the U.S. News rankings (including all the fourth-tier law schools) the median LSAT score is higher than the median score for all black test takers in the United States.").

⁴⁹ See Henderson, *supra* note 45 at 978; see also Vernellia R. Randall, *The Misuse of the LSAT: Discrimination Against Blacks and Other Minorities in Law School Admissions*, 80 ST. JOHN'S L. REV. 107, 139–41 (2006).

⁵⁰ Grodsky et al., *supra* note 43, at 399.

⁵¹ See *Cautionary Policies Concerning LSAT Scores and Related Services*, LAW SCHOOL ADMISSIONS COUNCIL (2005), <http://www.lsac.org/LSACResources/Publications/PDFs/CautionaryPolicies.pdf>.

⁵² See, e.g., Girardeau A. Spann, *The Dark Side of Grutter*, 21 CONST. COMMENT. 221, 237 (2004).

⁵³ John Nussbaumer, *Misuse of the Law School Admissions Test, Racial Discrimination, and the De Facto Quota System for Restricting African-American Access to the Legal Profession*, 80 ST. JOHN'S L. REV. 167, 170–71 (2006).

⁵⁴ News & Views, *The Decline in Black Enrollments at the Nation's Highest-Ranked Law Schools*, J. BLACKS IN HIGHER EDUC., Autumn 2007, at 8.

⁵⁵ Randall, *supra* note 49, at 108.

⁵⁶ See Floyd Weatherspoon, *The Status of African American Males in the Legal Profession: A Pipeline of Institutional Roadblocks and Barriers*, 80 MISS. L.J. 259, 287 (2010) (attributing temporary "modest" increases in racial diversity at law schools to affirmative action programs).

⁵⁷ See, e.g., Bingham McCutchen LLP et al., *supra* note 25.

Grutter that are not so easily measurable, such as the enthusiasm of the student's rater—may contain bias as well.

There is a growing literature on the existence of unconscious bias in decisionmaking, which increases when judgments are subjective and information is ambiguous, such as when multiple explanations for a behavior exist.⁵⁸ In fact, some scholars have argued that an increased use of more holistic, individualistic evaluation in organizations—precisely the type praised in the *Grutter* decision—is contributing to an increase in bias because these are usually unstructured evaluation processes that lack specific criteria and that often do not require decision makers to articulate reasons for their decisions.⁵⁹ For example, when holistically considering the enthusiasm of a rater, the quality of the candidate's essay, and the difficulty of the school and courses in addition to GPA and SAT scores, ratings for a white candidate may be higher than ratings for a black candidate even if these factors were all held constant because the subjectivity of the assessment more easily allows for unconscious bias to occur.⁶⁰ An example of this is when a black candidate's school difficulty level is discounted because of an unconscious assumption that most black students attend schools that have lower academic standards. Another example is attributing reasons for a low GPA for a white candidate to factors external to the applicant and reasons for a low GPA for a black candidate to characteristics of the applicant rather than to external causes.

We raise these issues primarily because they appeared to have been mostly overlooked in the *Grutter* decision; however, they clearly have implications for the ability to achieve the critical mass to which the *Grutter* decision refers. If measures of academic potential result in disparities in the selection of different groups of candidates, this is already likely to decrease diversity in the candidate pool being considered, thereby increasing the difficulty of achieving critical mass of a minority group. Therefore, in our view it is important to ensure that measures of academic potential used to select candidates are as effective as possible before ever beginning to consider how to measure and achieve critical mass. In terms of tests, this means finding or creating and using valid assessments that are predictive of all important aspects of law school performance. In

⁵⁸ See, e.g., Marianne Bertrand et al., *Implicit Discrimination*, 95 AM. ECON. REV. 94 (2005); Susan T. Fiske, *What We Know About Bias and Intergroup Conflict, the Problem of the Century*, 11 CURRENT DIRECTIONS IN PSYCHOL. SCI. 123 (2002); Linda Hamilton Krieger, *The Content of Our Categories: A Cognitive Bias Approach to Discrimination and Equal Employment Opportunity*, 47 STAN. L. REV. 1161 (1995). Unconscious bias is generally measured by the strength of the association between social categories such as African-American and European-American and positive and negative words such as love or evil. Scores on race-based unconscious bias tests are associated with degree of friendliness and other nonverbal behavior directed toward African-Americans. Nonverbal behavior towards applicants during an interview have been found to affect applicant performance. See John Dovidio et al., *Implicit and Explicit Prejudice and Interracial Interactions*, 82 J. PERS. & SOC. PSYCHOL. 62, 63–64 (2002); see also J. Nicole Shelton & Jennifer A. Richeson, *Interracial Interactions: A Relational Approach*, 38 ADVANCES IN EXPERIMENTAL SOC. PSYCHOL. 121, 153–154 (Mark P. Zanna ed., 2006); Carl O. Word et al., *The Nonverbal Mediation of Self-Fulfilling Prophecies in Interracial Interaction*, 10 J. EXPERIMENTAL SOC. PSYCHOL. 109, 109 (1974).

⁵⁹ Tristin K. Green, *Discrimination in Workplace Dynamics: Toward a Structural Account of Disparate Treatment Theory*, 38 HARV. C.R.-C.L. L. REV. 91, 104–08 (2003).

⁶⁰ See Marianne Bertrand & Sendhil Mullainathan, *Are Emily and Greg More Employable than Lakish and Jamal? A Field Experiment on Labor Market Discrimination*, 94 AM. ECON. REV. 991 (2004) (discussing how African-American names affect the selection process).

terms of the more subjective assessment of academic potential, this means making these judgments without time pressures and with a more structured review process, factors that have been found to reduce unconscious bias.⁶¹

VI. THE CONCEPT OF CRITICAL MASS

Several important aspects of *Grutter* have implications for practice and the real purpose for having a diverse student body—the contribution to the learning environment. First, the Court sanctions the assessment of applicant potential to contribute to the learning of those around them as it states:

As part of its goal of “assembling a class that is both exceptionally academically qualified and broadly diverse,” the Law School seeks to “enroll a 'critical mass' of minority students.” The Law School's interest is not simply “to assure within its student body some specified percentage of a particular group merely because of its race or ethnic origin.” That would amount to outright racial balancing, which is patently unconstitutional. Rather, the Law School's concept of critical mass is defined by reference to the educational benefits that diversity is designed to produce.

These benefits are substantial. As the District Court emphasized, the Law School's admissions policy promotes “cross-racial understanding,” helps to break down racial stereotypes, and “enables [students] to better understand persons of different races.” These benefits are “important and laudable,” because “classroom discussion is livelier, more spirited, and simply more enlightening and interesting” when the students have “the greatest possible variety of backgrounds.”⁶²

The Court also looked at the fact that the military, society, and business in general will benefit from students who had an education in a diverse educational environment.⁶³

The Court's discussion is referring in part to the difference between that student's background and experiences and the background and experiences of other students in the program. The point in *Grutter* seems to be that an education in such an environment is much richer because it goes beyond what the students learn from the professor and the materials presented in class to include a new and bigger picture of our society—the world we live in today. What students need today is not just the academic preparation and some exposure to diverse ideas and cultures, but a real substantive change in their perspective of the world. When students learn that bigger picture, they will be better prepared to deal with a future that includes diversity in their roles as future military, government, or business leaders, which is what the *Grutter* Court means by referring to diversity as a substantial governmental interest. Certainly there is research evidence indicating that an

⁶¹ See generally Audrey J. Lee, *Unconscious Bias Theory in Employment Discrimination Litigation*, 40 HARV. C.R.-C.L. L. REV. 481 (2005); see also Carol Isaac et al., *Interventions That Affect Gender Bias in Hiring: A Systematic Review*, 84 J. ACAD. MED. 1440, 1444 (2009).

⁶² *Grutter v. Bollinger*, 539 U.S. 306, 330 (2003) (citations omitted).

⁶³ *Id.* at 330–31.

environment characterized by diversity adds to student learning, particularly in terms of students' psycho-social development and particularly when the diversity results in students' increased socialization with peers from different backgrounds.⁶⁴ Outcomes also have included improved group skills and problem-solving as well as critical thinking skills.⁶⁵

In addition, the Court acknowledges that enrolling a critical mass of underrepresented students is important so they will not feel isolated or like spokespersons for their race.⁶⁶ The Court's concern with a critical mass seems to go directly to the educational environment that diversity can create. That educational environment is not just limited to what happens in the classroom in terms of the academic material and the interaction among the students, but more importantly, what that environment does to change the perspective of all the students and what they take with them into their future careers. In other words, for learning to occur, a perspective different from the majority perspective is needed, but the individuals with that perspective should have enough support from other likeminded individuals to feel comfortable speaking up.

Professor Christine Chambers Goodman has also written regarding the Court's emphasis on critical mass.⁶⁷ Goodman discusses what the Court stated about why a critical mass is necessary in terms of educational benefits, but views these as additional benefits from the main compelling governmental interest of the Court, which is attainment of a diverse student body. She argues that if appropriate methods are undertaken by a university to attain a diverse student body, the use of critical mass in racial diversity can legitimately serve as a proxy for integration.⁶⁸ She states, "Powell's rationale was that this interaction [in the classroom] was important 'so that they associate not only on an equal basis but also make a real effort to respect the autonomy of other people and to appreciate the virtues of cultural diversity.'"⁶⁹ The integration aspect of this is "that they associate . . . on an equal basis." Requiring integration means that different races share the same space and learn the same academic material; minorities are not kept out of the physical space and the ability to be exposed to the same educational process that the professor sets up.

However, we believe that just as important in Powell's rationale is the part about students learning to value, respect, and appreciate cultural diversity. Before the *Grutter*

⁶⁴ See Mitchell J. Chang et al., *The Educational Benefits of Sustaining Cross-Racial Interaction Among Undergraduates*, 77 J. HIGHER EDUC. 430 (2006); see also Shouping Hu & George D. Kuh, *Diversity Experiences and College Student Learning and Personal Development*, 44 J. COLL. STUDENT DEV. 320 (2003); Jeffrey F. Milem, *The Educational Benefits of Diversity: Evidence from Multiple Sectors*, in COMPELLING INTEREST: EXAMINING THE EVIDENCE ON RACIAL DYNAMICS IN HIGHER EDUCATION 126 (Mitchell J. Chang et al., eds., 2003).

⁶⁵ See David MacPhee et al., *Infusing a Diversity Perspective into Human Development Courses*, 65 CHILD DEV. 699, 699–700 (1994); see also Patrick T. Terenzini et al., *Racial and Ethnic Diversity in the Classroom: Does It Promote Student Learning?*, 72 J. HIGHER EDUC. 509, 526–28 (2001).

⁶⁶ *Grutter v. Bollinger*, 539 U.S. 306, 318–19 (2003) (quoting testimony from then-Dean of the University of Michigan Law School, Jeffrey Lehman, "(t)hat critical mass means numbers such that underrepresented minority students do not feel isolated or like spokespersons for their race.") (citations omitted).

⁶⁷ Goodman, *supra* note 32.

⁶⁸ *Id.* at 12–22.

⁶⁹ *Id.* at 14 (citing JAMES T. PATTERSON, *BROWN V. BOARD OF EDUCATION: A CIVIL RIGHTS MILESTONE AND ITS TROUBLED LEGACY* 205 (2001)).

majority adopted the position, Justice Powell's *Bakke* opinion was the only United States Supreme Court decision to identify diversity as a compelling interest. But the Court had previously discussed the role of cultural values in education in its *Brown* decision overruling the "separate but equal" doctrine.⁷⁰ The Court stated that though equalization had occurred in separate, segregated schools, "with respect to buildings, curricula, qualifications and salaries of teachers, and other 'tangible' factors," the focus of the law must be on the impact segregation has on public education.⁷¹ The Court further opined:

Our decision, therefore, cannot turn on merely a comparison of these tangible factors. . . .

. . . .

. . . Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.⁷²

Therefore, being in a classroom with someone of a different race/ethnicity is a "tangible factor," but the cultural exposure this can bring is an intangible factor that the *Brown*, *Bakke*, and *Grutter* Courts felt was just as important to consider.

But when is critical mass achieved? While the *Grutter* Court did not specify this, in a case involving enrollment of female cadets in a male-only military school, a federal district court opined that achieving at least ten percent female enrollment would be a sufficient critical mass.⁷³ However, social science research indicates this number is too low. In the social sciences, critical mass of a minimum of thirty-five to forty percent minority members as compared with non-minority group members is thought to be important for overcoming negative effects associated with tokenism, such as performance pressure, increased social isolation, and being the target of stereotyping.⁷⁴ Smaller proportions of minority group members have been found to feel more performance pressure and social isolation, and stereotyping by other individuals is more common

⁷⁰ *Brown v. Bd. of Educ.*, 347 U.S. 483, 492 (1954).

⁷¹ *Id.*

⁷² *Id.* at 493.

⁷³ See *United States v. Commonwealth of Virginia*, 766 F. Supp. 1407, 1434–38 (W.D. Va. 1991), *vacated*, 976 F.2d 890 (4th Cir. 1992) (reaching this conclusion after examining the percentage enrollment of females at other military institutions.).

⁷⁴ MARGARET FÖEGEN KARSTEN, *MANAGEMENT AND GENDER: ISSUES AND ATTITUDES* 149 (1994); see also Lynn H. Collins, *Competition and Contact: The Dynamics Behind Resistance to Affirmative Action in Academe*, in *CAREER STRATEGIES FOR WOMEN IN ACADEME: ARMING ATHENA* 45, 45–79 (Lynn H. Collins et al. eds, 1998); Pamela S. Tolbert et al., *The Effects of Gender Composition in Academic Departments on Faculty Turnover*, 48 *INDUS. & LAB. REL. REV.* 562, 563–64, 570–71 (1995).

when an individual has solo or near-solo status, consistent with previous observations of the social dynamics of skewed groups.⁷⁵

It should be noted that this relationship between proportions and effects of minority status appears to be curvilinear rather than linear. For example, Tolbert and colleagues found that as the proportion of women increased, turnover of women increased until the proportion reached the thirty-five to forty percent threshold, after which turnover declined.⁷⁶ This curvilinear effect is thought to be due to the threat to resources that a minority group represents for majority members and the increased resistance of the majority to that threat until the minority group is big enough to exert counter pressure, as was previously suggested by Blalock.⁷⁷ This interpretation was supported in a study by Collins, who measured resistance by majority group members as being reflected in the discrepancy between the percentage of the minority group who were at the highest rank and the total percentage of the minority group.⁷⁸ She found a similar curvilinear effect, with increased resistance to the promotion of women until their average proportion in the workforce reached or exceeded forty percent.⁷⁹

One might ask how the concept of critical mass found in *Grutter* is different than the concept of a quota. The *Bakke* and *Grutter* decisions indicate that a goal can be set, but this goal should not be rigid; instead it should be flexible and designed to enact a commitment to diversity, with the objective of making an effort to come within range of the goal.⁸⁰ For example, the goal of critical mass at the University of Michigan Law School was designed to encourage underrepresented minority students to participate in the classroom.⁸¹ In contrast, the *Grutter* Court defined a quota as a fixed number of opportunities reserved exclusively for members of certain minority groups.⁸² Thus, a goal of having thirty-five to forty percent of the underrepresented group in order to encourage reduced tokenism effects and turnover for the underrepresented group and decreased resistance by the majority group is consistent with the concept of critical mass and avoids the rigidity of a quota.

VII. HOW TO MEASURE DIVERSITY AT UNIVERSITIES

Parts III through VI laid the foundation for a discussion of how using a diversity index or diversity indices could be useful in monitoring whether the admissions policy of a university is, in fact, creating a diverse student population. With that in mind, we now move to a description of how a university could do this. It is not our intent to define which groups are underrepresented or which contribute to diversity at an institution. In

⁷⁵ See Pamela Braboy Jackson et al., *Composition of the Workplace and Psychological Well-Being: The Effects of Tokenism on America's Black Elite*, 74 SOC. FORCES 543 (1995); see also Eve Spangler et al., *Token Women: An Empirical Test of Kanter's Hypothesis*, 84 AM. J. SOC. 160 (1978); Carol Wolman & Hal Frank, *The Solo Woman in a Professional Peer Group*, 45 AM. J. ORTHOPSYCHIATRY 164 (1975).

⁷⁶ See Tolbert et al., *supra* note 74, at 570–71.

⁷⁷ H. M. Blalock, Jr., *Per Cent Non-White and Discrimination in the South*, 22 AM. SOC. REV. 677, 678 (1957).

⁷⁸ Collins, *supra* note 74, at 54–55.

⁷⁹ *Id.* at 54.

⁸⁰ Bingham McCutchen LLP et al., *supra* note 25, at 7–8.

⁸¹ *Grutter v. Bollinger*, 539 U.S. 306, 318 (2003).

⁸² *Id.* at 335.

our view it is the role of institutions to assess such questions. We seek only to provide tools that can aid institutions in the monitoring of representation and diversity.

Goodman offers some suggestions for the measurement and tracking of diversity, including creating a list of important diversity factors related to the mission of the university, measuring the diversity of a class using percentages, and creating a diversity range, with the goal of maintaining a critical mass within that range over time.⁸³ (Note that this use of a range is consistent with the preference of the Court for a flexible goal rather than the rigidity of a fixed number—see earlier discussion in Part V). She proposes the use of what she calls a Diversity Quotient to measure the level of the university's diversity on the identified factors. Her proposed Diversity Quotient also would include an assessment of the applicant pool, the composition of the geographic area, and the prestige of the school and quality of the faculty, among other things.⁸⁴ As she points out, a measurement system such as this would not only help with compliance, but would also allow one to assess at what point sunset has been reached.⁸⁵

Whereas her idea of a Diversity Quotient begins to chart the practical implications of *Grutter*, Goodman does not say how these various components—she lists nine altogether—would be represented within a Diversity Quotient. In other words, how should all these components be added, multiplied, or divided to yield the quotient and what exactly would this number represent? Or would some of these components simply be used to determine the targeted range for the Diversity Quotient? If so, then how should these various components be combined? Given these uncertainties, we believe it is important to continue the conversation that Goodman began by specifying how exactly one could develop a measuring system designed to assess compliance with the spirit of *Grutter*.

To this end, we begin by reviewing characteristics of existing diversity indices within sociology and economics and discuss how they relate to the idea of critical mass as well as to the compelling state interest in *Grutter*. We then discuss how measurement could be conducted throughout the process from student applications to student enrollment in order to be able to examine deviation from various goals, whether they are to diversify for educational reasons, to obtain critical mass for this diversity to work the best, or to serve as a proxy for integration. This measurement process would then allow for an adjustment of goals and/or policies and procedures before the next iteration of converting student interest to applications to enrollment. Many of our examples and much of our discussion is focused on the law school context since that was the focus of *Grutter*. However the proposed measurement process is applicable across higher education.

⁸³ Goodman, *supra* note 32, at 24–26.

⁸⁴ *Id.* at 24–25.

⁸⁵ *Id.* at 36–40 (arguing that implementing a diversity quotient is crucial if the goal, as suggested in *Grutter*, of race conscious admissions programs no longer being necessary in twenty-five years is ever to be realized); see also *Grutter*, U.S. 539 at 343 (stating “We take the Law School at its word that it would ‘like nothing better than to find a race-neutral admissions formula’ and will terminate its race-conscious admissions program as soon as practicable It has been 25 years since Justice Powell first approved the use of race to further an interest in student body diversity in the context of public higher education We expect that 25 years from now, the use of racial preferences will no longer be necessary to further the interest approved today.”).

A. Matching Diversity Indices to the Concept Being Assessed

Economists and sociologists have proposed and used several indices of diversity that could be borrowed and modified for assessing diversity at universities. However, it should be noted that these indices have different purposes. Harrison and Klein noted that diversity measures can be focused on separation, variety, or disparity.⁸⁶ In looking at the compelling interest that underlies the decision in *Grutter*, it is apparent that measures of variety are relevant for assessing the degree to which a group is diverse in terms of bringing to the classroom differing points of view that affect learning. In other words, one would hope to have equal numbers of students across each classification to have the optimal discussion that would result in an appreciation and respect for differences, which presumably would result when every point of view has equal representation.⁸⁷ On the other hand, measures of disparity seem just as appropriate for the compelling interest of attaining a diverse student body, although the focus in these measures is on how much different groups of individuals differ in their portion of a valued resource.⁸⁸ Given historical discrimination that has affected the resources, such as education and income, that different racial and ethnic groups have been able to attain, it would be useful for universities to track this measure over time. Therefore, since these two types of diversity indices have potential as measurement tools for the compelling interest underlying *Grutter*, each type will be described further after which we suggest that they be used at different points in the student admission process to track results of admissions policies and provide guidance for the revision of admission goals and procedures.

1. Critical Mass

Probably the most simple and understandable measure of variety is the proportion of group members within a larger group, such as women in a work group. This has been used in a study of the effects of tokenism on interactions in a group, for example.⁸⁹ A study that used the simple proportion and more complex measures of heterogeneity found no difference in their sensitivity to the effects found in the study.⁹⁰ This suggests that, generally, one might want to use an index that is easier to calculate. However, the simple proportion requires a separate measure for each group, so when there are multiple groups that need to be directly measured, other indices of variety that yield one number across groups may be more useful.

The simple proportion might be a good measure of critical mass if the concept of critical mass is viewed as a comparison of the numbers of students in all minority groups together with the total number of students. This could be applied to race and ethnicity—

⁸⁶ See David A. Harrison & Katherine J. Klein, *What's the Difference? Diversity Constructs as Separation, Variety, or Disparity in Organizations*, 32 ACAD. MGMT. REV. 1199 (2007).

⁸⁷ This equal representation of viewpoints is an ideal and may be difficult to achieve for racial and ethnic groups, because of their differing levels of representation in the general population. This may or may not be true for diversity of life experience.

⁸⁸ Harrison & Klein, *supra* note 86, at 1206.

⁸⁹ See Scott J. South et al., *Social Structure and Intergroup Interaction: Men and Women of the Federal Bureaucracy*, 47 AM. SOC. REV. 587 (1982).

⁹⁰ Lisa Hope Pelled et al., *Exploring the Black Box: An Analysis of Work Group Diversity, Conflict, and Performance*, 44 ADMIN. SCI. Q. 1, 16–17 (1999).

for example, to answer the question of whether at least thirty-five percent of students are from one of the non-dominant racial or ethnic groups. In fact, there is a good reason for grouping minority students across race and ethnicity: it is nearly impossible to create critical mass for groups whose representation in the general population is usually below twenty percent. For example, in the latest census, African-Americans represented 12.6%, Latinos represented 16.3%, Asians represented 4.8%, and Native Americans represented 0.9% of the U.S. population.⁹¹ The total of these numbers is 34.6%, which means that if one grouped these different racial and ethnic groups together and if a university had representation of these groups that paralleled the representation in the general population, it would just reach the 35% critical mass threshold (assuming rounding). Although grouping these racial and ethnic groups makes practical sense in terms of measuring critical mass, we are making an assumption that individuals in the minority groups will feel less like a token and more comfortable speaking up in this situation, which may or may not be the case.

*Table 1: Michigan State University College of Law 2009 Student Enrollment Statistics*⁹²

<i>Race/Ethnicity</i>	<i>Enrolled Students</i>
White non-Hispanic	693
Black non-Hispanic	52
Hispanic	26
Asian/Pacific Islander	36
American Indian or Alaskan Native	14
Race/ethnicity unknown	64
Non-resident alien	79

As an example, consider the Fall 2009 enrollment at Michigan State University's College of Law, listed in Table 1.⁹³ Summing across Black non-Hispanic, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native groups, we obtain the number 128. We then divide this number by the sum of 128 and 693. This sum is the total number of students for which we know racial/ethnic classification and which are not non-resident aliens. This results in the proportion 15.6%, which is below half of the critical mass goal of 35%. We could be optimistic and count the non-resident aliens, who may or may not be in these racial and ethnic groups. Even if they all were, which is highly unlikely, the proportion would still be only 21.5%. We could be even more optimistic and also count all the people who did not report race as part of our minority group. Even if they were all minorities, the proportion would still only reach 26.4%.

Similarly, a proportion could be used to measure critical mass for diversity in terms of life experience. The issues with measuring this are somewhat different, however. When assessing life experience diversity, one could start with the same goal—to achieve

⁹¹ Karen R. Humes et al., *Overview of Race and Hispanic Origin: 2010*, U.S. CENSUS BUREAU, 4, tbl. 1 (2011), <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>.

⁹² NAT'L CTR. FOR EDUC. STATS., www.nces.ed.gov/ipeds/datacenter/ (accessed June 30, 2011). This data captures both part-time and full-time students enrolled in J.D. and Master's degree programs.

⁹³ *Id.*

a critical mass of thirty-five percent for the underrepresented group. But the question would then be: who is the underrepresented group in terms of life experience? Defining this would probably first require measuring important aspects of the life experience of the typical law school student in the nation, such as average length and type of work experience, average amount of travel and languages spoken, average amount of adversity faced, and so forth. In fact, many of these characteristics of the national student population can already be obtained from studies on undergraduate and graduate students that have been carried out over the years by the National Center for Education Statistics (NCES) as well as other research groups.⁹⁴ The underrepresented group would consist of those individuals who had significantly more (or different) life experiences than the typical student.

Exactly which aspects should be measured by a university in a determination of critical mass of underrepresented life experiences should be informed by the list of diversity factors important to the institution's educational mission, as Goodman suggested.⁹⁵ However, universities could also use a predefined measure of nontraditional student, such as the definition of nontraditional status used by the NCES, which is based on the presence of one or more of seven nontraditional characteristics, including older than typical age, part-time attendance, being independent of parents, working full time while enrolled, having dependents, being a single parent, and being a recipient of a GED or high school completion certificate.⁹⁶

2. Heterogeneity

Although using the proportion might be good for examining critical mass when underrepresented groups are combined, there are other types of measures of heterogeneity that may be more useful or descriptive. These indices of variety have been designed to equal zero when there is no variation (e.g., all members fall into one category) and to equal one when variation reaches its theoretical maximum, such as the Blau and Teachman indices.⁹⁷ These metrics have been modified by researchers to simultaneously look at several dimensions, for example racial, ethnic and religious groupings, such as in the Social Diversity Index, a modification of Blau's heterogeneity index that measures the degree of fragmentation in a larger grouping such as a society.⁹⁸

⁹⁴ Other sources of student data include the Higher Education Research Institute at UCLA (<http://www.heri.ucla.edu>), the National Student Clearinghouse (<http://www.studentclearinghouse.org>), the National Post-Secondary Student Aid Study (<http://nces.ed.gov/NPSAS>), and the Western Interstate Commission for Higher Education (<http://www.wiche.edu>).

⁹⁵ Goodman, *supra* note 32, at 24.

⁹⁶ *Trends in Nontraditional Student Enrollment*, NAT'L CTR. FOR EDUC. STATS., <http://nces.ed.gov/pubs/web/97578f.asp> (last visited Feb. 20, 2012).

⁹⁷ See PETER M. BLAU, *INEQUALITY AND HETEROGENEITY: A PRIMITIVE THEORY OF SOCIAL STRUCTURE* (1977) (Blau's heterogeneity index is based on summing all the squares of the fractions in each category and subtracting that from one); Jay D. Teachman, *Analysis of Population Diversity: Measures of Qualitative Variation*, 8 SOC. METHODS & RES. 341 (1980) (Teachman's index takes the negative of the sum of all the fractions multiplied by their logarithms).

⁹⁸ See Tade O. Okediji, *The Color of Brazil: Law, Ethnic Fragmentation, and Economic Growth*, 83 CHI.-KENT L. REV. 185, 186 (2008).

For example, we will apply the Blau index to our Michigan State University College of Law. The Blau index formula is:

$$D = 1 - \sum_{i=1}^N p_i^2$$

D stands for diversity and p refers to the proportion of individuals belonging to the i th category and N is the total number of categories. Therefore, we would first divide each of the numbers for the five different groups (including White/Non-Hispanic) by 821 to obtain the percentage in each group. We then would square each of these numbers and add them together. Subtracting this sum from 1 gives us the diversity index of .314. Since Blau is 0 when all members are in one category and 1 when they are equally spread across categories, the number we obtained indicates a fairly low degree of heterogeneity in the student population.

A university might want to monitor the proportion of minority students to assess whether critical mass has been achieved *and* also monitor heterogeneity using an index such as Blau's because it is possible to obtain a critical mass of minority students but yet not have a high degree of heterogeneity. This would happen, for example, if all or most of the minority students were from one racial or ethnic group. Whether this is good or bad would be interpreted in light of what the institution's goals are. If the institution is concerned with critical mass, but not with the degree of heterogeneity within that critical mass, then this might be appropriate. This could happen, for instance, if the institution is serving primarily one minority group because of its mission or founding principles.

3. Disparity

Institutions may not only want to measure critical mass and heterogeneity, but also might want to use measures of disparity, which, as we stated earlier, seem as appropriate for the compelling interest of attaining a diverse student body. The focus in these measures is on how much different groups of individuals differ in their portion of a valued resource. For example, statistics gathered by government agencies to monitor compliance with federal legislation compare the percentage of underrepresented groups in each job category at each institution to the availability percentages of these groups qualified for the job.⁹⁹ The valued resource in this case is employment. Another example of an index that focuses more on disparity than diversity as proposed by Goltz and Hietapelto is the University Gender Equity Index (U-GEI), which contains measures of the valued resources of employment, education, and empowerment at universities.¹⁰⁰ Table 2 displays how these components are measured in the U-GEI as well as how it is a derivation of the Gender Equity Index (GEI), a set of world statistics that have been monitored by Social Watch, an international nongovernmental organization (NGO), since

⁹⁹ Office of Federal Contract Compliance Programs, U.S. Dept. of Labor, *Federal Contract Compliance Manual (FCCM)*, <http://www.dol.gov/ofccp/regs/compliance/fccm/fccmanul.htm> (last accessed Feb. 26, 2012).

¹⁰⁰ See Sonia Goltz & Amy B. Hietapelto, *Translating the Social Watch Gender Equity Index for University Use* (unpublished manuscript) (on file with authors).

2004.¹⁰¹ The U-GEI divides the percentage or number of women by the percentage or number of men and maximum variation is the same as minimum disparity: when there are 50% women and 50% men, the U-GEI is 100.

Table 2: U-GEI Translation from GEI¹⁰²

<i>Index Component</i>	<i>GEI</i>	<i>U-GEI</i>
Education	1) Literacy rate 2) Primary school enrollment 3) Secondary school enrollment 4) Tertiary school enrollment	(not applicable in this context) (not applicable in this context) (not applicable in this context) 1) Undergraduate enrollment for students 2) Master's program enrollment for students 3) Ph.D. program enrollment for students
Economic activity	1) economic activity (percent women employees) 2) income	1) economic activity (percent women employees) 2) income
Empowerment	1) percent in professional/technical positions 2) percent in management and government positions 3) percent in parliaments 4) percent in ministerial posts	1) percent in professional/technical positions 2) percent in management positions 3) percent in undergraduate, graduate student government, staff council, faculty senate 4) percent on board of control (if applicable)

Thus far, the index has only been applied to measure gender equity and not to measure other aspects such as racial or ethnic equity, but it could easily be converted to measure these aspects as well. For example, if using an index based on the concepts behind the GEI, one might have a goal of 12.6% Black non-Hispanics in the student body because that is the representation of African-Americans in the U.S. population. If parity in terms of educational resources is achieved within the U.S. population, we should see this proportion in the composition of law students. This results in a goal of 14.4 for our equity index, which is 12.6% (Black non-Hispanic) divided by 87.4% (remaining students), multiplied by 100. Using the Michigan State Law School enrollment data to calculate an actual equity index for Black non-Hispanics, we divide 52 (number of Black non-Hispanic students) by 769 (number of remaining students) and multiply by 100, giving us an index of 6.8, suggesting equity is far from being achieved for this group since the index indicating equity in this case is 14.4. For Asians, however, the story is different. Here, our goal is 4.8%, which would be an equity index of 5.0 (4.8 divided by 95.2 multiplied by 100). Our numbers (36 divided by 785 multiplied by 100) yield an index of 4.6, suggesting we are quite close to the goal of 4.8%.

The most interesting aspect of the U-GEI as compared with other measures considered in this Article is that it contains the three components of employment, education, and empowerment, creating a composite picture of the university that extends beyond the representation of students in the classroom. Therefore, although the U-GEI

¹⁰¹ *GEI Regional Average by Component*, SOCIAL WATCH, www.socialwatch.org/node/1156 (retrieved Mar. 4, 2011).

¹⁰² Table from Goltz & Hietapelto, *supra* note 100. The measurement of education is based on student enrollment, the measurement of economic activity is based on the composition of faculty and staff, and the measurement of empowerment includes student, staff, and faculty statistics, but is predominantly based on staff and faculty.

was developed primarily as a measure of parity, it could be used to indicate the degree to which diversity exists more broadly in the university or law school setting. If diverse groups are not well-represented or equitably paid in the staff and faculty (measured by the economic and empowerment components) or not well-represented in student governing bodies (measured in the empowerment component), this indicates that these groups are not receiving what could be called their proportional shares of education, income from employment, and decision-making power. However, under conditions of low parity, educational benefits from diversity are likely to be limited as well particularly if indications are that critical mass has not been achieved.

Using the U-GEI, the number indicating parity is 100 (50% women divided by 50% men times 100) and the number indicating critical mass is 53.8 (35% women divided by 65% men times 100). If one looks at the data from the Goltz and Hietapelto study, for example, one university achieved parity or near parity (numbers over 90) across all three components of the index for twenty years, which also indicates the achievement of critical mass of women across this twenty-year period. The other university never achieved parity or near parity and achieved critical mass (numbers above 53.8) only for the economic activity component and one year of the empowerment component.¹⁰³ The implication of these very different educational environments has been recognized by federal funding agencies. The first institution attracted federal grants because of its diversity, such as for the educational preparation of underrepresented groups; the second university received a federal grant to improve the rate of overall progress of women through the academic ranks and increase the number of women in leadership positions.¹⁰⁴

Therefore, although the *Grutter* decision primarily examines diversity within the entering class of students, universities should consider extending the measurement of diversity to other important groups on campus, including faculty, staff, and boards for a couple of reasons. First, this could help address some of the issues for minority students in the educational system such as those identified in the book *The Agony of Education: Black Students at a White University*,¹⁰⁵ which many minority law students no doubt encounter and which are not addressable by simply increasing student diversity in the classroom. These include student interactions with instructors that do not understand or value diversity, barriers encountered with university administration, and an environment of homogeneity of people found in university spaces. Monitoring and tracking representation in staff, faculty, administration, and governing boards as well as in student bodies would help create a broader environment in which diversity enhances learning. In addition, the modeling of diversity in universities, such as via the percentage of female or minority faculty, is likely to affect student learning outcomes beyond reducing barriers for minorities.

Although law students may interact primarily with other students within their law schools, they also interact with faculty, staff, and administrators at their universities, and these interactions are a form of education about social norms in terms of what is considered to be acceptable and unacceptable behavior. For example, when certain groups are underrepresented in positions of power at the university, this can indicate to

¹⁰³ See Goltz & Hietapelto, *supra* note 100, at 41.

¹⁰⁴ *Id.* at 41–42.

¹⁰⁵ JOE R. FEAGIN ET AL., *THE AGONY OF EDUCATION: BLACK STUDENTS AT A WHITE UNIVERSITY* (1996).

students that, while diversity is valued in the classroom or at the bottom ranks of the law school or university, it is not important at higher ranks. This “lesson” may then be applied, consciously or unconsciously, by students in the legal system when they become lawyers.

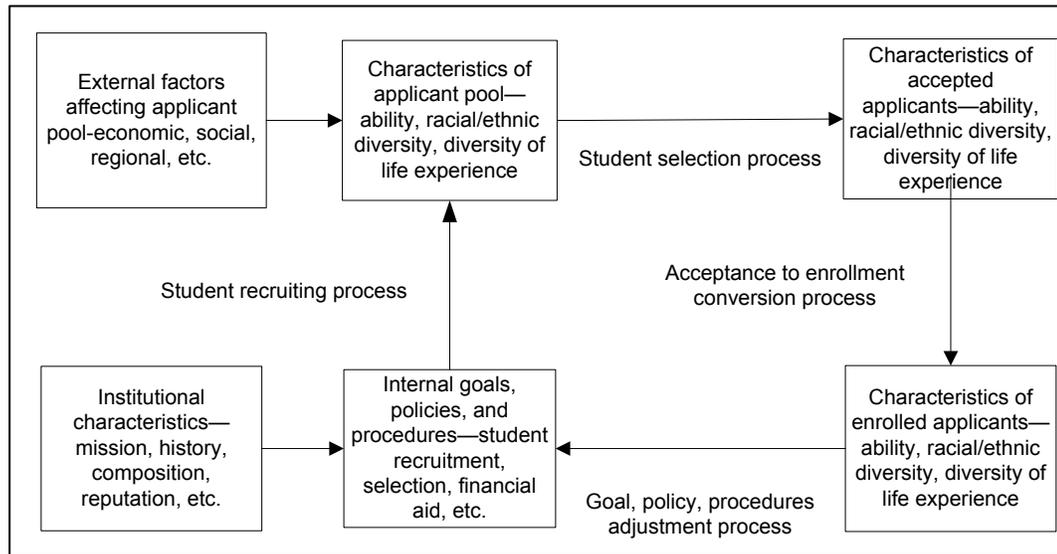
In sum, there are a number of useful tools that can help assess aspects such as critical mass, heterogeneity, and parity, which are all concepts relevant to *Grutter*. In particular, we proposed that the proportion of minority to non-minority applicants or students could be used to assess critical mass, indices of heterogeneity such as Blau’s heterogeneity index could be used to assess diversity in the applicant or student population, and indices of equity or disparity such as ones based on the GEI and U-GEI could be used to assess parity and diversity in the institution. However, for maximum effectiveness in diagnosing where the problems might lie, it is also critical to think about when these measures should be used, which is the subject of the following discussion. In addition, we will suggest a way to measure how much actual measures deviate from the goals that had been set. This will also aid in diagnosing enrollment issues as well as rethinking strategies and procedures for recruiting and admitting students.

B. The Goal Setting, Monitoring, and Adjustment Process

The assessment of diversity should not be discussed in isolation since it should be part of a larger process of goal setting, monitoring, and adjusting during admissions. We have illustrated this process in Figure 1. As can be seen in the figure, this process begins with two sets of factors, those external factors that affect student decisions to apply to the law school and the internal factors that lead to the goals, policies, and procedures the institution sets, such as for recruitment, selection, and financial aid, that affect diversity. External factors affecting the goals a law school sets, for example, should include the *Grutter* decision that permitted attaining a diverse student body beyond simply increasing the enrollment by underrepresented minorities and the *Gratz* decision that prohibited the use of a point system that ensured minorities would be admitted irrespective of a considering a student’s individual background, experiences, and characteristics to assess his individual potential contribution to diversity.

As illustrated in the figure, the admissions process begins with student recruiting, which results in the applicant pool. After this, student selection occurs, which involves a comparison of the applicant pool to the selection standards that have been set as a result of institutional goals and policies. Selection results in admissions letters being sent out, but students may or may not enroll after being accepted. Therefore, the final pool of students is a subset of admitted students. It is important to measure characteristics of these three groups—applicants, admitted students, and enrolled students—in order to examine how diversity changes from pool to pool. It may be, for example, that the initial pool of applicants is more diverse than the accepted pool or the accepted pool is more diverse than the enrolled pool. If so, the institution needs to recognize this “leaky pipeline” and come up with strategies to address it during the adjustment process (the final process illustrated in the figure). This adjustment process would lead to changes that will then be implemented during the next cycle of recruitment, selection, and conversion from acceptance to enrollment. These changes then would hopefully slow the leak, but this would not be known until the measurements are made during the next cycle.

Figure 1: The Administration and Enrollment Process



Universities may or may not want to use all three measures (measure of critical mass, measure of diversity, measure of disparity) discussed above for all three of these student populations (applicants, admitted students, enrolled students). At minimum, whether one has attained critical mass, which is the most general measure, should probably be assessed at all three points in the process for both diversity in terms of race and ethnicity and diversity in terms of life experience. Also, we suggest that all three measures be used to assess diversity in race and ethnicity and diversity in life experience for the enrolled pool because this is the most critical population in terms of classroom environment as well as achieving integration by creating parity. But of course, as discussed earlier, what is measured should ultimately depend upon what the goals of the institution are. However, it should be noted that assessing all three populations with all three measures is likely to generate more information that can be used for diagnostic and adjustment purposes. Also, this may allow an institution to make adjustments during the process itself rather than at the end of the cycle, which will help the institution be more adaptable to particular circumstances.

We would like to describe one more mathematical tool that can be helpful during this measurement and adjustment process. For purposes of our discussion, we will call this the “structure index” because it reveals the subgroup structure of a population and compares that to the structural goal. The structure index (SI) is a measurement of deviation, or distance, from goals and is especially helpful when there is a separate goal for each group in the population. Rather than assessing only whether each separate goal was achieved, one can use the structure index to also assess how well the goals were reached overall. The structure index has a value of one when there is no difference between the goals for the population and the actual characteristics of the population. Its value is zero when the distance is the greatest. The SI formula is:

$$SI = 1 - distance((S_1^a, S_2^a, \dots, S_n^a)(S_1^g, S_2^g, \dots, S_n^g))$$

That is,

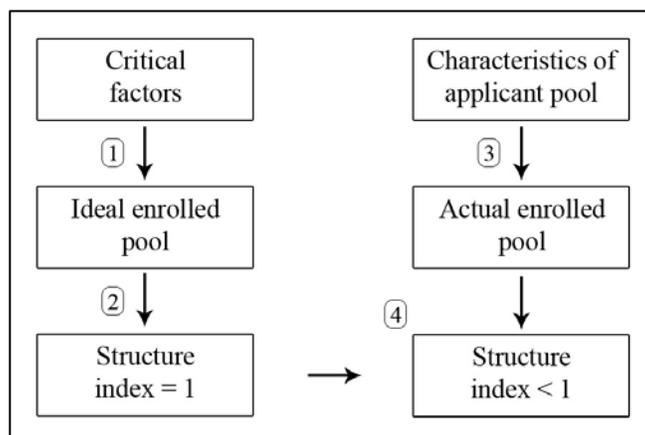
$$SI = 1 - \sqrt{(S_1^a - S_1^g)^2 + (S_2^a - S_2^g)^2 + \dots + (S_n^a - S_n^g)^2}$$

Where superscript *a* stands for actual distribution, superscript *g* stands for goal distribution, and the subscript number stands for different properties or characteristics.

In the application of the structure index as a tool, goals are first set by the law school and these goals lead to the definition of critical factors for the ideal candidate pool, which defines the structure index of one. This is illustrated in the left side of Figure 2. Process (1) in the figure illustrates that the law school first determines the critical factors for a good class structure given the goal or mission of the institution. With the critical factors, the law school can estimate the ideal enrolled pool.

As an example, assume that Michigan State had a goal of parity for its population of law students in 2009. In other words, it wanted the population to reflect the diversity characteristics in the U.S. population. Therefore, the goals would have been something like: 72.4% White non-Hispanic, 12.6% Black non-Hispanic, 16.3% Hispanic, 4.8% Asian, and 0.9% Native American. This ideal enrolled pool then is used to define the ideal structure index, as shown in process (2) in Figure 2. In other words, when actual enrollment in each of these groups is the same as each of the goals for the groups, the ideal enrollment is achieved, resulting in a structure index of one. The right side of Figure 2, including processes (3) and (4), illustrates the implementation and monitoring process, which involves actual enrollment numbers rather than the ideal ones.

Figure 2: Goal Setting and Monitoring Process



Once the law school has determined its ideal enrollment structure, it can set up the evaluation of applicants to admit good candidates individually, as illustrated by process (3). The structure index can be calculated either at the end of the entire admission process for all candidates or after each individual admission for monitoring the degree of compliance with the diversity goals initially established. This involves a comparison of the actual enrollment with the ideal enrollment for the different groups. Therefore, to calculate the structure index in order to complete process (4), the law school would first subtract its goals from the actual numbers for each group and then square this. For

example, in our example using hypothetical Michigan State Law School goals and actual Michigan State Law School data in 2009, our White non-Hispanic population is 693, so we would divide this by 821, the total number of students with known ethnicity, to obtain .844. Then we would subtract our goal, .724, from .844, which gives us .12, and square that, which is .144. We would do the same thing for all groups. The other four numbers we would get from doing the other groups are: .004 (Black non-Hispanic), .017 (Hispanic), .000 (Asian), and .000 (Native American). Then, we would sum these numbers across the groups, obtaining the number .309. Next, we would take the square root of our summation, .556, and subtract this from 1, which gives us .444. Finally, as illustrated by the horizontal arrow in the figure, the actual structure index is compared with the ideal, which has a value of one when all the goals are achieved. In this case, there is considerable room for improvement in terms of reaching the goals. We can see that the main areas that are keeping Michigan State from reaching the hypothetical goals are the overrepresentation of White non-Hispanics and the underrepresentation of Hispanics, with some underrepresentation of Black non-Hispanics contributing to the goal discrepancy as well.

As another example and for the purpose of contrast, assume that the goals were not for parity but for maximum diversity across all populations, not just across the minority groups. This means a goal of 20% White non-Hispanic, 20% Black non-Hispanic, 20% Hispanic, 20% Asian, and 20% Native Americans. It is true that this goal would be difficult to achieve and may be an unlikely goal in most universities, but we provide it here for illustrative purposes primarily because, as stated earlier, this goal would arguably represent the best of all worlds in terms of maximizing appreciation for difference and learning in the classroom. Once again, applying the structure index, we would first subtract our goals from our actual numbers for each group and then square this. In this case, our White non-Hispanic population is still 693, so we would divide this by 821 to obtain .844. Then, we would subtract our goal, .200, from .844, which gives us .644, and square that number, which is .415. Doing this for the other four groups, we would get the numbers: .005 (Black non-Hispanic), .028 (Hispanic), .024 (Asian), and .033 (Native American). Then, we would sum these numbers across the groups, obtaining the number .505. Next, we would take the square root of our summation, .711, and then subtract this from 1, which gives us .289. Recall that the SI has a value of 1 when all the goals are achieved. In this case, there is considerable room for improvement in terms of reaching the goal of maximum diversity. In fact, comparing this with the SI for the goal of parity, we can see that we are closer to achieving the goal of parity (SI=.444) than we are to achieving the goal of maximum diversity (SI=.289).

In summary, the diversity of an incoming class of students is a result of several processes that follow from an institution setting its goals, policies, and procedures as well as factors in the environment external to the institution. These various internal and external factors include: legal decisions; the demographics in the local, regional, or national population; student recruiting and student self-selection which results in the applicant pool; student selection which involves a comparison of the applicant pool to the selection standards; and the conversion of admitted students to enrolled students. The results of all of these processes should be monitored and compared with goals in order to make the appropriate adjustments to policies in a timely manner. We have described several tools that can help in this process. Some of these tools are more appropriate for

assessing critical mass, some are more appropriate for assessing heterogeneity and some are more appropriate for assessing parity. Therefore careful judgment should be exercised in selecting measurement methods. In addition, we propose that it is helpful to use a structural index to assess the degree of deviation from a set of goals.

VIII. CONCLUSION

As suggested by *Gratz* and *Grutter*, diversity in higher education should not be considered independent of the context. To the contrary, diversity is inherent in the context. For example, the *Grutter* decision considered a broad concept of diversity with race being one among many factors, which included so-called soft variables such as various life experiences. Similarly, the *PICS* decision upheld the importance of using a broad assessment of diversity in highly individualized, holistic reviews, particularly in contexts in which freedom of expression and thought are highly valued. One of these contextual elements is also the extent to which members of minority groups feel able to speak up comfortably rather than feeling isolated or feeling that they serve as spokespersons for their particular group, thus the concept of critical mass should be considered. This broad concept of diversity stems from the compelling interest endorsed in *Grutter*, attainment of a diverse student body. This compelling interest can be advanced by allowing individuals from different groups to associate on an equal basis and exposing students to diverse ideas in order to expand their perspective of the world, thus enhancing their ability to deal with diversity in their future roles.

We believe that institutions of higher education should more clearly and purposefully define what they mean by diversity at the highest levels of the institution during policymaking. Also, they should determine which critical diversity factors are needed, given a desired mission or goal. Then, institutions could recruit and evaluate applicants based on these policies as illustrated in Figure 1. These policymaking and implementing processes are important to the idea of carrying out both holistic and individualistic approaches to evaluating candidates in terms of their potential contributions to the classroom with respect to diversity. The holistic view begins with the process of determining critical factors given the mission and the particular underlying interests. The individualized review occurs when evaluating each applicant or candidate, taking into account these critical factors. However, the individualized review must also contain a holistic assessment in that it looks at how well the individual meets the broad array of critical factors, including race and other aspects of diversity, as well as examining how this would contribute to the characteristics of the previously accepted applicants and/or existing student population.

Aside from being more purposeful in the approach to diversity within universities, a university should measure its progress towards the goals it establishes for diversity using measures that most suit those goals. We note that there are several possible ways to measure various aspects of diversity such as critical mass, heterogeneity, and parity. In addition, we note that these can be measured at several different points in the process that begins with student applications and continues with student acceptance and, later, student enrollment. We suggest that it is important to measure all three characteristics (critical mass, heterogeneity, parity) for the enrolled student pool, but that measuring some of these aspects earlier in the process can help diagnose where pipeline leaks in terms of diversity might be occurring.

In addition, to help institutions assess how well they are meeting goals, we propose the use of a structure index, which has a value of one when there is no difference between the goals for the population and the actual characteristics of the population and a value of zero when this difference is the greatest. This monitoring process will provide immediate feedback and, thus, help the university achieve the diversity result much faster. That is, any unconscious bias embedded in a process can be identified through the corresponding structure indices and corrected for quickly. This would be an iterative process occurring frequently over time until what has been called sunset. As defined here, the sunset of a compelling interest would be when the structure index reaches one.

In our view, using indices such as those discussed in this Article allows institutions to better see the forest of the entire contextual diversity issue and also each tree of the diversity application individually and the diversity outcome step by step. This allows for fine-tuning of procedures at each and every step of implementation. As a consequence, the achievement—and as a result, sunset—of diversity goals will be accomplished faster. Note as well that the tools and processes discussed in this Article are general enough that they should be able to be applied and implemented in any specific situation—in other words, across various university goals, various diversity characteristics, and so forth. Therefore, these proposed tools and processes allow for the principles that are discussed with respect to court cases such as *Grutter* and *Gratz* to be translated into specific steps for implementation, addressing an issue that universities have struggled with for years. Utilizing diversity indices will better allow institutions of higher education to stay within the constitutional parameters set forth by the Supreme Court and monitor progress toward attaining a diverse student body.