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## Scholarly Profit Margins: Reflections on the Web

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## Commentary

### Scholarly Profit Margins: Reflections on the Web

LAWRENCE A. CUNNINGHAM\*

Research on scholarly contributions has been necessarily narrowly conceived. It involves exercises that selectively use historical information; selectively counts publications or citations; and is limited to certain scholars. Traditional scholarly contribution studies value length, placement, certain types of inquiry, and inherited hierarchies. Implicit theories of measure hazard false distinctions between the overlapping attributes of quantity and quality and subjectivity and objectivity.

The Legal Scholarship Network (LSN) repository of online scholarly works potentially reorients such approaches and redefines the molds to promote appreciation of scholarship's ultimate value: disseminated knowledge. LSN provides real-time data comprehensively, counts all works by all scholars, and implicitly incorporates survey data from the universe of scholars. Rather than tying measurement back to particular metrics that scholars might then be tempted to maximize, LSN's capacious scoreboard reflects the reality of academic investment and return as a reflective scholarly exercise bearing intrinsic value without regard to external measures.

The technology underlying LSN also can expand to include classroom teaching, an equally critical component of the law professor's job description. This Essay outlines a proposal to create a Legal Teaching Network (LTN) to disseminate law school teaching materials. This proposal was inspired as commentary upon the work of Professors Bernard Black and Paul Caron in this symposium volume.<sup>1</sup> In response to it, Professor Black and I, along with other leadership in LSN, are developing this innovative network.

#### I. ACADEMIC MEASURES

Bibliometrics measures scholarly investment and return. In law, investment roughly focuses on output, with productivity as measured by numbers of books, chapters, articles, or pages published. Returns are measured, roughly, in terms of varying numbers of citations or other indicia of influence. It is rare for bibliometric studies in law to capture both parts of the equation simultaneously; rather, studies concentrate on one (production) or the other (citations). Such analysis is both bemoaned and beloved, making its motivational role equivocal. Surveying its methods justifies this schizophrenia.

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\* Professor of Law and Business, Libby Scholar and Academic Dean, Boston College Law School. Thanks to Bernard Black, Paul Caron, Laura Ford, and Alfred Yen.

1. Bernard S. Black & Paul L. Caron, *Ranking Law Schools: Using SSRN to Measure Scholarly Performance*, 81 IND. L. J. 83 (2006).

### A. Partial Productivity Studies

Pioneering studies undertook to measure scholarly productivity by counting length of articles that were published in selected journals.<sup>2</sup> Subsequent studies followed the identical method, including back-to-back annual rankings of faculty scholarly output prepared by a group of law students.<sup>3</sup> Five years later, a successor student group improved on the approach by expanding the sources used to determine which selected journals to count.<sup>4</sup>

Numerous weaknesses afflict such studies. Article length is credited, which partially measures output but bears no necessary relation to quality or utility. Worse, only articles in the most oft-cited journals count. This attempts to incorporate a measure of quality into a measure of quantity, but it does not quite work. First, the studies invariably limited results to twenty or so journals and simply ignored hundreds of others (plus books and other publications). Second, the studies counted for a person to publish numerous equal-caliber articles in the 20th ranked journal, but did not count for another person to publish twice that number of equal-caliber articles in the 21st ranked journal.

Further, the number of laws and law schools, professors, courses, and reviews expanded dramatically during the twenty-year period from the pioneering studies to successors. If cutoffs of ten or twenty were sensible when there were 125 law schools and 250 journals, reconsideration was warranted when there were 175 law schools and 500 or more journals. Yet such fixation endures.

### B. Selective Surveys

Some studies estimate academic reputation by polling academics. A leading example is that undertaken by *U.S. News & World Report* ("U.S. News") as part of a larger effort to rank all universities, colleges, and professional schools nationwide.<sup>5</sup> It annually asks four academics at every law school to rank other schools, including faculties. Another survey developed selective data by getting 150 legal academics to evaluate colleagues at other schools.<sup>6</sup> Some denominate this survey approach to

2. See Ira Mark Ellman, *A Comparison of Law Faculty Production in Leading Law Reviews*, 33 J. LEGAL EDUC. 681 (1983); James Leonard, *Seein' the Cites: A Guided Tour of Citation Patterns in Recent American Law Review Articles*, 34 ST. LOUIS U. L.J. 181 (1990); Richard A. Mann, *The Use of Legal Periodicals by Courts and Journals*, 26 JURIMETRICS J. 400 (1986); Olavi Maru, *Measuring the Impact of Legal Periodicals*, 1976 AM. B. FOUND. RES. J. 227 (1976).

3. *Chicago-Kent Review Faculty Scholarship Survey*, 65 CHI.-KENT L. REV. 195 (1989); Janet M. Gumm, *Chicago-Kent Law Review Faculty Scholarship Survey*, 66 CHI.-KENT L. REV. 509 (1990).

4. Colleen M. Cullen & S. Randall Kalberg, *Chicago-Kent Law Review Faculty Scholarship Survey*, 70 CHI.-KENT L. REV. 1445 (1995); see also James Lindgren & Daniel Seltzer, *The Most Prolific Law Professors and Faculties*, 71 CHI.-KENT L. REV. 781 (1996) (reviewing the twenty most-cited law reviews over a five-year period to determine the most prolific law professors and faculty).

5. USNEWS.COM, AMERICA'S BEST GRADUATE SCHOOLS 2006 (2005), [http://www.usnews.com/usnews/edu/grad/rankings/rankindex\\_brief.php](http://www.usnews.com/usnews/edu/grad/rankings/rankindex_brief.php).

6. See Leiter's Law School Rankings, Faculty Quality Rankings: Scholarly Reputation,

assessing academic reputation as entailing “subjective” analysis.<sup>7</sup> This is done without defining the term, or explaining how objective analysis differs and while ignoring how both attributes tend in varying ways to characterize virtually any assessment methodology.

Survey data, properly designed, can bear objective attributes. This is epitomized by surveys seeking expert opinion. It would not be surprising, however, if such academics invoke the same data points that putatively objective bibliometrics relies upon: productivity measured by volume and impact measured by utility to other scholars (reflected in citations). Denominating one measure as subjective and another as objective likely retards rather than advances the inquiry. Still, such surveys are necessarily selective in scope and limited in value.

### C. Selected-Citation Counts

An example of the inextricable relation between quantity and quality appeared in the first modern citation study.<sup>8</sup> It examined all U.S. law journals then in existence (forty-three) and considered how judges had used scholarly contributions.

Applying the citation approach to proxy impact, inquiry concentrated on counting citations to single articles.<sup>9</sup> But if one’s purpose in bibliometrics is to assess influence, then a focus on single articles is too narrow. An author’s oeuvre matters, not single pieces. Other limitations of this and predecessor studies (including the partial-productivity studies) are: omitting interdisciplinary work and books and ignoring the effect of age on a work’s influence.

Limitations of such citation studies—and of partial-productivity studies—prompted Professors Theodore Eisenberg and Martin Wells to examine how frequently individual scholars’ names appear in fee-accessed scholarly repositories.<sup>10</sup> To assess schools, the study then compared the faculties. This approach eliminated the partial-productivity study focus on length and placement in selected journals. It also overcame other criticisms by allowing for counting citations to books, picking up some interdisciplinary citations, allowing for effects of age, and focusing on authors (as well as schools) rather than pieces. The study displays the best of the scholarly method, seeking through repeated variations in the statistical model to test the robustness of its conclusions.

Despite considerable improvements, the Eisenberg and Wells study acknowledged the limits of stamina: in assessing overall faculty, it confined itself to twenty schools dubbed “leading” by national news media and added another dozen “eclectically”

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2003–04, [http://www.leiterrankings.com/faculty/2003faculty\\_reputation.shtml](http://www.leiterrankings.com/faculty/2003faculty_reputation.shtml).

7. E.g., Brian Leiter, *Measuring the Academic Distinction of Law Faculties*, 29 J. LEGAL STUD. 451 (2000).

8. Douglas B. Maggs, *Concerning the Extent to Which the Law Review Contributes to the Development of the Law*, 3 S. CAL L. REV. 181 (1930).

9. See Fred R. Shapiro, *The Most-Cited Law Review Articles Revisited*, 71 CHI.-KENT L. REV. 751 (1996) [hereinafter Shapiro, *Most-Cited Articles Revisited*]; Fred R. Shapiro, *The Most-Cited Articles from The Yale Law Journal*, 100 YALE L.J. 1449 (1991) [hereinafter Shapiro, *Most Cited Articles from The Yale Law Journal*]; Fred R. Shapiro, *The Most-Cited Law Articles*, 73 CAL. L. REV. 1540 (1985) [hereinafter Shapiro, *Most-Cited Law Articles*].

10. Theodore Eisenberg & Martin T. Wells, *Ranking and Explaining the Scholarly Impact of Law Schools*, 27 J. LEGAL STUD. 373, 377 (1998).

chosen schools.<sup>11</sup> A glaring omission was the authors' decision to ignore clinical faculty members and librarians. Nor did this effort—or the others—reflect value accretion through preparation of teaching books, which are cited far less frequently than original works of scholarship.

#### D. Integrations

The welter of studies investigating scholarly profit margins and their respective limitations invites integrated approaches. One example involves reviewing all previous studies (of journals or faculties, for example) and taking averages.<sup>12</sup> This approach can be practical by, for example, aiding law libraries to determine how many copies of which journals to retain in print.<sup>13</sup> Although subjective attributes afflicting all such studies endure, combinations of existing studies can be maximally objective or honest in the sense that an investigator injects no direct subjectivity or bias into the exercise.

Alas, temptation can be strong when combining such approaches to recast earlier studies to suit tastes. For example, one study taking the combination approach redefined parameters of predecessor studies, rather than simply taking them on their own terms.<sup>14</sup> Consider the author's decisions of which publications to include in the partial-productivity component. He uses the "top ten" student journals, the "top ten" faculty-edited journals, and a mix of university and law presses to pick books. Unlike a scientific study, the author makes selections and moves on, not attempting to see how changes in choices would affect results.<sup>15</sup>

Illustrative are the ten faculty-edited journals chosen, which the author picked based on consultations with unnamed "experts in the different fields."<sup>16</sup> Compare the author's choices with lists presented in six previous empirical studies:<sup>17</sup> four of the ten author choices did not appear on the list in any of the studies; three appeared on one list; one on two lists; and one on three lists. Only one appeared on all six lists. In contrast, the author omitted one journal that appeared on five of the six lists and another that appeared on four of the six lists. Subsequent studies confirm the point: the library copy-retention study mentioned above yielded seven faculty-edited journals warranting multiple copies, only one of which appeared on the author's list.<sup>18</sup>

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11. *Id.* at 379.

12. *E.g.*, Scott Finet, *The Most Frequently Cited Law Reviews and Legal Periodicals*, 9 LEGAL REFERENCE SERVICES Q. 227 (1989).

13. *See* Kincaid C. Brown, *How Many Copies Are Enough? Using Citation Studies to Limit Journal Holdings*, 94 LAW. LIBR. J. 301 (2002).

14. *See* Leiter, *supra* note 7, at 455–56.

15. *Compare id.*, with Eisenberg & Wells, *supra* note 10.

16. Leiter, *supra* note 7, at 461.

17. Authors of the compared studies are: Ellman, *supra* note 2; Maru, *supra* note 2; Mann, *supra* note 2; Finet, *supra* note 12; Lindgren & Seltzer, *supra* note 4; Shapiro, *Most-Cited Articles Revisited*, *supra* note 9; Shapiro, *Most-Cited Articles from The Yale Law Journal*, *supra* note 9; and Shapiro, *Most-Cited Law Articles*, *supra* note 9.

18. *Compare* Brown, *supra* note 13, at 304, with Leiter, *supra* note 7.

*E. Left Tails*

As a genre, studies of scholarly contributions overemphasize the right tails of distribution curves (“top” journals, articles, authors, and schools). Whether this is due to manners, motivational aspirations, elitism, or other forces, a unique study focused on the neglected left tails to investigate causes of citations, high and low.<sup>19</sup> It examined some sixty factors to gain insight into determinants of citations. It also controlled for varying citation opportunity based on factors such as journal type. Findings include the discovery that article placement in elite journals does not guarantee any citation result. In fact, the study cites several articles published in so-called “top” journals that had never been cited. This dimension of inquiry underscores the utility of the concept of scholarly profit margins—they can range from zero on up.

## II. SSRN

Legal academics are not alone in attempting to assess scholarly investment and return. Considerable research addresses this field of inquiry, including research in finance and accounting. Scholars in these fields have begun to pay particular attention to the role of the Social Science Research Network (SSRN) in these undertakings.<sup>20</sup> While legal scholars have acknowledged this inquiry’s potential, pioneering work has only just begun.<sup>21</sup>

SSRN was established in 1994, with sub-networks on law as well as accounting, economics, and management; the law network component of SSRN is called the Legal Scholarship Network (LSN). Law schools from the United States and abroad joined in waves, with law professors from all law schools free to participate. LSN facilitates infinite dissemination of scholarship, reaching nearly all the world’s countries, and maintains affiliations with some 400 law journals. The database thus constituted is global, not limited to a national, legal, or social science index.

Authors post works without charge. LSN imposes no screening criteria—all works are permitted, including articles, essays, book chapters, and book introductions—and works may be submitted by anyone, including clinical and other professors, with or without institutional support. The resource is free for use to all people, and most papers are downloadable for free or at a low cost. Schools pay fees in exchange for periodic dissemination of school issues, delivered by e-mail to individual subscribers electing to receive that school’s output. LSN delivers free regular e-mail notices by subject matter to subscribers.

Papers are accompanied by an abstract that summarizes the work, and interested users may opt to download a work in full. LSN displays author pages listing all publications posted. It reports, by paper, the number of times abstracts are viewed and full papers downloaded. It also shows total downloads per paper, and it provides a

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19. See Ian Ayres & Frederick E. Vars, *Determinants of Citations to Articles in Elite Law Reviews*, 29 J. LEGAL STUD. 427 (2000).

20. See, e.g., Lawrence D. Brown & Indrarini Laksmna, *Ranking Accounting Ph.D. Programs and Faculties Using Social Science Research Network Downloads*, 22 REV. QUANT. FIN. & ACCT. 249 (2004); Lee Pinkowitz, *Research Dissemination and Impact: Evidence from Web Site Downloads*, 57 J. FIN. 485 (2002).

21. See Black & Caron, *supra* note 1.

special designation for the thousand network authors boasting greatest numbers of copies downloaded. The data are then disaggregated by field, with LSN presenting separate data for law schools and law professors in “tournaments” that enable users to rank schools and authors according to variables of the user’s choosing.

#### A. LSN’s Limitations

Several characteristics limit LSN’s current utility for general bibliometric use, including, chiefly, a first-mover advantage and self-selection bias. As a new dissemination vehicle, participation builds incrementally with time. Those joining earlier in the process enjoy longer exposure and more opportunities for usage; this inequality biases view and download data towards first movers. And because scholars are not bound to use the system, either for publication or research, a self-selection bias results. These constraints may abate with time, as more scholars participate and as a growing database leavens these effects. For now, they are serious.

Consider the fifty law professors most downloaded on LSN during a recent one-year period (the “LSN-50”).<sup>22</sup> These fifty scholars are disproportionately comprised of those specializing in business associations and securities regulation, with a smaller but outsized presence of scholars in intellectual property and law and economics. This reflects more about usage than about contributions, however, given that the number of works posted in various subjects on LSN is not skewed towards these subjects but towards constitutional law and other public law subjects.

The LSN-50 mostly (about 80%) represent schools routinely appearing in studies as constituting elite national institutions, along with a handful (20%) of other fine schools but less favored in such standings. The LSN-50 is dominated by males (only three females appear), which may simply echo its concentration among subjects which are, in turn, dominated by males.<sup>23</sup> In other ways, the LSN-50 is a varied lot, with senior, mid-level and junior faculty sprinkled throughout and six scholars based at non-U.S. law schools.

Consider the relation of the LSN-50 to current LEXIS and Westlaw citation counts for them. Downloads and citations show significant correlation but several unusual features. High downloads as opposed to citations appear more characteristic of either younger scholars or those heavily invested in interdisciplinary work. LSN downloads could thus be a forward-looking barometer for younger scholars.<sup>24</sup> For

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22. Legal Scholarship Network, *LSN Top 50 Most-Downloaded Authors*, [http://hq.ssrn.com/rankings/Ranking\\_Display.cfm?TMY\\_gID=2&TRN\\_gID=1](http://hq.ssrn.com/rankings/Ranking_Display.cfm?TMY_gID=2&TRN_gID=1); see also Legal Scholarship Network, *LSN Top 50 Most-Downloaded Law Schools*, [http://hq.ssrn.com/rankings/Ranking\\_Display.cfm?TMY\\_gID=2&TRN\\_gID=6](http://hq.ssrn.com/rankings/Ranking_Display.cfm?TMY_gID=2&TRN_gID=6) (last visited, Oct. 15, 2005); see also Black & Caron, *supra* note 1.

23. See Marjorie E. Kornhauser, *A Room of Their Own: An Empirical Study of Occupational Segregation by Gender Among Law Professors*, 73 *UMKC L. REV.* 293, 307 (2005).

24. But see Paul L. Caron & Rafael Gely, *What Law Schools Can Learn from Billy Beane and the Oakland Athletics*, 82 *TEX. L. REV.* 1483, 1543–44 (2004) (noting that the most-cited professors started writing more often, continued writing more often, and produced more influential works).

interdisciplinary, downloads likely are made by non-legal scholars whose citations are not picked up in LEXIS and Westlaw.

Consider also the relation of the LSN-50 to an overall citation count for all law professors conducted as of mid-2002.<sup>25</sup> The LSN-50 notably includes only ten scholars (20%) also appearing on the mid-2002 list of the most-cited 119 overall. Within LSN's well-represented subjects, moreover, eight of the high-ten in both business and intellectual property do not appear in the LSN-50 (although some of them appear further down LSN's list with still-high numbers). These data reflect LSN's youth and the bias created because its leading users work in fields most closely related to SSRN's other subject matter areas.

With such observations in mind, these limitations do not defeat LSN's future efficacy for bibliometric purposes. More importantly, they have no bearing on other considerable benefits LSN provides relating to absolute performance of individual scholars, which is useful for informal self-reflection rather than as formal relative comparisons among scholars.

### *B. Instant Improvements*

LSN provides three immediately, valuable incremental improvements over existing methodologies. These seem valuable without regard to LSN's general future utility for bibliometrics.

#### 1. Reputation Surveys

Measuring academic reputation by survey data may reflect perceptions other than those related specifically to scholarship. Yet the two are connected. LSN embeds an implicit reputation survey tailored to scholarship specifically: the number of subscribers to e-mail issues released by particular schools. If this data were made publicly available, it would supply a "money-where-the-mouth-is" reputation count.

#### 2. Publication Studies

Measures based on publications in journals have been selective in choosing which journals to count. This may have been a practical necessity given the large number of journals, but it is limited because there is no consensus as to the "top" journals. The limitation is exacerbated by growth in law and journals, including proliferation of specialized journals. Related studies sometimes ignored books, or only included books published by selected publishers. The studies have ignored book chapters.

On LSN, scholars can present all their work in a single place, wherever and however published (or not otherwise published in print at all): all publications count (whatever the journal, whoever the publisher), including book chapters. This has several other benefits. First, it negates any biases associated with ranking journals. Second, it moots debate on the relative merits of student-edited law journals and peer reviewed journals—all count. On LSN, the market filters scholarly quality rather than

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25. Leiter's Law School Rankings, Most Cited Faculty, 2000–02, [http://www.leiterrankings.com/faculty/2000faculty\\_impact\\_cites.shtml](http://www.leiterrankings.com/faculty/2000faculty_impact_cites.shtml).

academics or students on law review. Third, it eliminates opportunity bias associated with placement in particular journals (with which citation studies must contend).

### 3. Who Counts

Measures based on citations are perhaps the most robust, although it is hard to disentangle negative citations and effects of self-citations (minimized but not eliminated by the technique that counts numbers of works in which another work is cited). LSN includes any professor who wants to participate, including clinical and other professors. While LSN does not count citations, when combined with other new information that it produces, such studies may be improved by this characteristic of inclusiveness.

#### *C. New Information*

LSN provides new data concerning views and downloads. Each contains potentially useful information. When related to each other, and to citations, additional utility appears.

##### 1. Views

LSN tracks the number of times users view an abstract. As the preliminary encounter with a work, this provides limited data as to the use of scholarship, or its value. Users may read abstracts for numerous reasons and may reach them through conscious research efforts or more random processes. In the profit margin metaphor, views could be the equivalent of eyeballs hitting an Internet site. On the other hand, algorithms that direct Web users to sought sites are impressive,<sup>26</sup> reducing chance encounters with an LSN posting and giving the concept of views some purchase. Perhaps a better analogy, then, is to the Nielsen television ratings:<sup>27</sup> proxy measures used to establish advertising rates on television programs.

##### 2. Downloads

Downloads are a secondary encounter with a work. A download does not mean another scholar learned from the work but signals that potential. Downloads may be a measure of impact, but they are not equivalent to citations. At the most basic, while citations inform an author of how work is being used, downloads provide no indication of particular uses. They thus provide limited intrinsic value to authors compared to what visible citation and commentary provide and no manifestation of contributions to expanding knowledge.

Another limitation of downloads as a metric is that they risk undercounting usage, invisible though usage may be. For example, some readers of abstracts follow up

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26. See Sergey Brin & Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine* (1998), <http://dbpubs.stanford.edu/pub/1998-8>; Lawrence Page, Sergey Brin, Rajeev Motwani & Terry Winograd, *The Page Rank Citation Ranking: Bringing Order to the Web* (1998), <http://dbpubs.stanford.edu/pub/1999-66>.

27. Nielsen Media Research, *About Us* (2005), <http://www.nielsenmedia.com>.

directly with the author. When authors send copies to such inquirers, an equivalent of a download occurs (it may actually be a stronger utility signal given the inquirer's additional effort made), but LSN cannot count this as a download. Despite invisibility and potential undercounting, downloads offer additional information that, when combined with views and citations, is illuminating.

### 3. Downloads Per View

Researchers can combine views with downloads to provide information. Users may decide, based upon reading an abstract (counted as a view), whether the related piece is relevant to their inquiry and whether to download it. Given Web algorithms that direct researchers to relevant abstracts (generating a view), the relation between downloads and views could proxy for the narrative quality of an abstract—whether it *sells* a researcher on making a download. For personal purposes, the relation between views and downloads across a variety of pieces may thus provide useful feedback. Low ratios in a mix of comparatively higher ratios can provoke self-critical reflection upon how effectively one has summarized such work.

### 4. Citations Per Download

The relation of citations to downloads can be conceived as the ultimate profit margin. Invoking a business-model analogy: total publications represent aggregate investment; downloads are akin to sales; and citations, as the ultimate payoff, measure profit from those sales (hence, profit margin). The relation can be meaningful if the database is sufficiently robust. Causation stories may be unruly, however. For example, papers garnering high downloads but low citations may suggest negative reception to the full paper or high downloading by those outside the discipline whose citations are being investigated (this is the interdisciplinary effect, noted above, necessitating the calibration of a citation base's scope with the subjects of an LSN work or an LSN author's fields).

### 5. Control

Emphasizing anything draws attention, by definition. Emphasizing views, downloads, or citations can lead to maximizing strategies, including by manipulation. In the extreme, this can lead scholars away from honest inquiry and towards promoting parochial ends. To continue the profit margin metaphor, risks of earnings management appear. A common affliction of citation studies, for example, concerns how they deal with self-citation.

For LSN, built-in manipulability constraints exist. In addition to software that LSN uses to detect manipulation, researchers can apply multiple measures so that, if manipulated, they produce disadvantages as well as advantages. As examples, computing ratios of citations to downloads discourages self-downloading; computing downloads per paper discourages posting a series of facile papers generating random attention to pad overall downloads; and computing ratios of downloads to views decreases incentives to increase either artificially. Researchers can calculate average ratios and related standard deviations to detect for anomalies that would, in turn, require explanation.

Furthermore, concerns about controlling maximization through manipulation arise only when LSN data are used in relative assessments of scholarly contribution or impact. They do not matter for purposes of LSN's potentially more important function of self-reflection. For these uses, LSN's absolute rather than relative discrimination is relevant, and users' self-interest discourages such artificial manipulation.

#### *D. Transformative Potential*

LSN provides data likely to be useful in the future to researchers interested in measuring scholarly productivity and impact. A far greater utility appears, however, which might be called democratization. Scholars need not depend on historical studies conducted using selective tools by self-anointed arbiters of quality, quantity, impact, or influence. On LSN, the data are all there, available for individual examination, updated daily for users to do with what they regard as most beneficial.

##### 1. Real Time

LSN contributes the novelty of providing real time data. Previous studies required researchers to undertake a plan of evaluation, to collect data, to run tests, and to report results. LSN provides daily updated listings of views and downloads, by paper, author, and school, at the click of a mouse. Tallies include totals as well as functions, such as downloads per paper, during the recent one-year period and from inception. This time-segmentation provides discrimination that helps to address assessment problems associated with a work's age and the first-mover advantage early participants enjoy.

##### 2. Tailoring

LSN's data presentation facilitates tailoring of profit margin measurements for particular purposes. Individual faculty can conduct reflective personal assessments. LSN's accessibility and considerable data content make it easier for persons otherwise disinclined to invest effort required to conduct elaborate research studies (or even consult them). LSN thus facilitates moving from externally-oriented examination towards internal and personal examination. Such self-reflection is required by, and may facilitate aspects of, self-studies that law schools conduct of their own volition or as part of periodic accreditation reviews. This flexibility can assist in conducting internal faculty assessments, whether by committees for promotion and tenure or by deans in establishing salary increments and awarding other benefits, and can assist appointments committees.

##### 3. Motivator

Tailoring may hold considerable motivational appeal. Evidence suggests that people tend to prefer subjective measures of their own performance because they generalize from their own experience and believe what they experience personally more than what they apprehend indirectly. Some conclude from this that "objective information, even if

somewhat flawed, is better than purely subjective information.”<sup>28</sup> One risk in celebrating the objective in this context is that it ignores how the objective often contains its own subjectivity. But here the fuzzy boundaries between objective and subjective can play a useful role.

LSN provides individual pages for participating scholars, containing a variety of information that may be arrayed along an objective-subjective continuum. Towards the objective data end, individual LSN pages show number of works, views, and download statistics; towards the subjective end, they show one’s name and title, a link to a personal Web page (optional but common), and the titles of one’s articles. Data bearing more mixed objective-subjective attributes include a work’s journal or press of publication and dates of publication and posting. All told, LSN author pages present a partial resumé, a miniature academic biography, and a *curriculum vitae* vanity mirror.

This combination of objective-oriented data and subjective-reflecting content appearing on LSN author pages likely feeds observed behavioral traits that elevate subjective reflections over objective reflections. Embedding the personal (more subjective) reflections within the frame of the more objective reflections provokes honest self-reflection. LSN’s blending of these images may thus reinforce academic norms commanding law professors to contribute knowledge through scholarly production.

#### 4. Teaching

Tailoring capacity points to potentially broader applications of LSN’s model. LSN focuses on scholarship, both investment and return. Routinely neglected in research on scholarly profit margins is a critical point: what do students think? Put differently, how can the teaching function of the professorial job description be given equal prominence to that given to scholarship in traditional studies and underlined on LSN? After all, do students really only want to go through law school to get them a certain job,<sup>29</sup> or are they interested in knowledge, learning? Even those eager to practice invariably possess intellectual curiosity. Can LSN-inspired vehicles be put to use for the teaching function?

Substantively, content on a Legal Teaching Network (LTN) could include lecture notes and PowerPoint slides, many of which already appear on scattered sites throughout the Internet.<sup>30</sup> Reflectively, course evaluations, long available in print form in libraries and posted on some internal school Web sites, could be posted. LTN could include such additional details as how frequently professors teach which courses (potentially of special utility for prospective students eager to study under a famous professor, who might otherwise be disappointed to learn that the professor does not teach very much). Likewise, information concerning the number and type of independent study projects particular professors supervise would be useful.

For professors, contact hours would be useful information to collect and display on LTN, showing teaching burden. Connecting the link between certain kinds of scholarship and pedagogy, consider authors or editors of teaching books. Contributions

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28. Caron & Gely, *supra* note 24, at 1529.

29. See Russell Korobkin, Keynote Address, *Harnessing the Positive Power of Rankings: A Response to Posner and Sunstein*, 81 IND. L.J. 35 (2006).

30. Business professors routinely post case studies designed for classroom use on SSRN.

to knowledge and teaching from these products are not measured well by length, number, publisher, or citation counts. A better way to measure value contributed by teaching books is by using adoptions—the number of schools or professors teaching from the book. Such data could be posted on LTN. For schools, aggregate data concerning student-to-faculty ratios and total student body size could usefully be displayed on LTN.

In response to this proposal when circulated as a draft, Professor Bernard Black offered to help create it. Professor Black—an LSN founder whose paper, with Professor Paul Caron, inspired this Commentary—and I have sketched a five-year plan. We implemented the first step in October 2005 by creating a new journal within the existing LSN framework called *LSN Educator: Courses, Materials & Teaching*.<sup>31</sup> The long-term plan contemplates a sub-network to allow subdivision of materials by subject. Course materials often will be multiple documents for one class. This will require capacity to connect multiple files from a single abstract page and to upload multiple file types (such as Word, pdf, PowerPoint, Excel, and even audio/video content).

#### CONCLUSION

Extolling LSN's virtues must be accompanied by a warning about scoreboard risk: the danger of fixation on the scoreboard rather than the playing field. A cautionary note concerning transparency is thus in order. The information era is accompanied by devotion to transparency, at least rhetorically. Citizens and policy devotees advocate openness across a wide range of institutions, including government, military, diplomatic corps, press, corporations, and others. While a certain degree of transparency and information dissemination is undoubtedly desirable, pure transparency may have considerable negative side effects.

In the case of the legal academy, while scholarly profit margins are paid in actual currency, dean notes concerning salary levels and raises are likely best kept confidential in the interest of personal privacy, faculty collegiality, and institutional direction rather than opened for faculty or public scrutiny. Intelligently designed and appreciated, data concerning scholarly presence can be useful to professors and schools for self-reflection and to constituents to facilitate superior matching.

Traditional academic contribution studies in law selectively measure both productivity (pages in selected journals) and impact (citations on Westlaw to certain faculty at a few dozen schools) or use surveys of a few hundred persons. Controversial as all this is, LSN expands the picture considerably to invite inclusion of all production by all professors and by anyone wishing to use the network. While offering resources

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31. *LSN Educator's* Advisory Board includes the following law teachers: Craig Allen (University of Washington); Dorothy Brown (Washington & Lee University); Lawrence Cunningham (Boston College); John Dzienkowski (University of Texas); Heather Gerken (Harvard University); James Gordley (University of California, Berkeley); Gerry Hess (Gonzaga University); Cynthia Lee (George Washington University); Howard Lesnick (University of Pennsylvania); David Levine (University of California, Hastings College of the Law); Grant Nelson (UCLA School of Law); Roger Schechter (George Washington University); Joan Shaughnessy (Washington & Lee University); Elaine Shoben (University of Illinois and University of Nevada); and Stephanie Wildman (Santa Clara University).

to improve traditional bibliometric exercises, LSN also provides a unique capacity to promote self-reflection. It also offers additional power to facilitate and disseminate pedagogical innovations.

