A cure for the Electoral College?

By Arnold Barnett and Edward Kaplan

2:00 a.m. May 17, 2009

While the Electoral College caused little mischief in the 2008 election, it has often served as the fun-house mirror of American politics. Had one in 90 Ohioans voted differently in 2004, John Kerry would have won even though George W. Bush had a nationwide popular-vote margin of 3 million. Whatever happened in Florida in 2000, no one doubts that Al Gore won the national popular vote that year but lost the presidency. In 1984, the Electoral College rewarded Walter Mondale for getting 41 percent of popular votes by giving him 2 percent of electoral votes.

There are various proposals to alter or abolish the Electoral College, perhaps the most conspicuous being a scheme to move to a national popular vote through an agreement among states. The 21 small states that get extra strength in the Electoral College have shown little enthusiasm for this change. Indeed, the reform has passed thus far only in a few heavily Democratic states, which suggests that its prospects are limited.

There is, however, a revision of the present arrangements that might satisfy many different constituencies, and could conceivably be in place by 2012. A candidate's overall showing could be expressed as a percentage, and be an average of his or her showings in the 51 states (including the District of Columbia).

It would be not a simple average but rather a weighted one, the weights of which would be each state's present share of electoral votes. The candidate with the highest weighted-vote share would win the election.

What's a weighted average? We routinely encountered them in high school, when a teacher announced that the final exam counted as (say) 50 percent of the grade, the midterm exam as 30 percent and homework as 20 percent. We knew what that statement meant: If a student got 82 percent on the final exam, then 50 percent of 82 percent – 41 percent – would be credited toward his final score. If he got 90 percent on homework, then another 20 percent of 90 percent – 18 percent – would be added. The sum of the three contributions would be his final score.

Under the proposed system, California – with 55 electoral votes out of 538, which is 10.2 percent of the total – would have its popular-vote outcome weighted by 10.2 percent. Outcomes in the eight small states, which each have three electoral votes, would be weighted by 3/538 – 0.6 percent. An average state would have a weight of about 2 percent.

Under the proposed system, California – with 55 electoral votes out of 538, which is 10.2 percent of the total – would have its popular-vote outcome weighted by 10.2 percent. Outcomes in the eight small states, which each have three electoral votes, would be weighted by 3/538 – 0.6 percent. An average state would have a weight of about 2 percent. Thus, the popular-vote result in California would count five times as much as the result in a mid-sized state, while the smaller states would retain the "boost" the Electoral College now gives them.

This weighted-average scheme might not immediately seem exciting, but it achieves zest when we realize what it would accomplish. As we argued in the American Statistical Association's Chance magazine, its advantages include:

• Given recent voting patterns, it would increase rather than decrease the role of smaller states as a group.

This would happen because the weighted-average formula takes into account not just the fact of victory but the margin of victory, and the small states vote more lopsidedly than the nation as a whole. President Bush carried Utah (five electoral votes) by 45 percentage points in 2004; under the Electoral College system, however, he gained no more than he would have had he won by one-tenth of a percentage point. Calculations show that the new system would increase the collective impact of smaller states without yielding a partisan advantage. This rise in influence is the exact opposite of what would happen to small states under a popular-vote election. Therefore, it could defuse their opposition to reform.

• It would also increase the role of the largest states.

Because they viewed the winner as a foregone conclusion, both presidential candidates largely ignored four of the five largest states in 2004 and 2008: California, New York, Texas and Illinois. Under the weighted-average formula, however, a two-point gain from 42 percent to 44 percent in California would mean as much as a similar gain in five mid-sized states.

Thus, the candidates would rediscover the way to San Jose, Chicago, Fort Worth and Brooklyn.
It would dispel the most troubling consequences of the winner-take-all rule. The present arrangements are most troublesome when the vote is very close, in which case half the voters are exalted over the other half. Under the weighted-average formula, however, a tie would be treated as a tie, and small uncertainties in the vote count could not take on gargantuan importance (Think Florida, 2000). It would eliminate the danger that the president would be chosen by the House of Representatives. Under the current system, various combinations of state outcomes could give the two main candidates 269 electoral votes apiece, and a third-party candidate could keep any single competitor from getting a majority of electoral votes. In either case, the election would be decided in the House of Representatives, under bizarre rules that give all states equal weight. Such an outcome could not occur under the proposed system, under which the recipient of the highest weighted-vote share would win the presidency. As a practical matter, it would closely replicate a popular-vote election. Over the presidential elections since 1960, the difference between the winner’s weighted vote and his actual popular vote averaged two-fifths of one percentage point. That difference is 50 times lower than the average discrepancy between Electoral College and popular-vote shares. This is not to say that the winner of the popular vote would always win under weighted voting. (The opposite happened in 2000, as it did under the Electoral College.) But a reversal could only occur when the runner-up is a very close runner-up. Other than inertia, the main problem with adopting the system is its apparent complexity. Working with weighted averages is admittedly less straightforward than using electoral or popular votes. But a splendid Web site might make the key concept more accessible. And, with American youths falling ever further behind their counterparts elsewhere in mathematics, a more quantitative approach to a foremost national issue might have real value. Is it worth giving this system real consideration? The authors vote yes. Barnett is George Eastman Professor of Management Science at MIT’s Sloan School of Management. Kaplan is Beach Professor of Management, professor of Medicine and professor of Engineering at Yale University. Both have written extensively about U.S. elections and the Electoral College.