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Do College Rankings Mean Anything? Why rankings by *U.S. News* and others are deeply flawed

By George Leef and Michael Lowrey

<u>Summary:</u> The annual college rankings published by *U.S. News & World Report* are widely read and regarded as an authoritative assessment of the nation's colleges and universities. If the *U.S. News* rankings place one school higher than another, many people take that as proof that the higher-ranked school is academically better. Unfortunately, the *U.S. News* ranking system is deeply flawed. It does not measure educational results at all. What it bases its "calculations" upon are mainly input measures, such as financial resources and purely subjective factors such as "academic reputation." After examining all of the criteria employed in the *U.S. News* ranking system, authors George Leef and Michael Lowrey conclude that the rankings are almost meaningless. More highly ranked colleges and universities do not necessarily offer a better academic experience than do schools with lower rankings. Parents and students who want to gain real insight into the quality of colleges and universities should carefully investigate the details of their intellectual climates and not be swayed by facile and formulaic rankings.

Introduction

Americans love lists and rankings of things. Magazines and websites often feature pieces such as "The Top Ten Most Livable Cities" or "The Safest SUVs." Decisions on where to live or what to purchase can be influenced by those lists and rankings.

The infatuation with lists and rankings is very evident in higher education. A very closely-watched publication each year is the annual ranking of American colleges and universities by the magazine *U.S. News & World Report*. Although there are other college rankings, the *U.S. News* is by far the most influential, purporting to tell students and parents whether any particular college is among the nation's elite institutions, merely so-so, or an academic weakling. Sometimes it is a professed goal of college presidents to improve their school's ranking. Students and parents are often elated by acceptance at a school with a high ranking, or depressed by a rejection by such an institution.

In this paper, we will critically examine first the *U.S. News* college ranking system specifically and then the general idea that it is possible to produce a meaningful ranking of colleges and universities. We conclude that neither the *U.S. News* system nor any other gives reliable guidance as to the quality of the educational experience for students. Those who wish to evaluate colleges and universities should ignore rankings and investigate schools directly for pertinent information about the faculty, the curriculum, and academic standards.

Determining Educational Quality: The U.S. News Model

Near the beginning of each new school year, *U.S. News & World Report* publishes an issue devoted largely to its rankings of American colleges and universities, later republished in book form as *America's Best Colleges*. Those rankings are widely regarded as providing an accurate measurement of the quality of education at our colleges and universities, and people react to them. Administrators at colleges that have gained in the rankings can be expected to trumpet that fact. Some schools will use a favorable ranking in their marketing efforts. On the other hand, administrators at schools that have declined in the ranking can be expected to issue a statement saying that the rankings are not reliable because their school is better than ever. Students and parents often pay close attention to the rankings, using them to decide where to apply. The *U.S. News* rankings have become the benchmark in college evaluation.

How, precisely, does the magazine come up with its rankings? Its calculations are based on six factors: an assessment of academic reputation; student quality; faculty resources; student retention and graduation rates; financial resources; and average alumni giving rate. To ascertain whether this approach actually tells us anything about educational quality, we need to look closely at the six factors.

One point should be noted immediately: The six factors that go into the ranking are all either input measures or subjective evaluations. The weights assigned to these factors are also entirely subjective. The factors are not output measures that directly tell us anything about the learning that occurs — or perhaps does not occur — in the school.†

Academic reputation

To obtain its academic reputation scores, the magazine sends a survey form to three top officials — the president, the chief academic officer, and the dean of students — at each college and university in the United States. The survey asks those individuals to rank schools similar to themselves (i.e., research universities only rank other research universities and liberal arts colleges only rank other liberal arts colleges) on a scale of 1 (low) to 5 (high) regarding their academic reputation. The results of this survey count for 25% of the total score for the school.

Are the results of this peer assessment survey reliable indicators of the quality of the educational experience for students? There are strong reasons to doubt that they are. The officers who are surveyed are very knowledgeable about their own institutions, but in most instances they would have little or no direct knowledge about the academic environment even at other schools in their own state, much less around the entire nation. The president of a liberal arts college in Wisconsin, for example, probably has very little concrete information about the quality of instruction and academic standards even at other colleges in Wisconsin, much less those spread across the rest of the country. If a college in, let us say, Maryland had made great academic strides in the last year (or the

[†] Even if one where to accept that the validity of *U.S. News*' approach, its rankings cannot be used to assess changes in the quality over time. The magazine's specific methodology has changed — and continues to change — over time, making results from one year not comparable to those from other years. *U.S. News* does not go back and adjust their calculations for previous years as their methods change over time. *U.S. News*' obvious self-interest — the rankings are news worth only to the degree that there's something new about them — has prompted some commentators to suggest that the magazine's changing methodology may be motivated, at least in part, by commercial considerations.

reverse), it is not likely that the president of the Wisconsin college would know about it. In assigning exact numerical values to the responses, *U.S. News* is imputing exactitude where it is unwarranted. The calculated score for academic reputation in fact tells us nothing reliable about a college or university.

Moreover, academic reputation does not necessarily correlate with student learning. A school may have a strong reputation based on current (or past) noteworthy accomplishments of some faculty members and yet have many courses that are poorly taught and in which students can receive good grades without much learning. On the other hand, a little-known college with no academic reputation to speak of, might nevertheless offer very effective instruction that is of great and lasting benefit to its students. There is no necessary relationship between academic reputation and instructional quality. As Thomas Sowell writes in his book *Inside American Education*,

Some of the most prestigious institutions ... receive such an extraordinary student body that such students can learn a great deal on their own, despite the shortcomings of classroom teaching. Conversely, at the other extreme, some small colleges may have such cozy student-faculty relationships that the student can remain immature, dependent, or even irresponsible, missing an opportunity to develop fully, either intellectually or as a responsible adult who can meet deadlines, respect rules, and maintain standards. None of these characteristics, which affect the quality of education, is something that can be quantified in a formula or calibrated in a simple ranking. (*Inside American Education*, p.108)

The method employed by *U.S. News* to gauge academic reputation is not a reliable way of measuring quality. Nevertheless, fully one-fourth of the ranking is based on this nebulous factor.

Student selectivity

In the *U.S. News* model, 15% of the score is based on factors relating to each school's selectivity. The more "selective" the school is in accepting students who apply, the higher its ranking. The selectivity calculation depends on four factors: the SAT or ACT scores of the student body (40% of this score); the percentage of incoming students who were in the top ten percent of their high school class (for research universities and liberal arts colleges) or in the top 25 percent (for masters-granting universities and comprehensive colleges) (35%); the school's acceptance rate for applications (15%); and the school's "yield rate," which is the percentage of accepted students who actually enroll (10%).

The use of student selectivity as a factor in the rankings is based on the assumption that educational quality of a college or university can be inferred from the academic backgrounds of their students. Highly selective schools are presumed to be of higher quality than are non-selective ones. There are, however, reasons to doubt that student selectivity is a good proxy for educational quality.

For one thing, there is no necessary connection between selectivity and the quality of a school's academic culture. A professor teaching a class of very bright students may for that reason choose to conduct it in a particularly skillful and rigorous manner, but that is by no means assured. The existence of easy, low standards courses at elite universities is well known. Students at Harvard, for example, admit that they know that they can coast by with minimal effort and still and earn at least a B in many courses And on the other hand, some professors at non-selective institutions nevertheless teach exemplary courses from which their students benefit greatly. There may be a correlation between selectivity and academic quality, but the strength of that correlation has never been demonstrated.

It is also true that selective institutions may have weak curricula and non-selective ones may have strong curricula. Within the UNC system, a Pope Center study found in 2003, the most selective institution, UNC-Chapel Hill, has the weakest core curriculum requirements, allowing students to choose among a vast assortment of course offerings, many of them narrow or trendy. On the contrary, Elizabeth City State University, a non-selective school, has a strong core curriculum requiring all students to take an array of courses that constitute a firm educational foundation.

While it may be true that professors will tend to teach more rigorously with higher aptitude students in class, there is no reason to assume that they will necessarily do so.

Not only is student selectivity a poor proxy for educational quality, but it is also subject to manipulation. The increased use of "early decision" programs offers colleges and universities a means to influence their yield rates without actually affecting quality. Under early decision, an applicant applies to an earlier deadline to a single school and agrees to attend if accepted. In exchange for these commitments from potential students, institutions agree to act more quickly on early decision applications. Early decision offers a theoretical yield of 100 percent (all that are accepted have already committed to attend), which compares very favorably to the perhaps 30 percent yield typical during the regular admissions process even at many well regarded schools. Increasing the percentage of an incoming class admitted through higher-yielding early decision applicants will increase a college's overall yield, making it appear as more desirable under the U.S. News model.

Some schools are also known to encourage applications from students who are very unlikely to be offered admission, just so they can look more selective and raise their score in this regard. Therefore, the selectivity "calculation" used by U.S. News is itself suspect, as it depends to some extent on the willingness of the school to engage in gamesmanship to raise its score.

Student selectivity turns out to be an unreliable indicator of educational quality.

Faculty resources

Twenty percent of the U.S. News ranking is based on six factors relating to the school's faculty. Those factors are: faculty compensation (35%); the percentage of faculty members with the top degree in their field (15%); the percentage of full-time faculty (5%); the overall student to faculty ratio (5%); the percentage of classes with 50 or more students (10%); and the percentage of classes with fewer than 20 students (30%).

The underlying assumption that the model makes here are that you get educational excellence when you have highly paid full-time professors with terminal degrees teaching small classes. The more a school deviates from those conditions, the lower its quality ranking. As with the factors we have already examined, this one is also predicated on assumptions that are questionable.

First, merely because a professor is highly paid does not tell us anything about either his teaching competence or his willingness to devote time and effort to his classes. At prestige research universities where faculty members are very highly paid, one often finds that the professors are so wrapped up in their own research that they badly neglect their undergraduate courses. Sometimes what should be basic survey courses are instead reduced to the professor's current book topic, far too narrow to be of much value to the students. High compensation for professors does not necessarily indicate that students are receiving a high quality education. Nor does low compensation indicate that professors are less capable and that their students receive a low quality education. Professors at schools with low pay scales, as is generally the case at non-prestige liberal arts colleges and middle-and lower-tier state universities, often take their teaching obligations very seriously and they know the subjects they teach every bit as well as their highly paid counterparts. Furthermore, the higher a school's pay scale, the more likely it is that a professor will have one or more graduate students working with him, who will actually shoulder much of the burden of teaching and grading, whereas schools with lower pay scales usually do not have graduate programs and therefore the professors will have to handle the teaching and grading work themselves. That is to the benefit of the students.

Second, it is not necessarily true that a professor is better at teaching merely because he has earned the terminal degree in his field. The underlying assumptions here are that the only way to become truly expert in a discipline is to study it in an academic program leading to a doctorate and that the ability to instruct students is enhanced by having done so. Neither assumption holds up under scrutiny.

Someone who is motivated to become an expert in a field can do that by independent reading and communica-

tion with acknowledged authorities. The renowned economist Gordon Tullock, for example, is a lawyer by training and has no degree in economics. He would be a wonderful addition to any economics department, but would lower the school's ranking due to his lack of a Ph.D. in economics. There are many other people who know a subject very well from their business or professional careers and could teach college students very capably, but if they don't have a terminal degree, a school that hires them would lower its ranking and the perception of its quality.

It is also erroneous to assume that the ability to teach undergraduates is enhanced by having earned a doctoral degree. Someone with a master's or even a bachelor's degree who has amassed personal experience in his field may be at least as capable an instructor as is someone who proceeded to earn a Ph.D. and has spent his career in the academic world. Practical experience may in many cases be better preparation for teaching at the undergraduate level than is the effort that goes into earning a terminal degree.

The third factor here, the percentage of full-time faculty members, weighs down the scores of schools that rely to any extent upon adjunct faculty. The system's assumption is that full-time professors are better teachers than are part-time professors. There is, however, no reason to make that assumption. Because they work on year-to-year or semester-to-semester contracts, adjuncts know that they need to perform well if they wish to continue teaching at a school. Moreover, adjuncts may bring an element of personal experience that full-time professors do not have. For example, a school that employs a prosecuting attorney to teach a course in criminal justice may be giving its students an excellent learning opportunity, perhaps far superior to a course taught by a professor with a Ph.D. in criminal justice who has never been involved in a trial. This is not to say that there are no drawbacks to the use of adjunct professors. Adjuncts, for one thing, tend to be less accessible to students because they are not on campus all day and frequently do not have a campus office. Our argument is simply that the use of adjunct professors should not automatically be regarded as an indicator of low educational quality.

The other considerations here relate to the size of classes. *U.S. News* accepts the conventional wisdom that smaller classes are educationally better than large ones. While it may well be true that a particular professor (we'll call him Prof. Smith) could give his students more attention if he were teaching a class of 15 than a class of 100, it is not necessarily true that if Prof. Smith teaches 100 students they will have a poorer educational experience than if they had Prof. Jones in a class of 15. Professors, like all human beings, are adaptable. Someone who is determined to give his students a sound and rigorous course can find ways of doing that whether he is teaching a large lecture section or a small number of students. Likewise, someone who is more concerned about his research, consulting, or other preoccupations may be just as ineffective with a small class as with a large one.

Nor is a low student-faculty ratio or high a percentage of classes with lower enrollment a sign of quality in all cases. Many colleges and universities feel compelled to offer an extremely broad variety of majors, including programs that generate only limited student interest. In some cases, this includes majors that graduate only two or three students a year. A school with a higher percentage of classes with under 20 students could simply be offering more such unpopular majors. Such small programs can be of suspect quality. The of necessity limited upper level offerings may not cover key areas in a field. Small departments can also breed overfamiliarity and group think, with the few faculty and small cadre of students being exposed to only a very limited range of viewpoints and teaching styles.

Students may find it easier to get individual time with professors in schools with low student/faculty ratios, but a low ratio does not guarantee that faculty members will make themselves accessible. Therefore, class size and faculty to student ratio are weak proxies for educational quality.

Graduation and retention rates

The next set of data that go into the calculation of school ranking pertains to student retention and graduation, comprising 25% of the total score. For research universities and liberal arts colleges, 64% of this score is determined by the percentage of incoming freshmen who graduate within six years. (For master's universities and comprehensive colleges, this makes up 80% of the score.) The other factors considered here are the percentage of

freshmen who return to the school the following year and the school's "graduation rate performance." The latter is based upon a comparison between the predicted graduation rate based upon the characteristics of the incoming student body and the actual graduation rate. Schools enhance their ranking by having a higher graduation rate than would have been expected. (Graduation rate performance is only calculated for research universities and liberal arts colleges.)

Schools that have high graduation rates receive high scores, but is there good reason to believe that high graduation rates mean high educational quality? No. Graduation means that a student has accumulated enough course credits; it says nothing about the academic worth of those credits. Schools that want to "improve" their ranking could do so by pressuring faculty members to grade leniently so that students will be less likely to drop out or transfer, or by watering down the curriculum. Conversely, a school that insisted on rigorous academic standards and a challenging curriculum would find its ranking depressed if a significant number of students transfer or drop out. Therefore, we cannot say with any confidence that graduation and retention rates are a proxy for educational quality.

Financial resources

Ten percent of a school's ranking is based on its average educational expenditure per student.

There are many ways in which a school can spend its revenues on "education" that have little or no impact on the quality of teaching and student learning. As we have already seen, high spending on faculty salaries does not necessarily mean high quality instruction. High spending on lavish facilities may be pleasing to students (and to faculty members and administrators, too), but learning can occur in the humblest of facilities if the students and professors are motivated. Some college and universities spend heavily on research institutes, conferences, academic presses and other things have little or no bearing on the quality of education they provide to students, yet their high spending is taken as indicative of educational quality.

This factor rewards schools that have large endowments or receive high amounts of government support, but spending is not a reliable proxy for educational quality.

Alumni giving

The last factor that *U.S. News* considers is the percentage of alumni who contribute financial support to the school (5%).

The stated justification for using this measure is that it supposedly indicates the level of satisfaction with the school. The problems with that argument include that many alumni contributors have no current knowledge about educational conditions at the school and that satisfaction may be based on considerations other than academic quality. Alumni may give because of the success of sports teams, for example. Contribution rates are also highly dependent upon the efficiency of schools' alumni affairs offices, which can vary widely in effectiveness. Alumni giving is no better an indicator of educational quality than are the other five factors we have examined.

The Weakness of the Ranking System

The weakness of the *U.S. News* ranking system is striking: It does not directly measure educational outputs — student achievement — and none of the factors that go into its calculations is a reliable proxy for educational quality either. Consequently, the mathematically precise computations upon which the rankings are based are illusory. Instead of working with six measurements of quality, as it seems to do, the system actually works with no measurements of quality. While the top ranked colleges and universities may provide a higher quality education than do those with low rankings, the system of analysis employed by *U.S. News* does not give us grounds for believing that to be so.

Perhaps an analogy will clarify the point. Suppose that we wanted to know which cars are the safest, and which the least safe. The way to approach the problem would be to perform tests directly on a sample of each vehicle to see how well they stand up to crashes. But what if such direct testing was not allowed or was not feasible. So we then devise an alternate safety evaluation system that ranked vehicles based on:

- 1. A questionnaire sent to three executives at each auto manufacturer, asking them to give numerical ratings to each car made in accordance with their views on the car's reputation for safety
- 2. The selectivity of the manufacturer in its hiring of employees
- 3. Employee satisfaction
- 4. How much it cost to build the vehicle
- 5. The percentage of return customers
- 6. Percentage of management holding MBAs or other advanced degrees

Would the calculations from that system enable us to say with any confidence that the top ranked vehicles were really the safest and the lowest ranked were really the least safe? Certainly not. Such a system would be so error prone that it would be worse than having no ranking system at all.

One of the crucial defects in the *U.S. News* system is that it ranks colleges and universities as though each was a monolith. The truth is that most institutions are quite heterogeneous. That is particularly true in the case of large state universities, where a single campus may have more than 40,000 students taking courses in dozens of departments. The quality of the educational experience can vary greatly from one department to the next, but that fact is entirely overlooked in a ranking system that only considers information on the whole institution. Many of the nation's leading universities owe their high rankings to their great reputations for research, but they badly neglect many of their undergraduates. Professor Murray Sperber writes that "despite all the lip service that universities now pay to a 'commitment to undergraduate education,' most have established a faculty reward system that relentlessly denigrates undergraduate teaching." (*Beer and Circus*, p. 77) Just as, to return to our hypothetical auto rankings, the top ranked manufacturer might have some poor individual vehicles and low ranked manufacturers might have some excellent vehicles, highly-ranked schools may have areas of educational weakness and lesser-ranked schools may be superior in some or even many respects.

We believe that the *U.S. News* ranking system is no more reliable than hypothetical safety ranking system above. A high ranking does not ensure that students will receive an excellent education and a low ranking does not ensure that they will not.

Not only does the *U.S. News* system fail to identify the best colleges and universities, but it also has the perverse effect of creating incentives for colleges and universities to make decisions with their impact on the school's ranking in mind, rather than the improvement of educational quality. For example, a school might have the opportunity to hire a highly capable, energetic adjunct professor at a fairly low salary to teach Introduction to Chemistry, but because the individual does not have a Ph.D. in chemistry and would not be full time, adding him to the faculty would hurt the school's ranking in two of the measurements. The school might decide against hiring him for those reasons. This is not to say that schools always are driven by the impact of choices on their rankings, but they do introduce incentives that can work against decisions that would do the most to improve the quality and affordability of education.

Education leaders, politicians, students and parents would be wise to stop focusing on the *U.S. News* college rankings, which are not reliable indicators of educational quality.

Better Methods

Even though the *U.S. News* approach is not a good way of assessing educational quality, that does not mean that assessing college quality is impossible. Attempting to rate entire colleges and universities on the basis of input measures, as the *U.S. News* system does is not useful, but by focusing attention on certain aspects of schools, it is possible to get a sense, even if not an exact mathematical calculation, of their academic quality.

Students, parents, and others who are interested in evaluating colleges and universities for their academic quality should be prepared to do a considerable amount of individual research. Among the key points to investigate are these:

Curriculum

Some schools have done away with curriculum requirements entirely, leaving it up to the students to choose whatever courses seem most appealing - which often means easy and entertaining. At many schools, students have to satisfy a set of "distribution requirements," meaning that they're obligated to take so many courses in each of several different areas of study. Only at a fairly small number of schools is there a true core curriculum composed of courses that are the pillars of a well-rounded education.

The lack of a core curriculum does not necessarily mean that a student cannot get a sound education. What it means is that it will take more guidance, both by parents and faculty advisers to seek out the courses that are worthwhile and avoid those that are not. The presence of a true core curriculum is a good indicator of academic seriousness of purpose, but the lack of one doesn't necessarily indicate the opposite.

Potential students should also examine the requirements and courses actually offered by a school's majors. Do these upper level courses touch on the critical areas of the field? Flipping through a school's course catalog is not enough - many schools list a variety of courses in their catalogs that they seldom if ever actually offer.

Faculty

In many research universities, graduate students handle much of the teaching in some courses and departments. That is something students and parents should try to avoid. If graduate students teach many of the "core" courses and courses in the field in which the student intends to major, that is a sign of weakness. If, on the other hand, those courses are taught by professors who have already been tenured, that is a good indicator — assistant professors who are working toward tenure are often too distracted by their need to publish to give their classes the attention they deserve.

Courses

Much can be learned by scrutinizing the syllabi for a sampling of courses. Will students have to do a significant amount of writing? If so, that is evidence that the professor takes a deep interest in the course and will work with the students. On the other hand, if there are no paper assignments and exams are nothing but objective questions, that indicates a lack of professorial commitment. Another thing to look for, especially in English and the humanities, is evidence of bias. It is not always apparent from a syllabus, but sometimes a professor will let it be known that he or she harbors certain beliefs that strongly color the course. Students and parents should regard it as a serious demerit to a school if they find that bias is prevalent and tolerated. (A source that is valuable in this regard is the website NoIndoctrination.com.) A third indicator of academic weakness is the abandonment of traditional testing (even if by objective questions) in favor of other kinds of "assessment" that often covers for severe grade inflation.

Academic climate

In addition to the above criteria, students and parents can investigate the academic climate at a school in a more

general way by looking at the following points: Is the library used for serious study, or mainly as a singles bar? Does the school have extracurricular activities of an intellectual nature, such as debate, drama, and music? What kinds of visiting speakers have come to the campus? Does the student newspaper indicate that there is interest in anything except campus fun? If it is possible to speak with recent alumni, what is their view of the academic seriousness of the school, particularly the department of greatest interest to the student? Does the school have a threatening speech code or other restrictions on communication? What percentage of students go on to advanced degrees?

Conclusion

Another automotive analogy will be useful here. If you are going to buy a new car, you would not want to simply consult a magazine or website to see which models were highly rated. You would want to actually get in several vehicles, drive them, and examine the quality of workmanship before making a decision. Similarly, it takes a lot of individual effort to evaluate a college or university. Neither published rankings like those of *U.S. News & World Report* nor the carefully-crafted advertising of a school will tell you much about a school's academic strengths and weaknesses. There is no easy or objective way of finding out about them. It requires knowing what to look for and persistence in seeking out the information.

About the authors

George Leef is the Executive Director of the John William Pope Center for Higher Education Policy and Adjunct Professor of Law and Economics at Northwood University. Michael Lowrey is associated editor for *Carolina Journal* and an adjunct fellow at the John Locke Foundation. He has taught at the University of North Carolina-Charlotte and at Wingate University.