ESSAY

MEASURING SCHOLARLY IMPACT: A GUIDE FOR LAW SCHOOL ADMINISTRATORS AND LEGAL SCHOLARS

GARY M. LUCAS, JR.†

INTRODUCTION

Texas A&M, the public university for which I work, assesses its colleges and departments based partly on scholarly impact and using quantitative metrics. As part of my administrative duties, the law school’s dean has assigned me the task of identifying scholarly impact metrics for use in assessing the performance of our law faculty collectively and individually. This Essay discusses the major issues that arise in measuring the impact of legal scholarship. It explains important scholarly impact metrics, including the Leiter score and Google Scholar h-index, and the major sources of information regarding scholarly impact, including Google Scholar, Westlaw, HeinOnline, SSRN, and bepress.

I intend for this Essay to serve as a guide for law deans and legal scholars interested in measuring the impact of legal scholarship. In addition, university administrators should find it helpful for comparing the impact of their own law faculty’s scholarship with the scholarship of law faculties at other universities. The primary obstacle to such comparisons is a dearth of publicly available information. To that end, the Essay recommends that each law school create a Google Scholar profile for its faculty and explains the procedure for doing so. By acting on this recommendation, administrators would dramatically improve our ability to assess the impact of legal scholarship. Moreover, a ranking of faculties by Google Scholar citation count

† Professor of Law and Associate Dean for Assessment, Strategic Analysis and Reporting, Texas A&M University School of Law. I thank Andy Morris and Greg Sisk for their helpful comments. I also thank the staff of the University of Pennsylvania Law Review, especially Greg Bischoping and Ben Weitz, for excellent assistance in editing and improving the essay.

(665)
would provide a much-needed supplement to existing rankings schemes, including ranking schools based on U.S. News peer reputation score.

Part I of the Essay discusses citations, Part II discusses downloads, and Part III makes the case for widespread use of Google Scholar profiles.

I. CITATIONS

This Part discusses the use of citations as an assessment tool. This practice is controversial, so Section I.A addresses common criticisms. Section I.B discusses the Leiter score, Section I.C discusses Google Scholar, and Section I.D discusses HeinOnline.

A. A Defense of Citations as an Assessment Tool

Law deans or university administrators who use citations to assess law faculty performance are likely to face some resistance from the faculty itself. This Section briefly addresses the major criticisms that administrators may encounter.

1. Criticism Number One: Citations Do Not Measure Everything That Is Important

This criticism is undoubtedly true as far as it goes, but it does not go very far. Law professors have many roles. They teach students, educate the practicing bar, testify before Congress, represent clients, and much more. Citations do not capture the impact of many of these very important activities. Administrators must keep this limitation in mind and conduct a holistic performance evaluation in light of their law school's mission and goals. That said, many law schools devote significant resources to funding scholarship, presumably in the hope that the scholarship will have an impact within the academy and on the law. Citations are perhaps the single best tool available for measuring scholarly impact.¹

2. Criticism Number Two: Your Citation Count Is Flawed

No citation count is perfect. Some counts (e.g., Google Scholar) may include citations (e.g., citations in unpublished working papers) that some administrators would prefer to exclude. Other counts (e.g., HeinOnline) may exclude citations (e.g., citations in social science journals) that some administrators would prefer to include.

¹ See, e.g., Theodore Eisenberg & Martin T. Wells, Ranking and Explaining the Scholarly Impact of Law Schools, 37 J. LEGAL STUD. 373, 374 (1998) (arguing that citation counts assess "not what scholars say about schools' academic reputations but what they in fact do with schools' output").
Nonetheless, the fact that a metric is imperfect does not mean that it is useless. Particularly when it comes to comparing faculties across law schools, the fact that a specific citation count is flawed often will not affect the rankings. For example, if the particular citation count that an administrator relies on happens to underestimate the “true” citation count of Law School X, it will also likely underestimate the true citation count of other law schools as well. Consequently, the resulting ranking of law schools may be unaffected by this measurement error.

As a caveat to this point, flaws in a citation count may affect rankings where law faculties differ in systematic ways. For example, if the faculty at Law School X is cited in social science journals with greater frequency than faculties at other law schools, then a citation count that excludes citations in social science journals may rank Law School X lower than would a more inclusive count.

In evaluating individual faculty members, the same principle applies but with lesser force. A citation count that underestimates or overestimates the true citations of Professor A will likely do the same for other scholars as well. But in some cases, the ranking of individual faculty will depend greatly on the particular citation count used. For example, a count that excludes citations in social science journals will likely underestimate the impact of interdisciplinary scholars compared to those who produce more traditional legal scholarship. To combat this problem, my law school calculates citations using various databases, each of which differs in scope of coverage. Transparency is also important. Individual faculty members should have the opportunity to inform the law school administration if they have a legitimate concern that a particular citation count places them at a disadvantage.

3. Criticism Number Three: Citations Do Not Measure Quality

At the level of the individual, citations do not correlate perfectly with quality. For example, the “industrious drudge” may accumulate citations simply by producing many mediocre articles, and the author of “the classic mistake” may be cited frequently for having said something embarrassingly wrong. Nonetheless, scholars who have higher citation counts tend to have better reputations, which suggests that citations are useful for assessment purposes.

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4 See, e.g., id. at 470-73 (listing the most cited legal scholars).
The imperfect correlation between citations and quality that exists at the individual level diminishes in importance for comparisons across faculties.\(^5\) For example, most faculties will have a few industrious drudges, so excluding them would not greatly affect the rankings. Not surprisingly, faculties that rank highly based on citations tend to have outstanding reputations (with some notable exceptions).\(^6\)

More fundamentally, citations almost certainly provide a better measure of quality than the measure that legal scholars have traditionally used, i.e., placements in highly ranked law reviews. The problems with relying on placements are well-documented\(^7\) yet my conversations with other administrators and law professors suggest that the practice remains pervasive. I have little doubt that obtaining a good placement will enhance impact by increasing exposure and readership.\(^8\) But once an article is placed, the most significant measure of its impact is whether other scholars read and rely on it, and citations measure this more precisely than placements.

4. Criticism Number Four: Citations Are Biased Against Scholars in My Field

Citation counts vary across fields within the law. For example, the top scholars in constitutional law and law and economics are cited much more often than the top scholars in tax and family law.\(^9\) In evaluating individual

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\(^5\) See Eisenberg & Wells, supra note 1, at 377 ("For the purpose of ranking schools, it is only necessary that citation frequency correlates with objective quality, not that it perfectly reflects quality.").

\(^6\) See, e.g., Gregory C. Sisk et al., Scholarly Impact of Law School Faculties in 2015: Updating the Letter Score Ranking for the Top Third, 12 U. ST. THOMAS L.J. 100, 101 (2015) (ranking law schools by letter score, which is based on citations, and finding that the top five, in order, are Yale, Harvard, Chicago, New York University, and Stanford).

\(^7\) See, e.g., Olufunmilayo B. Arewa, Andrew P. Morriss & William D. Henderson, Enduring Hierarchies in American Legal Education, 89 Ind. L.J. 941, 1010 (2014) ("Not only do we think that placement is at best a limited signal of quality, given the widespread concerns over ‘insider bias’ in journal placement and most law reviews’ failure to use methods like blind submission to address such issues, but the relative success rate of different subject matters in top journals varies widely.").

\(^8\) Cf. Gregory Scott Crespi, Judicial and Law Review Citation Frequencies for Articles Published in Different ‘Tiers’ of Law Journals: An Empirical Analysis, 44 Santa Clara L. Rev. 897, 901-02 (2004) (finding that articles published in prestigious journals are cited much more often by courts and scholars, but concluding that it is difficult to determine if this is because prestigious journals are given undue weight or because those journals publish higher quality articles).

faculty, administrators may want to judge faculty within a field against faculty within that same field.

At Texas A&M, the field bias problem arose recently in connection with a University program that funds fellowships for visiting scholars. The purpose of the program is to bring distinguished scholars from outside the University to visit the campus, so they can collaborate with the University’s faculty and interact with our students. The law school nominated several leading legal scholars for fellowships. The decision whether to award a fellowship is based in large part on how the nominee compares to others in his or her discipline based on citations. This presented a problem because the scholars whom the law school had nominated had very different citation counts, not because their work differed materially in quality, but because of field bias. Fortunately, the law school administration was aware of field bias and included in its request an analysis of each nominee’s citations relative to other scholars in the same field. This avoided the problem of having the University compare the scholars to each other when they were in fact incomparable.

For comparisons across faculties, field bias becomes less important. Most law schools have scholars in both high- and low-citation fields, so most schools are on a level playing field. That said, law schools that have a disproportionate number of scholars in either high- or low-citation fields will benefit or suffer accordingly in the rankings.

5. Criticism Number Five: Citations Are Biased in Favor of Senior Scholars.

This criticism arguably has some merit, but can be at least partially addressed if an administrator concludes that doing so is desirable. Senior scholars have a larger stock of articles, which gives them an advantage over junior scholars in accumulating citations. One way to address this problem is to divide total citations either by age or by years since receiving the J.D. For example, Scholar A, who has 200 citations, may appear to have had a greater impact than Scholar B who has only 100 citations. But if A received his J.D. twenty years ago, and if B received hers only five years ago, then A’s citations per year since J.D. (ten) are less than B’s (twenty), making A look less impressive by comparison.

B. Leiter Score

The Leiter score, created by Brian Leiter and refined by Gregory Sisk, has emerged as the industry standard for comparing law faculties based on scholarly impact.\(^{10}\) A faculty’s Leiter score equals two times the faculty’s average citations plus the faculty’s median citations, which places greater weight on the average than on the median faculty member.\(^{11}\) The Leiter score is calculated with respect to the tenured faculty only and excludes clinical and legal writing faculty unless the school in question has an integrated tenure track under which these faculty have a scholarship obligation similar to the doctrinal faculty.\(^{12}\)

The Leiter score is based on citations in Westlaw’s Journals and Law Reviews (JLR) database over a recent five-year period,\(^{13}\) so it highlights scholars whose work is currently relevant rather than those who accumulated citations in the distant past. For example, to calculate Cass Sunstein’s citations, you would enter the following search in the JLR database: “Cass /太阳stein and DATE(aft 2011) and DATE(bef 2017).”\(^{14}\) You would then examine the first twenty hits to determine if there are any false positives, e.g., references to Sunstein that do not cite his work or citations to other scholars with the same name. If so, you would examine the first fifty citations to determine the percentage of false positives and multiply this percentage by the total hits to estimate the total number of false positives. You would credit Sunstein with citations equal to his total hits minus the estimated false positives. An attractive feature of this method is that it counts citations to books as well as articles.

The Leiter score is particularly influential because Gregory Sisk and his colleagues use it to rank the top third of law schools, a ranking that they update periodically.\(^{15}\) Sisk’s rankings are arguably the best available for purposes of comparing the scholarly impact of law faculties. Brian Leiter also uses Sisk’s citation counts to rank the top legal scholars overall and within various fields.\(^{16}\)

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\(^{11}\) Id. at 117.

\(^{12}\) See id. (explaining the procedure for conducting a citation count for purposes of calculating the Leiter score).

\(^{13}\) Id. at 100-02.

Unfortunately, the Leiter score suffers from two significant drawbacks that limit its usefulness. First and most importantly, calculating a faculty’s Leiter score is labor intensive. Sisk employs a team of research assistants and librarians for this task. Given the labor required, Sisk does not calculate a Leiter score for every law school—only the top third of schools—and he does not update his rankings every year.

Second, the only citations counted are those that appear in publications contained in the JLR database. This means that the Leiter score measures the impact of legal scholarship on the work of other legal scholars, but not on the courts or social sciences. Thus, the Leiter score may underestimate the contribution of scholars who are frequently cited by judges or in social science journals. In ranking law faculties, however, this limitation only matters if some faculties influence the courts or the social sciences to an extent that is out of proportion to their influence on legal scholarship relative to that of other faculties. In addition, some administrators may place less weight on citations outside law reviews, in which case the Leiter score’s narrow scope becomes a strength not a weakness.

C. Google Scholar

Based on my interactions with scholars outside the legal academy, Google Scholar (GS) is more widely used among scientists for purposes of counting citations than among legal scholars. Part of the goal of this Essay is to change that. GS citation counts are not without problems, some of which I address below. But GS has enormous potential to provide us with significant information about the impact of legal scholarship at a very low cost.

Individual scholars can create a GS profile, and GS will automatically add their publications and count citations. A scholar can then make his or her profile visible to the public. In addition, a law school can create a GS profile for its entire faculty that includes all of the faculty’s publications and citations. Texas A&M School of Law, for example, has created a GS profile for its faculty and Part III explains how other law schools can do so as well.

GS has several features that make it especially useful. In addition to counting total citations, GS gives a separate count covering the past five years. GS also calculates a scholar’s h-index, which is the largest number h, such that h of the scholar’s publications have been cited at least h times. For example, a

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17 Nick Farris and his colleagues recently conducted a very useful study of the legal scholars most cited by courts, but it is limited in scope. See generally Nick Farris et al., Judicial Impact of Law School Faculties (Aug. 23, 2016) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2826058.

18 Texas A&M Law Faculty, GOOGLE SCHOLAR, https://scholar.google.com/citations?hl=en&user=BVRza6gAAAAJ&view_op=list_works [https://perma.cc/KgZV5AZ7].
schorlar who has five articles that have been cited twenty, five, four, two, and
two times respectively has an h-index of three. Compared to total citations,
the h-index deemphasizes the importance of scholars who have a large
number of citations attributable to a small number of publications. Finally,
GS includes citations to some books as well as articles.

GS also has three major advantages over the Leiter score. First, once a
scholar or law school has created a profile, GS automatically updates it with
new publications and creates an up-to-date, computer-generated citation
count. This makes GS citation counts more current and far less labor intensive.
Second, public GS profiles are visible to everyone, whereas the citation counts
that underlie the Leiter scores published by Gregory Sisk are not. Finally,
GS includes citations that appear in a much broader array of publications,
including social science journals. Consequently, GS does not underestimate
the value of interdisciplinary scholars who are cited by social scientists.19

Nonetheless, GS suffers from significant drawbacks. First and most
importantly, many legal scholars and law schools do not have a profile. This
means that ranking scholars and faculties is labor intensive and requires
manual searches. Of course, this limitation could be overcome if more
scholars and law schools created profiles. Second, GS includes citations that
some administrators might prefer to exclude, e.g., citations in unpublished
working papers. Finally, GS sometimes introduces errors, e.g., double
counting a citation. These last two problems are less of a concern when
comparing faculties, as opposed to individual scholars. Both problems will
arise with respect to all faculties, so they will likely affect any ranking based
on GS citations only in exceptional cases.

D. HeinOnline

Although it has received less attention than Google Scholar, HeinOnline also
features computer-generated citation counts for legal scholars. Hein identifies
and generates a list of articles authored by a particular scholar and then generates
a citation count based on that list. Hein then ranks scholars by citations.

In my experience, the Hein citation counts are accurate with two major
exceptions. First, if two or more authors have the same name, Hein sometimes
attributes articles to the wrong author. Second, if a scholar has published
under multiple names (e.g., using a nickname or a different last name) or if a
scholar does not consistently use his or her middle initial or suffix, then Hein
may generate multiple citation counts for the same scholar. This means that

19 Another method for measuring the impact of interdisciplinary scholarship would be to use Web
of Science, which is a citation index that includes articles published in social science journals. See WEB
obtaining an accurate count requires manual aggregation. Fortunately, both problems are easily overcome if the scholar creates a Hein profile. Once a scholar has a profile, Hein will automatically generate a citation count, but each faculty member will need to monitor it to ensure that new publications are added. My law school worked with Hein to create a profile for every faculty member who has publications on Hein. Because Hein organizes profiles by school, anyone can easily view the Hein citation count for any of our faculty members.

Although useful for quickly generating a citation count for a particular scholar, Hein suffers from two major drawbacks. First, because many scholars have not created a Hein profile, the Hein rankings are not always accurate. Similarly, ranking law faculties using Hein, while perhaps not as labor intensive as generating Leiter scores, requires significant work. As with GS, this problem could easily be overcome if more law schools created profiles for their faculty members. Second, Hein only counts citations in publications that are included in the Hein database.\(^20\) This means that Hein citation counts are narrow relative to GS and exclude, for example, citations to books and articles not included in Hein’s database and citations in social science journals.

II. Downloads

Downloads are not as widely accepted as citations for measuring scholarly impact because it is not always clear who downloaded a particular article, whether they read it, or whether they found it useful. Nonetheless, because citations are a lagging indicator, recent downloads are useful to the extent that they predict how frequently a scholar’s work will be cited in the future.\(^21\) This feature of downloads makes them especially valuable in assessing the impact of scholars who have recently produced a substantial amount of work that has not existed long enough to accumulate citations. Section II.A of this Part discusses SSRN downloads and Section II.B discusses downloads from the bepress institutional repository.

A. SSRN Downloads

SSRN downloads are particularly important for two reasons. First, in an early study, Bernard Black and Paul Caron found that SSRN downloads are

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\(^20\) For a list of publications included in the Hein database, see Hein’s ScholarCheck: Quick Reference Guide, HeinONLINE, http://heinonline.org/HeinDocs/ScholarCheck.pdf [https://perma.cc/N3V5-NLSB].

\(^21\) See Bernard S. Black & Paul L. Caron, Ranking Law Schools: Using SSRN to Measure Scholarly Performance, 81 Ind. L.J. 83, 112 (2006) ("SSRN downloads can potentially offer a more timely measure of scholarly influence than citation counts.").
correlated with citations. The correlation is especially strong at the faculty level, which suggests that ranking law faculties based on SSRN downloads gives a rough approximation of relative scholarly impact. Second, SSRN ranks both individual scholars and law schools based on a number of metrics, including total and recent downloads and total and recent downloads per author. This makes comparisons easy. Moreover, SSRN updates its rankings monthly, and these updates receive significant attention throughout the legal academy.

Despite their usefulness, SSRN’s rankings suffer from four major limitations. First, the correlation between downloads and citations is not perfect, particularly at the individual scholar level. For example, downloads may overstate the influence on legal scholarship of scholars whose work attracts the attention of (and downloads by) people outside their field, e.g., because they write popular blogs or newspaper columns, make frequent television appearances, or write about topics that are regularly in the news. Second, rankings based on downloads will underestimate the importance of scholars who publish disproportionately in the form of books. Nonetheless, the bias against book authors will not affect the law school rankings except to the extent that some faculties publish disproportionately more books than other faculties. Third, unless a law school carefully monitors which authors affiliate with it on SSRN, its figures may include downloads attributable to authors who are not on its full-time faculty, such as students and adjuncts. At Texas A&M, we have worked with SSRN to address this issue by creating a separate “department” for students and by excluding adjuncts from the school’s download figures for rankings purposes. But to the extent that other schools have not taken these steps, the integrity of the law school rankings is compromised. Finally, the SSRN download rankings suffer from some of the same biases that affect citation rankings, including a bias against certain fields.

B. bepress Downloads

Many law schools participate in the bepress institutional repository, which stores faculty publications. Similar to SSRN, bepress publishes a download count for the articles in its repository. Individual scholars can also access a detailed download count for each of their articles. For participating law schools, the school’s bepress administrator can access an aggregate download count for the entire faculty. Unfortunately, the download counts for

22 See id. at 107:20 (reporting the correlation between downloads and other metrics, including citations).
23 See id. at 109 (reporting a strong correlation between SSRN downloads and citations as the faculty level).
24 Id. at 119.
25 See id. at 113-17 (explaining the various biases that affect rankings based on downloads).
individual scholars and for law faculties are not publicly available, which severely limits the usefulness of this information.26

For law schools that participate in the bepress repository, the question arises whether doing so hurts their SSRN download ranking. Some evidence suggests that bepress and SSRN appeal to different audiences, but this question remains unresolved.27 At Texas A&M, downloads from the bepress repository tend to outpace downloads from SSRN by a significant margin, but it is difficult to determine what percentage of bepress downloads come at the expense of downloads on SSRN. Ultimately, the law school’s goal is to disseminate the faculty’s work as widely as possible, and participation in the bepress repository facilitates that goal. For purposes of this Essay, the more relevant point is that SSRN downloads may not adequately capture the relative scholarly impact of the faculties of law schools that use bepress or a similar institutional repository.

III. A CALL FOR LAW SCHOOLS TO CREATE GOOGLE SCHOLAR PROFILES

As I alluded to in the Introduction, Texas A&M takes quantitative performance metrics very seriously. In particular, the University administration compares the faculties in its colleges and departments, including my law school, to their counterparts at peer schools, which are a group of nationally recognized public universities. The University’s evaluation focuses partly on scholarly impact. As part of my administrative role, the law school’s dean has given me the task of identifying and selecting scholarly impact metrics to be used for assessing the performance of our law faculty.

The most frustrating aspect of this task has been the lack of publicly available information for comparing the scholarly impact of law faculties. Existing metrics for ranking faculties suffer from severe limitations. For example, U.S. News peer reputation score receives substantial attention within the academy,28 but empirical evidence suggests that it is subject to echo effects,29 whereby the peer reputation score is at least partly determined by the law school’s overall U.S. News ranking. In addition, Gregory Sisk's

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26 It would be helpful if the schools that use bepress coordinated to share download information with each other and perhaps the public.

27 See generally James Donovan & Carol Watson, Will an Institutional Repository Hurt: Calming the Faculty Fear, 16 AALL SPECTRUM 12 (2012).


Leiter score rankings are helpful, but as we have seen, their usefulness is impaired by the fact that they include a limited number of law schools, require significant work to generate, are updated sporadically, and are not transparent or easy to verify. Finally, SSRN's download rankings, while also useful, are subject to the limitations discussed in Part II.

As a practical matter, the lack of readily available comparative information regarding scholarly impact has meant that giving the University the information required for its assessment has required a lot of work. I have worked with our librarians and several student research assistants to produce citation counts for peer schools. Much of this work would have been unnecessary if more law schools had GS profiles for their faculties. To encourage administrators to create GS profiles for their law schools, this Part explains the procedure.

If you are a law school administrator, to create a GS profile begin by creating a Gmail account for your school. This will become the user name associated with the profile. Next, go to the GS home page and click on “My Citations” to begin the process of creating the profile. GS will guide you the rest of the way.

You should keep a few points in mind as you create the profile. First, give the profile a name that will make it easy for outside users to find and identify. At my law school, our faculty profile is simply called “Texas A&M Law Faculty.” Second, for the profile to be viewable by others, you will need to check the box to make it public. Finally, during the set-up process, GS will prompt you for an email address, which Google will then verify. You should use an official law school email address. At my law school, our IT department created a special email account for this purpose. As a result, our GS profile states: “Verified email at law.tamu.edu.” This adds credibility to the profile by signaling to outside users that it was created by someone who has a law school email address.

After you create your law school's GS profile, you will need to add the faculty's publications to it. You can add publications by searching for a faculty member’s name. GS will then find all of the publications associated with that name, and you can add them as one batch. The process is mostly painless, but...
two problems can arise that may require a little patience to resolve. First, if a faculty member has published under multiple names or name variations, then you will need to find and add the articles associated with each of the names. Second, if the faculty member has a common name, you will have to be careful not to add publications authored by someone who shares that name.

Once your law school’s GS profile is created, GS does most of the work. It will automatically count citations and add new publications by authors associated with the profile. Nonetheless, someone should monitor the profile to ensure the publication list is accurate and that only current faculty are included.

CONCLUSION

Despite their limitations, both citations and downloads are useful tools for assessing the scholarly impact of individual scholars and of law faculties. At present, a major obstacle to the use of citations is the lack of reliable, up-to-date, computer-generated, and publicly available citation counts. At the faculty level, this obstacle could be overcome if each law school created a GS profile for its faculty and made it visible to the public. Publicly available citation information would not only make comparing law faculties easier, it would also facilitate research on the impact and societal value of legal scholarship, which a number of prominent judges, lawyers, and academics have called into question.

In the meantime, administrators who wish to use citations to compare their law faculty to others must rely on the Leiter scores published by Gregory Sisk or generate their own citation counts, a labor-intensive undertaking. In addition, SSRN’s download rankings (particularly those focusing on recent downloads) can supplement citation counts by serving as a leading indicator of future citations.


33 If you create a GS profile for your school, please email me at garylucasjr@law.tamu.edu. If enough schools create profiles, I will publish a list online to make them more easily accessible.

34 See, e.g., Harry Edwards, Another Look at Professor Rodell’s Goodbye to Law Reviews, 100 VA. L. REV. 1483, 1487-1503 (2014) (summarizing the “litany of complaints” lodged against law reviews and legal scholarship).