Public colleges and universities may soon lose the freedom to consider race in their admissions processes. In California and Washington, voters have required colleges to abandon affirmative action, and in Texas, a federal court decision has virtually eliminated the use of racial preferences in college admissions. At the University of Michigan, preferences—established on historical, moral, and empirical grounds—are now being challenged in federal court (Gratz and Hamacher v. Bollinger, et al.; Grutter v. Bollinger, et al.).

While there is a growing movement away from the use of racial preferences in college admissions, there is still support for maintaining diversity in college enrollments, especially in public colleges. Recent polls indicate that the majority of voters favor maintaining racial diversity on college campuses. Further, the state legislature in Texas and the Board of Regents in California have mandated changes in public college admissions practices that essentially ensure diversity. How, then, can colleges develop admissions practices that achieve diversity but do not involve racial preferences, two seemingly contradictory goals?

In this paper we address this question by testing an alternative method of college admissions, the "merit-aware model" proposed by William Goggin. We first reconsider the issue of using racial preferences in the admissions process, then summarize the merit-aware alternative, and present case studies that illustrate how the merit-aware approach can be used. Finally, we conclude with a few lessons that might help inform admissions practitioners and others considering merit-aware admissions.

Racial preferences in admissions originated in efforts to rectify the injustices of segregated higher education. The public colleges and universities are now being challenged to consider race in a manner that is fair, just, and effective. The merit-aware model offers a promising alternative that can help achieve diversity in college enrollments without relying on racial preferences.

Edward P. St. John is a professor in the Department of Educational Leadership and Policy Studies at Indiana University. His research on student aid and other policy issues has appeared in numerous higher education research journals. Ada Simmons has been the associate director of the Indiana Education Policy Center at Indiana University for three years. Her research interests include student access to and persistence in higher education. Glenda Droogsma Musoba is a policy analyst at the Indiana Education Policy Center and is pursuing her doctorate in higher education at Indiana University. Her research interests include access and equity in college admissions as well as student persistence.
The position one takes on racial preferences in college admissions depends on the definition of fairness one holds. 

Due to differences in quality, not all high school students have an equal opportunity to prepare for college. Rural high schools lack the comprehensive spectrum of educational opportunities offered by most public high schools, while urban high schools frequently have lower test scores for a variety of educational, social, and economic reasons. Rural schools tend to be majority white; urban high schools tend to be predominantly black. Explicit consideration of the inequities in schools may provide a fair and just way to reward merit in the admissions process. 

To understand how these issues of fairness and justice pertain to college admissions, we need to reconsider how the admissions process actually works. First, a set of criteria is typically used to develop a screened-applicant pool. Next, screened applications receive a more in-depth review of individual cases before admissions decisions are made. Goggin suggests a third stage in which race might be considered as part of the final admissions decision. This approach—considering race after empirical measures have been used to screen qualified students—may be legally appropriate. 

Most of the current controversy about admissions centers on the criteria used in the first stage of the admissions process and whether these measures are fair and just. Students who are not admitted may feel they have been treated unjustly. The construction of fair and just criteria for the screening process merits reconsideration in this new policy context. Our focus is on creating a fair and just approach that yields a screened-applicant pool. 

If racial preference is dropped from the admissions review process, the number of applicants from underrepresented minorities could decline, and diversity in elite public higher education would become even more elusive. Unless a campus can come up with an appropriate alternative to absolute stan-
The current debate about alternative approaches to admissions has sparked a new wave of efforts to interpret test scores. According to the Wall Street Journal, the Educational Testing Service (ETS) has performed research that identifies “strivers,” students who score 200 points higher on the SAT than would be predicted from their socioeconomic background. But this method has been controversial, leaving room for other alternatives.

In the Postsecondary Education Opportunity Newsletter, William Goggin outlined an admissions strategy that he characterized as “fairer, more just, and more accurate” than reliance on absolute test scores and that was sensitive to the underlying issues of equity. He argued that merit was crucial:

Does anyone, anywhere believe that a student’s absolute test score is a perfect measure of anything, much less merit? Is not the concept of merit a little more complicated than can be captured by absolute test score alone? Merit, to most Americans, is not simply where you wind up, but what you did with what you were given. But, in the absence of race and ethnicity, there is little in current models to account for this basic American value, save grade point average and class rank.

Goggin also argued that colleges and universities should take a more proactive approach to defining merit in ways that align with the new concepts of fairness and justice in college admissions:

Why not create a measure of the extent to which a student’s achievement exceeded what could reasonably have been expected given his or her academic background? In particular,
Universities have discretion over the weighting of various empirical measures used in college admissions.

why not use a measure of the extent to which the actual test score exceeds the predicted score? Make no mistake, incorporated in the right admissions model, such a merit measure would be as powerful as race and ethnicity in achieving the goals of affirmative action.\(^{18}\)

While this argument has some common features with ETS’s attempt to identify strivers, Goggin’s method is simpler, less problematic, and more flexible, enabling institutions to construct their own merit measures in the first stage of the admissions process.

First, a simple merit index can be constructed by subtracting the average SAT score of an applicant’s high school from the applicant’s own score. This index could be supplemented with class rank, GPA, and other factors typically used at the institution.

Goggin argues that institutions should focus only on positive merit. His concept of the merit index uses high school averages as a proxy for the predicted score, rather than relying on a full set of predictors. Using the average high school score is logically consistent with the use of achievement test scores to compare schools, and is now common policy in most states.

Second, a more powerful merit index\(^{19}\) can be constructed by assigning weights in the simple merit index. Universities have discretion over the weighting of various empirical measures used in college admissions. The rationale universities use for weighting the merit index is a crucial issue.

Public universities using the merit-aware approach can assign weights that are fair, relative to the educational context in the state. One possible approach might be to assign higher weights to high schools from urban and rural areas, based on differentials that are reported in state reports of student achievement.

Under the assumption that the rankings for achievement test scores and SAT scores are highly correlated, another approach would be to assign higher weights to schools with substantially lower-than-average achievement test scores. Both of these approaches would link the college admissions process to state efforts to improve K-12 education in ways that might enhance both agendas.

This approach would move selective institutions away from an admissions process that eliminates qualified minority applicants. To get maximum advantage, institutions should admit or deny the vast majority of applicants by using the merit index, along with traditional factors, but without data on
Consideration of race/ethnicity data should only be considered in the last stage of admissions.

Consideration of race/ethnicity data should only be considered in the last stage of admissions to minimize the institution's legal and political vulnerability. We examine the merit index only for its power to identify additional students of color and do not use racial preferences in the third stage of the process.

There are two crucial issues facing selective universities seeking to achieve greater diversity: Encouraging sufficient numbers of qualified minority students to apply and using an admissions screening approach that fairly and justly rewards students for their merit—and yields a diverse screened applicant pool.

The merit-aware approach relates directly to the second issue: using a fair and just approach to increase the percentage of minority applicants who are screened into the second phase of the admissions process.

We constructed a merit index for both illustrative cases\textsuperscript{20} using a three-step process.

First, we calculated the average SAT score for each high school, using the scores of all students from a given high school enrolled in public institutions of higher learning in the state during the academic year prior to the one for which we had application data. We used the average high school score for students enrolled in public universities in the entire state, rather than the average from the applicant cohort because both of these universities attracted applicants with SAT scores higher than the state average. Had we used the institutional data sets to estimate high school averages, we would have underestimated merit.

Second, we calculated a merit index for all students, counting only positive merit scores, as Goggin recommended. We experimented with a range of different approaches to analyzing the merit index. We found that using an index based totally on merit increased diversity in the screened-applicant pool, compared with using SAT only. In another analysis we found that the merit index predicted persistence about as well as the SAT.\textsuperscript{21} Indeed, just having positive merit was positively associated
with persistence during the first year. Based on these analyses, we conclude that the merit index offered an appropriate way to alter the first stage of the admissions process.

Third, we decided to weight merit in a way that recognized high-achieving students from high schools with lower than average achievement test scores. For students from schools with SAT averages below the mean, students’ merit scores were incrementally weighted more heavily so that those students from the lowest-achieving schools received the highest weights. This recognized the extra challenge that these students faced, given the apparent difference in quality of high schools.

The cases below illustrate how this method of using the merit index would influence the applicant pool for two campuses. In both cases, we first screened 30 percent of the applicants using an SAT cut-off score—1160—to achieve 30 percent in these cases. Then, we screened another 10 percent, selecting the top students using the weighted merit index.

The first institution was located in a region of the state that was mostly white and had not attracted large numbers of minority applicants. As illustrated in Table 1, the application of the merit index substantially increased the percentage of minority students in the screened-applicant pool.

In particular, the merit pool more than doubled the percentage of blacks in the screened-applicant pool. The percentage of black students in the merit group was 6.1 percent, compared to 1.1 percent in the initial group and 3.2 percent in the applicant population as a

Table 1.
Application of the Merit-Aware Approach in Selective University—Traditional Campus

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Applicant Pool (%)</th>
<th>Percent with SAT (\geq 1160)</th>
<th>Percent in Merit Group</th>
<th>Percent in Screened Pool (A+B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>0.3</td>
<td>0.1</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Asian</td>
<td>2.7</td>
<td>4.4</td>
<td>2.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Black</td>
<td>3.2</td>
<td>1.1</td>
<td>6.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Foreign National</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.8</td>
<td>1.2</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Other American</td>
<td>1.0</td>
<td>0.8</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>White</td>
<td>90.1</td>
<td>90.3</td>
<td>87.7</td>
<td>89.6</td>
</tr>
<tr>
<td>Not Specified</td>
<td>0.9</td>
<td>1.9</td>
<td>0.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>
There were modest gains for Hispanics and Native Americans using this method.

At the second campus there was more of a history of diversity, and the campus attracted a larger percentage of minority applicants. However, if the campus relied solely on absolute SAT scores in the applicant screening process, diversity would be reduced substantially.

As shown in Table 2, while 5.9 percent of the applicants were African-Americans, only 2.0 percent of the screened-applicant pool would be African-American if the SAT cutoff of 1160 were to be used. However, the merit index alone would generate a pool that was 12.1 percent African-American and 22 percent minority. With this expanded pool of screened-applicants, it would be easier to generate a diverse admitted population without considering race.

If the courts decide in favor of race-blind admissions rather than retaining affirmative action, campuses may need to make rapid adaptations in their admissions practices, just as graduate programs did after the Bakke decision. Even if affirmative action is retained, the merit-aware approach may offer a viable alternative. The central challenge for all of us, regardless of the positions we hold on this controversial issue, is to find just and fair ways to provide postsecondary opportunity.

The merit-aware approach to admissions holds promise, but it needs to be more fully tested and adapted by admissions personnel in colleges and universities, as they adjust their admissions practices to

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Applicant Pool (%)</th>
<th>Percent with SAT ≥ 1160 (A)</th>
<th>Percent in Merit Group (B)</th>
<th>Percent in Screened Pool (A+B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>0.5</td>
<td>0.1</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Asian</td>
<td>4.8</td>
<td>7.8</td>
<td>4.5</td>
<td>7.0</td>
</tr>
<tr>
<td>Black</td>
<td>5.9</td>
<td>2.0</td>
<td>12.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Foreign National</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.3</td>
<td>2.2</td>
<td>2.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Other American</td>
<td>1.8</td>
<td>1.2</td>
<td>2.0</td>
<td>1.4</td>
</tr>
<tr>
<td>White</td>
<td>81.9</td>
<td>82.9</td>
<td>77.6</td>
<td>81.5</td>
</tr>
<tr>
<td>Not Specified</td>
<td>1.6</td>
<td>3.4</td>
<td>0.4</td>
<td>2.7</td>
</tr>
</tbody>
</table>
these new conditions. There are also important roles for state agencies and testing services engaged in the process of adapting admissions to these new conditions. From our initial analyses we have derived a few lessons that might inform admissions practitioners and other interested stakeholders.

Lesson 1: Admissions offices should assess alternative approaches to specifying merit-aware indexes, using their institution’s admissions data, while continuing with customary admissions processes.

Because the analyses presented here use actual admissions data, it seems safe to conclude that most campuses can find workable approaches to the development of merit indexes, while temporarily continuing their customary practices. The worst-case scenario would be to attempt a complete change in admissions practices, disrupting the process, delaying notifications, and losing qualified applicants.

Perhaps the most reasonable approach would be to continue with customary practices for the initial screened-applicant pool, possibly eliminating race if the board of trustees favors a cautious approach. At the same time, it is possible to experiment with the development of a merit index that expands the applicant pool to include more diverse screened-applicants in a merit group that receives full admissions screening.

Interestingly, when the merit-aware approach is used, more white students with lower scores would receive a more complete review because of their merit. What both whites and minorities in the expanded-applicant pool have in common is that they have attended high schools that are less competitive, qualifying them for special merit consideration because their achievement was higher than other students in their schools.

Further, it is not necessary to limit the variables considered in the merit index or in the weighting process to the SAT (or ACT) tests. Rather, colleges and universities can develop approaches that are consonant with their own admissions practices. We used SAT scores in this pilot test as a means of illustrating that it was indeed possible to make these adaptations.

Lesson 2: Collaboration is needed to develop appropriate methods for using information on high schools to construct fair and just measures of merit.

It would be easier for individual campuses to adapt their admissions practices if data were shared across campuses in the public system. More selective universities attract applicants from the top
In recruiting, emphasize that admissions screening will consider standardized test scores—and individual merit.

tiers of their high school graduating classes. Thus, the measures used to rate high schools and construct merit indexes reflect actual comparisons of high schools, rather than comparisons of student traits.

It may be necessary to explore ways of using data on public high schools to develop fair weighting criteria for rating high schools. The most immediate problem is that some of the high schools with lower scores on the SAT (or ACT) have only a few students who take these tests, making high school test score averages less reliable for these schools than for others.

It may be appropriate to also consider the percentage of students passing high school achievement tests, the percentage of students on free or reduced lunch, or the availability of Advanced Placement courses as part of the weighting index used for high schools.

Collaboration on the construction of appropriate indexes for rating high schools not only involves other stakeholders, but also creates an opportunity to improve the linkages between public schools and public universities. The goal in many states is to increase the percentage of students making the transition from high school to college.

Lesson 3: When recruiting students, emphasize that admissions screening will consider individual merit, along with standardized test scores.

Given the litigation over affirmative action, the news coverage of the strivers’ index, and board decisions to reconsider race-based admissions, colleges need to pay attention to the messages they send to high school students and counselors. It is possible that selective public colleges could lose their minority applicants, as was the case in California.

The process of informing high school students and counselors that the campus is making an effort to consider weighted merit as well as test scores can have another positive effect: Additional minority applicants. Keep in mind that whether conventional admissions methods or merit-aware approaches are used, low percentages of minority applicants limit an institution’s capacity to establish a diverse campus.

Lesson 4: Consider using merit-aware indexes in awarding student financial aid.

The question of diversity does not end with the process of creating a diverse screened-applicant pool, or with the process of admitting diverse students. Instead, diverse students who are admitted must also enroll and be retained. In this regard, it may be possible to use a merit index in the awarding of stu-
Ideally, student aid would be awarded based on need, after a fair and just admissions process.

dent aid. Recently, Hanson and Burt completed a paper describing how the University of Texas developed an elaborate set of measures to award aid to more diverse students and thereby increase diversity on the campus. Thus, aid is an important part of the process.

Ideally, student aid would be awarded based on need, after students are admitted based on a fair and just admissions process. Certainly need-based aid is a means of equalizing opportunity. However, many colleges and universities already have dedicated substantial portions of institutional aid dollars to attract more able students.

Since a simple, unweighted merit index predicts college success about as well as the SAT, it may be possible to redirect a portion of this merit-based campus aid. By considering the merit index in the merit award process, campuses can attract more diverse students as well as students who have high chances of success.

Lesson 5: Be prepared to work through multiple iterations of the new admissions scheme in order to achieve the outcome most appropriate for your campus.

The process of establishing a new campus procedure, particularly one as critical as admissions, is likely to be complicated and controversial. From a logistic standpoint, it will necessarily entail a series of time-consuming, trial-and-error analyses, simulating the outcomes of various weighting schemes, in order to achieve the degree of diversity desired on a given campus.

Conversations to introduce the new process, agree on campus goals for diversity, and consider and prepare for the consequences of such schemes on other campus systems—such as financial aid and academic and social support services for underrepresented students—are likely to be challenging.

Lesson 6: The merit-aware approach can provide a fair and just way to screen admissions applicants, but it is not a substitute for affirmative action.

The merit-aware approach to admissions is not a replacement for affirmative action. There are legal, moral, and economic reasons to take affirmative approaches to college admissions and employment.

There are, however, good reasons to use a merit index in the first stage of the college admissions process: It provides a fair, just, and equitable basis for admissions that could help colleges choose students likely to be successful. Therefore, the merit-aware approach has value, regardless of the decisions courts, trustees, or voters eventually make regarding the future of affirmative action.
Endnotes:

1 Sugrue, et al., 1999.
3 Carnevale, 1999; Healy, 1999.
8 We think there is compelling evidence that the vestiges of segregation have not been removed (Hossler & St. John, 1997; St. John & Hossler, 1998; Williams, 1997). However, we also recognize that there is a need to adjust to the new political context.
9 The idea of using merit-aware admissions strategies is not simply a matter of finding another way of providing racial preferences. Indeed, as the cases illustrate, underrepresented white populations may benefit more from the new approach to fairness than do Blacks. This is because rural high schools that are typically white-majority have, on average, lower SAT scores than schools in urban or suburban areas.
10 Goggin, 1999.
12 Sharlet, 1999.
13 Healy, 1999.
14 In fact, class rank and the merit index developed here can both be used to increase diversity in the screened applicant pool.
15 Dockser Marcus, 1999.
16 Gose, 1999.
19 Given that diversity and fairness are the goals, a “powerful” index is one that achieves both of these goals in ways that fit institutional preferences.
20 While these analyses use actual admissions data derived from student records provided by collaborating universities, the two case studies are hypothetical. The admissions scenarios described in these cases are not representative of those currently in use in the collaborating colleges.
22 Hypothetically, in an applicant pool of 10,000 students in a traditional school that admitted only 40% of applicants, 94 African American students would be admitted. Sixty-one of these (in a possible 1,000 slots) would be included in the screened applicant pool through the merit index, while only 33 (in a possible 3,000 slots) would be included through SAT scores. In more selective schools the challenge would remain to include meritorious and diverse students in the admitted pool, as part of subsequent phases of the admissions process.
23 Hanson and Burt, 1999.
Works Cited:


