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# A View from the Flip Side: Using the “Inverted Classroom” to Enhance the Legal Information Literacy of the International LL.M. Student

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*International students enrolled in LL.M. programs in U.S. law schools come with a wide variety of legal experience. As part of their introduction to U.S. law, students take a legal research course to prepare them to competently undertake the research necessary to complete a master’s thesis and to perform legal research in clinics, internships, externships, and U.S. law firms and legal departments. This article argues that the “flipped” classroom pedagogical model is a better method for developing legal information literacy in international LL.M. students than the traditional classroom model. In support of this, it presents the author’s experiences in implementing the flipped classroom to teach legal research in an international graduate law program and offers guidance to others seeking to use the flipped classroom model to teach legal research.*

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Introduction

¶1 International students enrolled in LL.M. programs in U.S. law schools, such as the one at the Indiana University Robert H. McKinney School of Law,<sup>1</sup> come to these programs with a wide variety of legal experiences. Most students have undergraduate law degrees from their home countries, and many have practiced law or worked in law-related jobs before coming to study in the United States.<sup>2</sup> However, their legal education, training, and experience are very different from that taught in U.S. law schools and engaged in by attorneys practicing in the United States.

¶2 As part of their introduction to U.S. law, students in the LL.M. program at the McKinney School of Law are required to take a one-credit legal research course<sup>3</sup> to prepare them to competently undertake the research necessary to complete a master's thesis and to perform legal research in clinics, internships, externships, and U.S. law firms and legal departments.<sup>4</sup> Our legal research instruction seeks to develop the legal information literacy of law students; that is, the ability to find,

1. *Master of Laws (LL.M.) Program Tracks: American Law for Foreign Lawyers*, IND. UNIV. ROBERT H. MCKINNEY SCH. OF LAW, <http://mckinneylaw.iu.edu/degrees/llm/program-tracks/american/index.html> (last visited Aug. 11, 2013).

2. Carole Silver, *States Side Story: Career Paths of International LL.M. Students, or "I Like To Be in America,"* 80 FORDHAM L. REV. 2383, 2384 (2012).

3. I taught the fourteen-week, one-credit course in the LL.M. program at the Indiana University Robert H. McKinney School of Law for the first time in the spring semester of 2011. During two semesters, I concurrently taught a required online asynchronous legal research course to second-year J.D. students. Simultaneously teaching a traditional, face-to-face podium course and an online course provided an opportunity to evaluate and ultimately find wanting the traditional classroom model for teaching legal research to international graduate law students. In the spring of 2012, I did not teach the international LL.M. legal research course and used the time to significantly rework the course using the flipped classroom model for the fall semester of 2012. That experience is detailed in the case study described in this article.

4. *Master of Laws (LL.M.) Program Tracks: American Law for Foreign Lawyers, Curriculum*, IND. UNIV. ROBERT H. MCKINNEY SCH. OF LAW, <http://mckinneylaw.iu.edu/degrees/llm/program-tracks/american/curriculum.html> (last visited Aug. 1, 2013).

retrieve, analyze, and use legal information.<sup>5</sup> Lawyers, and those preparing for the practice of law, must possess highly developed legal information literacy skills to be competent legal researchers.

¶3 Despite prior successful legal education and practice experiences in their home countries, international students in LL.M. programs often become frustrated when doing research using U.S. legal information. Their prior legal research and practice experiences have not prepared them for the complexities of research using U.S. legal information. This is not to imply that U.S. legal education is superior to foreign legal education.<sup>6</sup> It is simply to acknowledge that different legal systems require different approaches and skills. Most international LL.M. students "come from code-based civil law countries, where the sources of law are less numerous and varied than in the U.S. common law system."<sup>7</sup> The U.S. legal system, which includes both federal and state jurisdictions and relies on the theories of precedent and *stare decisis*, is bound to frustrate students who, in many instances, are able to complete legal research in their home countries by looking up a civil code on an official government web site.<sup>8</sup> This frustration often results in less than optimal development of the requisite legal information literacy by the international graduate law student. The goal for those of us who teach legal research to international graduate law students is to develop their legal information literacy, preventing this debilitating frustration and preparing them to successfully complete legal research using the broad array of U.S. legal and nonlegal materials and information.

¶4 The "inverted" or "flipped" classroom is a pedagogical model supported by theories of active learning that replaces the traditional in-class lecture format with predelivered instructional materials and an in-class learning lab.<sup>9</sup> In the legal research course, class time is repurposed into a learning lab where students test their skills in applying the knowledge acquired from the readings and other instructional materials by researching a hypothetical situation. The flipped classroom pedagogical model is preferable to the traditional classroom for developing legal information literacy in international LL.M. students, as it provides students with the opportunity to work in teams and apply knowledge to challenging research hypotheticals in a directed and guided environment.

¶5 This article presents a case study on using the flipped classroom model to teach legal research to international graduate law students (hereinafter LL.M. students). It first discusses the flipped classroom and recent research findings regarding the

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5. Information literacy is defined by the Association of College and Research Libraries as a "set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." ASS'N OF COLL. & RESEARCH LIBRARIES, INFORMATION LITERACY COMPETENCY STANDARDS FOR HIGHER EDUCATION 2 (2000), available at <http://www.ala.org/acrl/sites/ala.org.acrl/files/content/standards/standards.pdf>.

6. Matthew A. Edwards, *Teaching Foreign LL.M. Students About U.S. Legal Scholarship*, 51 J. LEGAL EDUC. 520, 521 (2001).

7. Elizabeth L. Inglehart, *Teaching U.S. Legal Research Skills to International LL.M. Students: What and How*, 15 PERSPECTIVES: TEACHING LEGAL RES. & WRITING 180, 180 (2007).

8. *Id.*

9. See generally JONATHAN BERGMANN & AARON SAMS, *FLIP YOUR CLASSROOM* (2012). See also Amy Erin Borovoy, *Five-Minute Film Festival: Flipped Classroom* (Jul. 13, 2012), <http://www.edutopia.org/blog/film-festival-flipped-classroom> (providing a series of introductory and example videos).

model's pedagogical effectiveness. It then examines the elements to consider when designing a legal research curriculum and presents a discussion of legal information literacy and its primacy in curriculum development. Next, it looks at the flipped classroom model's response to pedagogical needs in the legal education context. Finally, the article describes the experience of implementing the flipped classroom to teach legal research in an LL.M. program and offers guidance to others seeking to use the flipped classroom model to teach legal research.

### An Introduction to the Flipped Classroom

¶6 Students today expect more from a classroom experience than a passive learning opportunity that consists mostly of one-way communication with limited student interaction.<sup>10</sup> Instead, they prefer classroom experiences that encourage and help them “develop knowledge for themselves.”<sup>11</sup> As a result, “modern learning is reinventing how instructors use course material, structure their time, and more effectively drive results.”<sup>12</sup> The flipped classroom responds to the needs of modern learning and provides an effective model of “reinvention.”

¶7 Legal research instruction has traditionally involved a classroom lecture packed with instructional information and concepts and a research assignment to be completed outside of class time. This structure typically provides little opportunity for the student to fully understand difficult concepts presented in class, even though the student will be required to apply those concepts in order to successfully complete the research assignment. Due to the graded nature of the course, these assignments must be completed without consultation with classmates. This structure does not respond to the goals of today's students who want to develop knowledge and skills and apply them to solve problems, often in group and team settings.<sup>13</sup>

¶8 In the modern learning environment, “the whole point is to use the class time well.”<sup>14</sup> The flipped classroom, with its use of web-based and e-learning technologies, offers the legal research professor the chance to do just that by reserving classroom time for meaningful analytical and critical thinking activities.<sup>15</sup> Pioneered

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10. Ctr. for Digital Educ., *Issue Brief: The Flipped Classroom: Increasing Instructional Effectiveness in Higher Education With Blended Learning Technology*, available at <http://resources.echo360.com/flipped-classroom-pr> (last visited Aug. 1, 2013).

11. *Id.*

12. Press Release, Echo 360, Echo 360 Highlights Benefits of “Flipped Classroom” Practice Using Blended Learning Technology (Mar. 14, 2012) (quoting John Halpin, Vice Pres. of Strategic Progs., Ctr. for Digital Educ.), <http://echo360.com/press-release/echo360-highlights-benefits-%E2%80%9898flipped-classroom%E2%80%9999-practice-using-blended-learning>.

13. Ctr. for Digital Educ., *supra* note 10.

14. Kenneth A. Connor, *Goodbye, Podium: An Engineering Course Puts Theory into Practice*, CHRON. HIGHER EDUC., Oct. 5, 2012, at B30.

15. The flipped classroom and the traditional classroom models share the same expectation that the students will prepare for class by reading the instructional materials and come to class prepared to discuss the material with their classmates. The flipped classroom goes one step further by ensuring that all the students are engaged with the material during class time. In a typical doctrinal law class, the professor interacts with a few students in the Socratic method. In addition, students are often told when they will be required to present in class. These two factors permit the rest of the students in the class to be less engaged with the material. See Sarah Glassmeyer, *Notes from a Class Observation*, CALI

by Colorado high school science teachers Jonathan Bergmann and Aaron Sams,<sup>16</sup> and made mainstream through the Khan Academy,<sup>17</sup> flipped classrooms use technology to invert the traditional teaching environment.<sup>18</sup> Although there is no single model, the term is generally used for those class structures that use technology to deliver online instructional materials as preclass homework and then repurpose class time for individual or group lab work.<sup>19</sup> The instructional materials become a study aid to help students complete the research assignment in the lab.<sup>20</sup> During lab sessions, the professor serves as a coach or advisor, encouraging students in individual or collaborative efforts.<sup>21</sup> Students receive the same instructional content the professor would give in person, but "the focus is on doing things with the information [in a lab setting] rather than sitting passively and watching someone else demonstrate."<sup>22</sup>

¶9 The legal academy is not immune to the widespread pressures to develop cost-effective education delivery systems that are redefining other disciplines in higher education.<sup>23</sup> Similarly, the legal academy must respond to calls to better educate our students to engage with technology and manage the ever-expanding role technology plays in legal practice.<sup>24</sup> These pressures can easily lead to the wholesale adoption of technology in legal education. Although technology can have lasting value when educating adults, it is not the answer to all problems.<sup>25</sup> Technology is a tool, and like any other tool "should fill a need or solve a problem."<sup>26</sup>

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(Dec. 4, 2012, 1:50 P.M.), <http://www.cali.org/blog/2012/12/04/notes-class-observation>. Therefore the flipped classroom, particularly in the legal research context, provides the professor with an opportunity to engage all the students in the class and explore the class material more deeply because the students have already been given the instructional content.

16. BERGMANN & SAMS, *supra* note 9. See also EDUCAUSE, *Seven Things You Should Know About . . . Flipped Classrooms* (Feb. 2012), <http://net.educause.edu/ir/library/pdf/ELI7081.pdf> (providing a summary of the flipped classroom model).

17. *About*, KHAN ACADEMY, <http://www.khanacademy.org/about> (last visited Aug. 1, 2013). See also Salman Khan, *Let's Use Video to Reinvent Education*, TED TALKS (Mar. 2011), [http://www.ted.com/talks/salman\\_khan\\_let\\_s\\_use\\_video\\_to\\_reinvent\\_education.html](http://www.ted.com/talks/salman_khan_let_s_use_video_to_reinvent_education.html).

18. See Dean N. Shimamoto, *Implementing a Flipped Classroom: An Instructional Module*, <http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/22527/ETEC690-FinalPaper.pdf?sequence=1> (instructional module is at <http://www.kokuamai.com/test/flipped>) (last visited Sept. 9, 2013).

19. See generally EDUCAUSE, *supra* note 16; Bill Tucker, *The Flipped Classroom: Online Instruction at Home Frees Class Time for Learning*, EDUC. NEXT, Winter 2012, at 82. See also Ctr. for Digital Educ., *supra* note 10 (discussing flipped classroom experiences in higher education).

20. Connor, *supra* note 14.

21. BERGMANN & SAMS, *supra* note 9, at 70–71.

22. Connor, *supra* note 14.

23. Rita Shackel, *Beyond the Whiteboard: E-Learning in the Law Curriculum*, 12 QUEENSLAND U. TECH L. & JUST. J. 105, 105 (2012).

24. See generally EDUCATING THE DIGITAL LAWYER (Oliver Goodenough & Marc Lauritsen eds., 2012), available at [http://www.law.harvard.edu/programs/plp/pages/digital\\_lawyer\\_book.php](http://www.law.harvard.edu/programs/plp/pages/digital_lawyer_book.php); MITCH KOWALSKI, AVOIDING EXTINCTION: REIMAGINING LEGAL SERVICES FOR THE 21ST CENTURY (2012); RICHARD E. SUSSKIND, THE END OF LAWYERS? RETHINKING THE NATURE OF LEGAL SERVICES (2008); RICHARD SUSSKIND, TOMORROW'S LAWYERS: AN INTRODUCTION TO YOUR FUTURE (2013); William D. Henderson, *Three Generations of U.S. Lawyers: Generalists, Specialists, Project Managers*, 70 MD. L. REV. 373 (2011).

25. See MICHELLE BOULE, MOB RULE LEARNING: CAMPS, UNCONFERENCES, AND TRASHING THE TALKING HEAD 110 (2011).

26. *Id.* See also Tanya Roscorla, *Flipped Classes: Dispelling Myths and Sharing What Works*, CTR. FOR DIGITAL EDUC. (June 28, 2012), <http://www.centerdigitaled.com/classtech/Flipped-Class-QA.html> (discussing the use of a flipped classroom that employs a variety of teaching strategies and stressing the importance of ensuring that the pedagogy drives the use of technology and not the reverse).

Therefore, the same considerations that apply to the adoption of any teaching strategy must also apply to the adoption of e-learning strategies and tools. These considerations include (1) ensuring that pedagogical goals drive the use of technology, and not vice versa; and (2) understanding how technology supports identified course learning objectives and desired outcomes, and how it enhances or supplements, rather than simply supplanting, the traditional teaching strategy.<sup>27</sup> “If caution is exercised and if technology and its limitations are well understood, then e-based learning tools undoubtedly provide a platform for innovative pathways to learning, which can serve to better prepare law students for the modern professional marketplace.”<sup>28</sup>

¶10 An examination of the flipped classroom model, when properly implemented, refutes the notion that cool technology is supplanting traditional podium teaching at the expense of pedagogy. In September 2010, the U.S. Department of Education released a report on the comparative effectiveness of online and face-to-face teaching.<sup>29</sup> Based on the analysis of more than fifty empirical studies of online learning conducted between 1996 and 2008, the report found purely online education “as effective as classroom instruction, but no better.”<sup>30</sup> The research results vary, however, in studies comparing a blend of online and face-to-face instruction with purely face-to-face conventional classroom instruction. The researchers found an average of thirty-five percent stronger learning outcomes for students taught in a blended format.<sup>31</sup> The report noted that there is nothing about a blend of online and face-to-face instruction per se that should improve student learning.<sup>32</sup> Rather, the significantly improved outcomes for students taught in blended settings may flow simply from the fact that those students are exposed to more instructional materials than students whose primary encounters take place in a classroom.<sup>33</sup>

¶11 Flipped classrooms blend e-learning and in-class learning. More recent research suggests that courses based on a “blended” teaching strategy, that is, those that provide a combination of opportunities for e-learning and face-to-face teaching, are “more successful and increase student satisfaction with the learning experience.”<sup>34</sup> More important, not only do blended courses increase student satisfaction, some evidence suggests that such courses “generate deeper learning experi-

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27. Shackel, *supra* note 23, at 114.

28. *Id.*

29. See BARBARA MEANS ET AL., U.S. DEP’T OF EDUC., EVALUATION OF EVIDENCE-BASED PRACTICES IN ONLINE LEARNING (2010), available at <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>. See also Todd E. Pettys, *The Analytic Classroom*, 60 BUFF. L. REV. 1255, 1303–05 (2012), for a discussion of the empirical data in a legal education context.

30. MEANS ET AL., *supra* note 29, at 18.

31. *Id.* at 19.

32. *Id.* at 52.

33. *Id.*

34. Shackel, *supra* note 23, at 109–10. See also Ed Hahn, *Video Lectures Help Enhance Online Information Literacy Course*, 40 REFERENCE SERVICES REV. 49 (2012); Gordon E. McCray, *The Hybrid Course: Merging On-line Instruction and the Traditional Classroom*, 1 INFO. TECH. & MGMT. 307 (2000); Robert Talbert, *Inverted Classroom*, COLLEAGUES, Fall 2012, at 18; Dan Berrett, *How “Flipping” the Classroom Can Improve the Traditional Lecture*, CHRON. HIGHER EDUC., Feb. 24, 2012, at A16–A18.



ences for the students.”<sup>35</sup> Researchers have also identified other advantages of blending learning environments, including

that such learning may encourage deeper levels of understanding; the ability it offers to more carefully consider responses due to the asynchronous nature of the medium; and the minimization of the power differential between the student and teacher as well as power differentials between students, which may surface in the classroom and impact individual learning.<sup>36</sup>

¶12 Given these substantial research findings, the adoption of the flipped classroom model to teach legal research should not raise the specter of technology for technology’s sake or the wholesale dumping of pedagogy for the newest “shiny object.” As a blended e-learning environment, the flipped classroom model represents an appropriate use of technology in a legal research teaching strategy that is designed to prepare students for the evolving legal, business, and technological environments in which lawyers work.

## Elements to Consider When Designing a Legal Research Course

### Responding to the Cultural Needs of the LL.M. Student

¶13 Deciding the how and what of teaching legal research is a challenge for anyone designing a legal research course. It is all the more challenging when designing and teaching a course for LL.M. students.<sup>37</sup> We anticipate that the students will struggle with the fundamental differences in legal systems and design our courses appropriately.<sup>38</sup> However, we do not always adequately respond to the struggles these students face in understanding cultural differences, informal English, cultural references in the classroom, classroom conventions, and the pace of spoken English in the classroom.<sup>39</sup>

¶14 LL.M. students face these language and cultural barriers and complications despite high English-language proficiency test scores.<sup>40</sup> English proficiency exams do not test, and therefore cannot measure, an understanding of the cultural aspects of the U.S. legal system or the U.S. law school classroom and its norms.<sup>41</sup> LL.M. students therefore must adjust to unfamiliar social and cultural norms in everyday life in the United States, the legal education classroom, and U.S. law and legal

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35. Shackel, *supra* note 23, at 109–10.

36. *Id.* at 110.

37. Inglehart, *supra* note 7, at 180.

38. Most legal research professors include basic civics instruction and basic legal concepts in courses taught to LL.M. students. For example, when I use a research hypothetical involving shareholder liability (piercing the corporate veil), a short description of corporate structure is provided in the instructional materials and reviewed in the short orientation held at the beginning of each lab session.

39. See Julie M. Spanbauer, *Lost in Translation in the Law School Classroom: Assessing Required Coursework in LL.M. Programs for International Students*, 35 INT’L. J. LEGAL. INFO. 396, 421 (2007).

40. *Id.* at 414.

41. See *id.* at 415 (discussing the premise of contrastive rhetoric, i.e., that language and culture are reciprocal).



practice.<sup>42</sup> Unlike some of their home country environments, all three of these environments in the United States value “individual opinion, critical thinking, and questioning authority.”<sup>43</sup>

¶15 We need to provide our students (even those who are practicing attorneys in their home countries) with training and exposure to the “U.S. legal sociolinguistic and cultural norms”<sup>44</sup> as a way to assist them in adjusting to these norms. This training comes from reading legal texts, writing documents, and researching the law.<sup>45</sup> The training should also incorporate learning opportunities that reflect the real-life practice of law. This substantive and professional exposure to U.S. legal English and legal culture is what students seek in U.S. LL.M. programs.<sup>46</sup> Ironically, this is the very experience many international LL.M. programs fail to deliver.<sup>47</sup>

¶16 The flipped classroom legal research course provides students with an opportunity to read, interpret, and apply U.S. legal principles to solve a research hypothetical in a practice-like setting. In doing research, students learn the organizational and analytical norms associated with U.S. law.<sup>48</sup> Placing this training and exposure in a safe environment such as the flipped classroom encourages the student to experiment, challenge, and in turn, gain a deeper understanding of the U.S. legal system. This deeper learning experience gives the LL.M. student the expertise and confidence to successfully engage in legal practice in the United States and elsewhere.

### Bringing Legal Research Out of the Hidden Curriculum

¶17 A legal research course in an LL.M. program often suffers from the same “hidden curriculum” issues a legal research course faces in the J.D. program. The “hidden curriculum” is the “socialization process where students pick up messages through the experience of being in school and interacting with faculty and peers, not just from things that they are formally taught.”<sup>49</sup> Despite its fundamental role in the practice of law,<sup>50</sup> J.D. and LL.M. students alike rapidly come to dismiss the legal research course as something less than a doctrinal course. The delivery of the legal research course curriculum often involves teaching by non-tenure-track faculty in class meetings tacked onto or inserted into legal writing classes. Some programs may require attendance at vendor-administered “training sessions” that

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42. *Id.* at 424.

43. *Id.* at 435.

44. *Id.* at 419.

45. *Id.*

46. *See id.* at 426. *See also* Carole Silver, *Holding onto “Too Many Lawyers”: Bringing International Graduate Students to the Front of the Class*, 3 Oñati Socio-Legal Series 543–44 (2013), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2298682](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2298682).

47. Spanbauer, *supra* note 39, at 429.

48. *Id.* at 435.

49. John Lande, *Reforming Legal Education to Prepare Law Students Optimally for Real-World Practice*, 2013 J. DISP. RESOL. (forthcoming 2013) (manuscript at 15), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2214989](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2214989).

50. *See* Ronald E. Wheeler, *Does WestlawNext Really Change Everything? The Implications of WestlawNext on Legal Research*, 103 LAW. LIBR. J. 359, 369, 2011 LAW. LIBR. J. 23, ¶ 39 (discussing legal research as “a cornerstone of the legal process and the development of the law”).

suggest legal research is less about careful analysis and the application of law to fact than it is about using the algorithm to find that one sentence in that one case that will win the day for the client. In addition, the courses are typically assigned fewer (or no) credit hours than doctrinal courses and may be taught on a pass-fail basis. "Nobody doubts that legal research is a skill that permeates nearly all other legal skills,"<sup>51</sup> yet all of these factors send signals to students that time spent on a legal research assignment is time not spent on the more valuable work to be done for doctrinal courses. The pedagogical model chosen for use in teaching legal research to LL.M. students should reflect the importance of legal research. In addition, the research assignments and group learning setting should provide meaningful opportunities to engage in lawyerlike activities.

### Responding to Technological Advances

¶18 Most agree that the days of teaching students how to conduct legal research using print materials are gone,<sup>52</sup> as students increasingly express an unsurprising preference for online resources.<sup>53</sup> Methods of accessing and using legal information resources have been profoundly changed by technology. "In the last thirty-five to forty years, legal research has moved from being a thoughtfully conceived all-print endeavor, to a query-based electronic venture, to a 'Google for lawyers enterprise.'"<sup>54</sup> In addition, LoisLawConnect, Bloomberg Law, WestlawNext, and Lexis Advance are merely the latest iterations of vendor platforms.<sup>55</sup> The quality and quantity of free legal information on the Internet continues to expand rapidly. In addition, mobile technology drives a demand for new applications and interfaces daily, in all arenas, including higher education and legal research.<sup>56</sup>

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51. Matthew C. Cordon, *Task Mastery in Legal Research Instruction*, 103 LAW LIBR. J. 395, 396, 2011 LAW LIBR. J. 25, ¶ 2.

52. Ellie Margolis & Kristen E. Murray, *Say Goodbye to the Books: Information Literacy as the New Legal Research Paradigm*, 38 U. DAYTON L. REV. 117, 117 (2012). See also Sanford N. Greenberg, *Legal Research Training: Preparing Students for a Rapidly Changing Research Environment*, 13 LEGAL WRITING: J. LEGAL WRITING INST. 241, 246–50 (2007); Ellie Margolis, *Surfin' Safari—Why Competent Lawyers Should Research on the Web*, 10 YALE J.L. & TECH. 82, 109 (2007).

53. See Margolis & Murray, *supra* note 52, at 126 (discussing student comfort levels with electronic resources versus print resources and student preferences for online sources); Michelle M. Wu & Leslie A. Lee, *An Empirical Study on the Research and Critical Evaluation Skills of Law Students*, 31 LEGAL REFERENCE SERVICES Q. 205, 222–23 (2012).

54. Anna P. Hemingway, *Accomplishing Your Scholarly Agenda While Maximizing Students' Learning (a.k.a., How to Teach Legal Methods and Have Time to Write Too)*, 50 DUQ. L. REV. 545, 555 (2012).

55. John O. McGinnis & Steven Wasick, *Law: An Information Technology* 24–28 (2012), [http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=john\\_mcginnis](http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=john_mcginnis) (providing a history of the development of vendor-based computerized legal research).

56. See *Transforming Higher Education: 4 Key Mobility Trends for Instructional Technologists to Watch*, available at [http://forms.lenovo.com/forms/4\\_Key\\_Mobility\\_Trends](http://forms.lenovo.com/forms/4_Key_Mobility_Trends) (last visited Aug. 1, 2013) (free site registration required) (noting that 55% of public universities launched mobile applications in 2011, up from 32.5% in 2010); Joanna Brenner, *Pew Internet: Mobile*, PEW INTERNET (June 6, 2013), <http://www.pewinternet.org/Commentary/2012/February/Pew-Internet-Mobile.aspx> (discussing the increasing use of smart phones for web searching); Kristen Purcell, *The Rise of Apps Culture*, PEW INTERNET (Sept. 14, 2010), <http://pewinternet.org/Reports/2010/The-Rise-of-Apps-Culture.aspx>.

¶19 In the legal research professor's "new normal," it is clear that no legal research curriculum can teach students everything they need to know about every information resource, Internet option, or vendor platform. It is also abundantly clear that there is no going back. We can continue to lament the loss of resource selection and all the other features that we used in past versions of vendor platforms, and we can continue to list all the potential downsides of the Google interface. However, our students have already moved on, and we must as well. Rather than lamenting the past, we must design a research curriculum that gives our students the tools to enable them to effectively interact with legal information in any setting.

¶20 Furthermore, we must provide our students with the tools in a pedagogical environment that does not discourage them at the outset. A focus on the ever-evolving nature and complexity of legal research technologies can be daunting. "When students hear the message that legal research is so intricate that it will take years to master, it hardly provides incentive for them to take the time to master the skill."<sup>57</sup> We want to create confidence and develop good research habits in our students by using a classroom model that includes sound instruction and opportunities for hands-on practice and guided experimentation.<sup>58</sup>

### Responding to Calls for Changes in Legal Education

¶21 In addition to the needs of our LL.M. students and the impact of the hidden curriculum and technological factors, recent proposals demanding changes in legal education must also be considered when designing a legal research course. These proposals are based in part on an allegation that law schools are falling short in their goal to equip law students with the analytical abilities necessary to become successful members of the legal community.<sup>59</sup> These allegations are not new. The MacCrate Report,<sup>60</sup> published in 1992, and the Carnegie Report,<sup>61</sup> published in 2007, "taken together stand for the proposition that our system of legal education and professional development has been underserving law students for generations."<sup>62</sup> More pedagogically damning is the allegation that the legal education system, as currently structured, with its focus on the educational objectives of comprehension, analysis, and

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57. Cordon, *supra* note 51, at 403, ¶ 21.

58. *Id.* at 399–402, ¶¶ 11–19 (discussing the habits of a good researcher). The seven habits for successful and efficient research Cordon identifies and explains are: (1) practice makes perfect; (2) being curious, confident, creative, and competitive; (3) using effective strategies and seeing the big picture; (4) covering the details; (5) passion for knowledge, writing, advocacy, and technology; (6) cost-consciousness; and (7) savvy use of sources.

59. See David McGowan, *Making Law School More Useful* (San Diego Legal Studies Paper No. 13-102, 2012), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2181793](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2181793); Pettys, *supra* note 29, at 1256.

60. AM. BAR ASS'N, SECTION OF LEGAL EDUC. & ADMISSIONS TO THE BAR, LEGAL EDUCATION AND PROFESSIONAL DEVELOPMENT—AN EDUCATIONAL CONTINUUM: REPORT OF THE TASK FORCE ON LAW SCHOOLS AND THE PROFESSION: NARROWING THE GAP (1992).

61. WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007).

62. Dennis Kim-Prieto, *The Road Not Yet Taken: How Law Student Information Literacy Standards Address Identified Issues in Legal Research Education and Training*, 103 LAW LIBR. J. 605, 614; 2011 LAW LIBR. J. 37, ¶ 20.

simple application, gives short shrift to more sophisticated forms of application, synthesis, and evaluation, thus limiting the expectations of law schools and their students.<sup>63</sup>

¶22 Others within the legal academy posit that what is missing is "an educational environment that provides students with resources and the situations with which they can best learn."<sup>64</sup> "Law schools cannot help students cultivate practical wisdom or judgment unless they give students opportunities to engage in legal problem-solving activities."<sup>65</sup> The best way to increase students' abilities to engage in legal problem-solving activities is to increase the number of clinical and externship opportunities.<sup>66</sup> A second option would be to increase instruction in important legal skills such as legal research and legal writing.<sup>67</sup> "When given appropriate instruction, nearly all law students can achieve mastery—not merely competence—of the skills of the novice lawyer."<sup>68</sup>

¶23 Although these charges are aimed primarily at doctrinal law classes utilizing the Socratic method of teaching, the findings are equally relevant to traditionally taught legal research classes that focus on search instruction and treasure hunt questions. In both circumstances, we have limited our students' expectations and set them up to fail by not engaging and motivating them with the proper pedagogical strategies.<sup>69</sup> If we want to successfully teach students to think and reason like lawyers, legal research instruction must create a context that replicates what lawyers actually do.<sup>70</sup>

### Responding to the Goals of the International LL.M. Student

¶24 International students "constitute nearly all of the applicants for many law schools' one-year LL.M. programs."<sup>71</sup> As a result, they are an increasingly important part of the student tuition revenue for many U.S. law schools. This revenue stream is not without risk or cost. Students applying for admission to LL.M. programs are encouraged to fully vet the graduate law program on many levels, including its delivery of meaningful experiential educational and cultural opportunities.<sup>72</sup> In addition, U.S. law schools are facing strong competition from other English-speaking common law countries for international students at the same time U.S. law schools are seeking to increase enrollments and market share to support declining tuition revenues from traditional J.D. students.<sup>73</sup> If U.S. law schools want to

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63. Edwin S. Fruehwald, *How to Become an Expert Law Teacher by Understanding the Neurobiology of Learning* 2–3 (July 23, 2012), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2115768](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2115768).

64. *Id.* at 2.

65. *Id.*

66. Lande, *supra* note 49, at 20.

67. *Id.*

68. Fruehwald, *supra* note 63, at 2.

69. *See id.* at 2–3.

70. *Id.* at 2.

71. Silver, *supra* note 2, at 2387.

72. GEORGE E. EDWARDS, LL.M. ROADMAP: AN INTERNATIONAL STUDENT'S GUIDE TO U.S. LAW SCHOOL PROGRAMS 71–74 (2011).

73. Silver, *supra* note 46, at 535–38; Silver, *supra* note 2, at 2434.

continue to rely on this revenue, they must respond to and satisfy the goals of international students.<sup>74</sup>

¶25 Carole Silver has summarized the goals and motivations of the LL.M. student as the acquisition of a “global legal literacy, which includes the ability to communicate with those whose first language is different, cultural fluency—particularly with regard to professional legal culture, an appreciation for the ways in which the roles of lawyers differ in particular countries, and an awareness of basic variations regarding national law.”<sup>75</sup> To satisfy the goals of the LL.M. student, U.S. legal education programs must provide “an educational framework that enables meaningful interaction with an internationally diverse peer group, including U.S. JD students, and one that offers exposure to practice experiences, too.”<sup>76</sup>

¶26 Ironically, the legal research course stands at the crux of any program seeking to offer practice experiences to the LL.M. student. The chance to participate in an internship, externship, clerkship, or secure employment in a law firm or legal department requires legal research competency in the U.S. legal system. Even those students who are practicing attorneys in their home countries do not bring these skills to the table.<sup>77</sup> The legal research process exposes students to the structure and content (both primary and secondary) of the U.S. legal system. More important, it provides an opportunity, if instruction is delivered properly, to develop the analytical and critical thinking skills necessary to successfully practice in the U.S. legal system.<sup>78</sup> In short, the legal research process informs their understanding of both U.S. law and its unique sociocultural aspects.

¶27 Researchers have noted the frustration of LL.M. students with the fact that U.S. law schools fail to provide meaningful practical legal experiences and intercultural experiences.<sup>79</sup> Due to the nature of legal research instruction, a legal research course is well positioned to respond to this frustration and other needs of the LL.M. students seeking to study at U.S. law schools. Using a flipped classroom model built on working groups researching and responding analytically to complex legal issues more accurately reflects U.S. legal practice, and better prepares students to participate in internships, externships, and other experiential learning opportunities during law school and in the practice of law in the U.S. after graduation.

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74. Silver, *supra* note 46, at 543.

75. *Id.* at 547. See also Spanbauer, *supra* note 39, at 426 (discussing the need for exposure to “U.S. legal English, and legal culture, including the norms of the various documents produced in different practice areas and the litigation system and appellate process. . . . [S]tudents need to be taught about this aspect of U.S. legal culture because they need to experience this differing cultural preference for articulating knowledge so that they can become conversant in it.”).

76. Silver, *supra* note 46, at 550. See also Spanbauer, *supra* note 39, at 431–32.

77. This is not to dispute that practicing attorneys and students from other countries bring other valuable skills to the law school classroom. These skills may include negotiation, deal structuring, subject expertise, and political knowledge, to name just a few.

78. For example, I have used criminal law research assignments to introduce concepts such as plea bargaining and aggressive prosecutorial charging in a political campaign context. Students should consider these external factors when advising their hypothetical clients.

79. Spanbauer, *supra* note 39, at 429; see also Silver, *supra* note 46, at 543–49.

### The Redesigned LL.M. Legal Research Course

¶28 The redesign of the legal research course at the McKinney School of Law was prompted by the need to provide opportunities for analytical legal work in settings that encouraged and supported learning and mimicked the context of what lawyers actually do. The legal research course, as currently taught, is a required (and demanding) one-credit course. It consists of fourteen class sessions, readings from a textbook and other sources, online tutorials and instructional materials, and weekly hypothetical research assignments. The course consists of several introductory in-class sessions<sup>80</sup> followed by eleven weekly lab sessions.

¶29 Students prepare for the lab sessions by completing reading assignments and viewing web-delivered instructional materials. They come to the lab sessions ready to work collaboratively on research hypotheticals that often require advising a client. The labs provide opportunities for students to work in small groups that change weekly.<sup>81</sup> The work on the research hypothetical continues outside the lab and is due the following week. In the lab sessions, the focus is less on the particular interface and more on interacting as a team to respond to the research hypothetical. The labs are less about the “right answer,” and more about learning in an encouraging and confidence-building environment.<sup>82</sup>

¶30 The online tutorials and instructional materials are updated each semester as necessary to stay both current and interesting. The research hypotheticals span topics from criminal to corporate law. An ancillary purpose of the research hypothetical is to introduce the LL.M. students to aspects of American life, in particular those aspects of American culture that might not be familiar to them. For example, a research hypothetical may involve issues related to the Native American Graves and Repatriation Act.<sup>83</sup> This introduces the students to an understanding of American culture that extends beyond the borders of New York, Chicago, and Los Angeles. The research hypotheticals are re-created each semester to reflect changes in the law and incorporate evolving legal topics.

¶31 In summary, the flipped classroom model meets the curriculum requirement to develop a legal research course that responds to the sociocultural needs of the LL.M. student, removes the stigma of the hidden curriculum, responds to technological advances, answers the call for changes in legal education, and lastly, satisfies the goals and motivations of the LL.M. student at a time when U.S. law schools are seeking to further develop this revenue stream. Given this, the next question to

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80. These explain the structure of the course, including such basics as accessing the course platform, and provide instruction on the fundamentals of the U.S. legal system and research basics to address any educational gap experienced by international LL.M. students. See Susan C. Wawrose, Academic and Cultural Support for International LL.M. Students: Four Suggestions to Help Students Succeed 3 (2012), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2189830](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2189830), for ideas and topics to include in the introductory sessions.

81. The groups are randomly assigned and change each week to encourage different students to experience different team roles. The optimal group size appears to be three students.

82. One of the goals of the research assignments is to reinforce that there is not always a “right” answer; instead there are often two or more competing options that must be weighed and advocated.

83. Pub. L. No. 101-601, 104 Stat. 3048 (1990) (codified as amended at 25 U.S.C. §§ 3001–3013 (2006) and 18 U.S.C. § 1170 (2006)).



ask is, “Does the flipped classroom model reflect the pedagogical goals of a legal research curriculum?”

## Informed Learning as the Basis for Design

### Overview

¶32 In addition to reacting to calls for changes in legal education that reduce expenses and provide practical educational experiences, changes in the legal research curriculum must also further the goal of developing students who are better able to practice in a changing technological, legal, and business environment. Therefore the legal research courses we design and deliver in response to this opportunity must support and reflect the principles of information literacy, including legal information literacy.

¶33 Students must be able to effectively engage with legal and nonlegal information<sup>84</sup> when learning in different contexts in order to be considered information literate.<sup>85</sup> Despite the changes wrought by technology, fundamental legal information literacy has not changed.<sup>86</sup> When doing legal research, students must be able to locate the relevant facts, identify the relevant primary law, locate and use appropriate secondary sources for background information as needed, analyze and apply the law to the client’s situation, and update their research. Teaching legal information literacy in a rapidly and relentlessly evolving technological, legal, and business environment poses a daily challenge to legal research professors.

### Understanding Information Literacy in the Context of Informed Learning

¶34 The goal to transform our students into “informed learners”<sup>87</sup> for the twenty-first century should frame our response to this pedagogical challenge. The

84. See McGowan, *supra* note 59, at 21 (suggesting that law students receive additional education and competent training in factual investigation, that is, in gathering and analyzing facts).

85. See Christine Bruce & Hilary Hughes, *Informed Learning: A Pedagogical Construct Attending Simultaneously to Information Use and Learning*, 32 LIBR. & INFO. SCI. RES., at A2 (2010).

86. Cindy Guyer, *Experiential Learning: Context and Connections for Legal Research—A Case Study*, 32 LEGAL REFERENCE SERVICES Q. (forthcoming 2013) (manuscript at 10), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2170086](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2170086).

87. Informed learning is based on nine principles that may be interpreted and applied in different manners according to the needs of the particular information context. Researchers have identified three information contexts in society: education, workplace, and community settings. The nine principles are as follows:

1. Foster Informed Learning;
2. Promote Critical, Creative, and Reflective Information Use in Learning;
3. Recognize That the Experience of Information Literacy May Vary across Different Cultures and Communities;
4. Explore and Celebrate the Diversity of User Communities in Order to Support Their Information and Learning Needs;
5. Advocate for the Disadvantaged and Disempowered;
6. Develop Informed Learning Environments for People of Diverse Generations, Learning Styles, and Cultural Heritages;
7. Pursue the Potential of Technological Innovation and Learning Space Design for Informed Learning;
8. Collaborate to Support Informed Learning; and
9. Broaden the Recognition of Educator to Include Information Professionals such as Academic and Public Librarians, Museum Curators, and Others.



concept of informed learning “refocuses attention on using information to learn and [the] learners’ awareness of their information experiences as they go about learning.”<sup>88</sup> Informed learning has been described as

using information, creatively and reflectively in order to learn. It is learning that draws on the different ways in which we use information in academic professional and community life, and it is learning that draws on emerging understandings of our varied experiences of using information to learn.<sup>89</sup>

Informed learning is “simultaneously about information use and learning.”<sup>90</sup> In short, informed learning is “learning through engaging with or interacting with information.”<sup>91</sup> “Informed learning” or “using information to learn” therefore brings a broader, “learner-centered, experiential, and reflective [approach] to the information literacy agenda.”<sup>92</sup>

¶35 Before we can understand the role of informed learning in teaching legal research, it is necessary to understand how informed learning expands and deepens our understanding of information literacy. Information literacy is defined as “recogniz[ing] when information is needed and [knowing how] to locate, evaluate, and use [it] effectively.”<sup>93</sup> Information literacy skills include the ability to

- determine the extent of information needed
- access the needed information effectively and efficiently
- evaluate information and its sources critically
- incorporate selected information into one’s knowledge base
- use information effectively to accomplish a specific purpose
- understand the economic, legal, and social issues surrounding the use of information; and access and use information ethically and legally<sup>94</sup>

¶36 Developed by the Association of College & Research Libraries (ACRL), these standards have been used in college and university libraries for purposes of, among other things, assessment and curricular development.<sup>95</sup> As a result of this focus on measurable skill sets, library or research instruction often concentrated on search techniques and tools and the use of information technology.<sup>96</sup> A similar emphasis was evident in the manner in which legal research was taught in the print environment. “Traditionally, legal research was taught through bibliographic instruction—explaining what materials were contained in various case reporters, code books, other primary legal sources, etc. and then teaching how to access these materials through digests, annotations, secondary sources and the like.”<sup>97</sup>

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Christine Bruce et al., *Supporting Informed Learners in the Twenty-first Century*, 60 LIBR. TRENDS 522, 541–43 (2012).

88. *Id.* at 524.

89. Bruce & Hughes, *supra* note 85, at A2.

90. *Id.*

91. Bruce et al., *supra* note 87, at 524.

92. Anne R. Diekema et al., *Re-framing Information Literacy: Problem-Based Learning as Informed Learning*, 33 LIBR. & INFO. SCI. RES. 261, 261 (2011).

93. *Presidential Committee on Information Literacy: Final Report*, ACRL: ASS’N OF COLL. & RESEARCH LIBRARIES (1989), <http://www.ala.org/acrl/publications/whitepapers/presidential>.

94. ASS’N OF COLL. & RESEARCH LIBRARIES, *supra* note 5, at 2–3.

95. Kim-Prieto, *supra* note 62, at 608, ¶ 5.

96. Diekema et al., *supra* note 92, at 261.

97. Margolis & Murray, *supra* note 52, at 118.

¶37 Informed learning advocates criticize this approach to information literacy as a “practice that tends to privilege easily-defined skills, often in a linear model that emphasizes the search component of the research process.”<sup>98</sup> In the end, “confining information literacy to such skills denies learners the rich potential that may be gained from broader attention to different ways of experiencing information use in the disciplines, the professions, and community.”<sup>99</sup>

¶38 Informed learning is contextual, with different strategies for different contexts. Researchers typically measure learning strategies and outcome assessments in one of three contexts: academic, professional, or life in general.<sup>100</sup> Informed scholars are informed learners who engage with information to learn in formal education environments, such as schools, universities, and research centers.<sup>101</sup> An informed workforce is adaptable and innovative and uses information creatively and wisely for a wide variety of purposes.<sup>102</sup> An informed citizenry uses information effectively to learn for health, financial, educational, recreational, political, and other purposes.<sup>103</sup>

¶39 Informed learning requires that learners be given a supportive environment that provides the opportunity for enhancing existing information skills as well as learning new information skills.<sup>104</sup> Creating such an environment requires an understanding of what constitutes information and informed literacy in a particular context.<sup>105</sup> The learners themselves should participate in the design of the learning environment.<sup>106</sup> Elements of such an environment include “reflective learning, which promotes inquiry, reflection, and problem solving; thoughtful and effective management of information resources; self-directed learning individually and in teams; research-based learning that activates and extends prior learning; and curriculum that encourages reflection on the implications for self and others of learning.”<sup>107</sup>

¶40 In addition, informed learning pedagogical models require informed educators. Informed instructors act as

learning guides and consultants to their students, fostering independent research and co-creation of new knowledge. They ensure [that] students are equipped with . . . [the] capabilities to take advantage of a range of established and emerging technologies and to interact safely, responsibly, and productively . . . . Informed educators embrace social and cultural diversity, creating inclusive learning environments that enable students to share varied knowledge and experiences and so develop rich, inquiring, and mutually respectful world views.<sup>108</sup>

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98. Diekema et al., *supra* note 92, at 261.

99. *Id.*

100. Bruce et al., *supra* note 87, at 525–26.

101. *Id.* at 526.

102. *Id.* at 527.

103. *Id.*

104. *Id.* at 534.

105. *Id.*

106. *Id.* at 534–35.

107. *Id.* at 535–36.

108. *Id.* at 536.

For students in supportive academic environments with informed educators, researchers have identified seven levels of informed learning experiences: information awareness, sources, process, control, knowledge construction, knowledge extension, and wisdom.<sup>109</sup>

¶41 "A key role of informed learning in scholarly contexts at all levels is to activate and heighten awareness of [these] information experiences."<sup>110</sup> In so doing, students engage with different information resources at different points in their academic lives. Each interaction creates a new learning point that is expanded and developed by the student. Informed learning seeks to make "explicit awareness of . . . different forms of information and their use, as well as make explicit the various activities through which information is interpreted and understood."<sup>111</sup>

¶42 Legal research professors can work to ensure that students develop the requisite legal information literacy to be considered informed scholars in the academic environment. They can develop a curriculum that supports informed learning, provide the requisite supportive learning environment, and serve as informed educators. However, a solid pedagogy must also take into account external assessments.<sup>112</sup> Thus, in developing an informed learning curriculum for legal research it is important to look to external legal research competency standards, which were established to prepare students for the practice of law. When incorporating external standards into pedagogy, legal research professors should determine how these externally developed standards assess and measure their work in order to develop law students into informed learners ready to function as informed workers in the legal workplace.

### Constructing Legal Information Literacy in the Context of Informed Learning

¶43 In July 2012, the executive board of the American Association of Law Libraries (AALL) approved Legal Research Competencies and Standards for Law Student Information Literacy.<sup>113</sup> The standards were later revised and renamed Principles and Standards for Legal Research Competency.<sup>114</sup> The principles are "[intended] to foster best practices in law school curriculum development and design; to inform law firm planning, training and articulation of core competencies; to encourage bar admission committee evaluation of applicants' research skills; to inspire continuing education program development; and to impact law school accreditation standards review."<sup>115</sup> A review of the principles indicates that they support an informed learner curriculum since they envision a curriculum

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109. *Id.* at 527.

110. *Id.*

111. *Id.*

112. Vicenç Feliú & Helen Frazer, *Outcomes Assessment and Legal Research Pedagogy*, 31 LEGAL REFERENCE SERVICES Q. 184, 189 (2012).

113. AALL *Legal Research Competencies and Standards for Law Student Information Literacy*, AM. ASS'N OF LAW LIBRARIES (2012), <http://www.aallnet.org/Archived/Leadership-Governance/policies/PublicPolicies/policy-lawstu.html>.

114. *Principles and Standards for Legal Research Competency*, AM. ASS'N OF LAW LIBRARIES (approved July 11, 2013), <http://www.aallnet.org/main-menu/Leadership-Governance/policies/PublicPolicies/policy-legalrescompetency.html>.

115. *Id.*

dedicated to equipping law students with the skills necessary to become independent lifelong informed learners.

¶44 The principles identify five core competencies of the legal-information-literate researcher. For each core principle there is a list of related standards and competencies.<sup>116</sup> The five principles require that a legal-information-literate researcher

- I . . . possesses foundational knowledge of the legal system and legal information sources
- II . . . gathers information through effective and efficient research strategies
- III . . . critically evaluates information
- IV . . . applies information effectively to resolve a specific issue or need
- V . . . distinguishes between ethical and unethical uses of information, and understands the legal issues associated with the discovery, use, or application of information.<sup>117</sup>

¶45 Based in part upon the ACRL Information Literacy Standards,<sup>118</sup> the principles are “tailored to fit the skills, tools, and work product that we train law students to acquire, use, and create.”<sup>119</sup> What are these skills and tools? In the print environment, the process of legal research focused on finding the law. It was relatively straightforward and appropriately bibliographic because of the similarity between the structure of the resources and the manner in which the material was presented.<sup>120</sup> “In the era before computerization of the law, one could become proficient in legal research by relying on the bibliographic structure of the law. Law could be comprehended simply by the organization of volume sets on library shelves.”<sup>121</sup>

¶46 “Legal search is experiencing a revolution in capability”<sup>122</sup> that will continue. In this environment, researchers no longer worry about finding the law. The availability of electronic resources, both proprietary and free, has changed the skills we want students to acquire. In the decontextualized electronic environment, legal researchers must now understand how to develop appropriate searches and effectively and efficiently identify and select the needed information from vast numbers of results.<sup>123</sup> Finally, they must be able to analyze and apply their research findings to resolve a client’s problem. Thus, the current legal environment demands that we move from a “let’s find it” and “click here” approach to a more pedagogical

116. *Id.*

117. *Id.*

118. *Id.* See also Kim-Prieto, *supra* note 62, at 609–11, ¶¶ 7–10 (discussing the historical development of the literacy standards (now called principles) and their relationship to the ACRL standards).

119. Kim-Prieto, *supra* note 62, at 609, ¶ 7.

120. Margolis & Murray, *supra* note 52, at 122.

121. Brian Donnelly, *What Does “Digital Lawyer” Mean?*, in EDUCATING THE DIGITAL LAWYER, *supra* note 24, at 1-1, 1-14.

122. McGinnis & Wasick, *supra* note 55, at 78 (suggesting that law is itself an information technology). Viewing the law as an information technology reflects that the law both distributes information and is itself influenced by the infusion of more information from the outside world. This view argues that “the information revolution can substantially improve our ability to find the law and with that greater capacity can mold a law that better serves both its objectives of providing information to [the] community and gathering information from the world.” *Id.*

123. These skills require that legal researchers continue to understand and differentiate among sources, as well as know when it is appropriate to use a particular resource.

approach in order to teach legal research in a way that engages students in an analytical transformative process.

¶47 The AALL principles reflect this pedagogical shift<sup>124</sup> from thinking about legal information literacy as a bibliographic skill with easily defined tasks that emphasize the search component of the research process,<sup>125</sup> to one of informed learning, by recognizing that "[h]ighly competent research skills, effective problem solving skills, and critical thinking skills are keys to success in all areas of legal practices of today and the future."<sup>126</sup> For example, principle IV states: "A successful legal researcher applies information effectively to resolve a specific issue or need." This includes a competency that an information-literate student must understand "research as a recursive process" and be able to "reflect on the successes or failures of prior strategies."<sup>127</sup> To be an information-literate law student, the student must be an informed learner who learns through engaging and interacting with legal information. The principles and related standards therefore support the importance of a broader and deeper understanding of information literacy in the legal context.

¶48 Our students have embraced this new environment and moved forward past traditional legal instruction.<sup>128</sup> In determining what we want our students to learn and how they want to learn in this environment, we need to "differentiate between (1) the skills associated with using information in an ever-expanding range of contexts, representing a functional view of information and information literacy; and (2) the process of using information to learn, including communicating and creating in these contexts, representing transformative interpretations of information and information literacy."<sup>129</sup> It is imperative that legal research professors also focus on the broader informed learning platform that the principles envision when designing a legal research curriculum.

¶49 Law students should leave the legal research course with a level of information literacy that will enable them to work successfully with any information structure, proprietary or open, because they understand how to leverage what they know into skills for use in any new information environment.<sup>130</sup> Legal research professors should prepare students to adjust and succeed in an evolving legal environment that demands that lawyers bring new and changing skills to the table.<sup>131</sup>

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124. See Margolis & Murray, *supra* note 52, at 130 (discussing the principles as the basis for rethinking the way traditional legal research courses are taught).

125. See Diekema et al., *supra* note 92, at 261.

126. *Principles and Standards for Legal Research Competency*, *supra* note 114.

127. *Id.*

128. Margolis & Murray, *supra* note 52, at 150.

129. Bruce et al., *supra* note 87, at 524.

130. Bruce & Hughes, *supra* note 85, at A3 (noting that "[information literacy] is grounded in a program of research which has illuminated the experience of using information to learn in many contexts").

131. See EDUCATING THE DIGITAL LAWYER, *supra* note 24 (discussing need for education in information technology and its impact on the development of law); KOWALSKI, *supra* note 24 (stressing importance of project management and knowledge management skills); Henderson, *supra* note 24 (discussing need for project management skills).

¶50 The AALL principles provide the “groundwork for rethinking the way the traditional legal research course . . . is taught”<sup>132</sup> and a means to identify student competencies and create assessments<sup>133</sup> to deliver a legal research program in touch with “the realities of the legal field.”<sup>134</sup> The realities of the legal field require that the practical training law schools give their students must go beyond the “knowledge of the law and writing and trial skills.”<sup>135</sup> This training must “extend to the development of students’ emotional intelligence, professionalism, and sense of accountability and ownership.”<sup>136</sup> Law schools can

ensure that their graduates are ready to “hit the ground running” not only by teaching law students substantive law and certain technical aspects of [legal] practice but also by focusing on their students’ contributions to the learning process, thereby making self-assessment, self-learning, responsibility, and ownership second nature to all law graduates.<sup>137</sup>

In short, legal research courses that challenge students with research hypotheticals and group learning opportunities where learning is collaborative, self-driven, and ongoing will better position students for success in today’s legal environment.

¶51 Therefore, using informed learning in legal research curriculum development enables us to move beyond a discussion of a curriculum that develops technological skills and library skills to one that focuses on how students use information to learn in the particular context of law.<sup>138</sup> The challenge for legal research professors is to develop a curriculum that goes beyond “click here” and treasure hunt questions in an academic environment that speaks of the need to develop practical and analytical skills in our students, but may not always recognize or support the best method to achieve this goal.

## How the Flipped Classroom Supports an Informed Learning Objective

### Understanding Student Expectations and Motivations

¶52 Although we know very little about how law students actually learn, we do know that law students’ perceptions of the mode of delivery affects their learning.<sup>139</sup> A recent study of the factors that influence law students’ assessments of their professional and academic development indicates that students report greater academic and professional gains when the course emphasizes analysis, synthesis, and higher-order learning approaches.<sup>140</sup> These research results reflect findings about students in general. Students increasingly expect a classroom experience that pro-

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132. Margolis & Murray, *supra* note 52, at 130.

133. See Kim-Prieto, *supra* note 62, at 615, ¶ 21.

134. *Principles and Standards for Legal Research Competency*, *supra* note 114.

135. Cassandra L. Hill, *The Elephant in the Law School Assessment Room: The Role of Student Responsibility and Motivating Our Students to Learn*, 56 *How. L.J.* 447, 488 (2013).

136. *Id.*

137. *Id.* at 489.

138. See Bruce et al., *supra* note 87, at 543.

139. Shackel, *supra* note 23, at 112.

140. Carole Silver et al., *Gaining from the System: Lessons from the Law School Survey of Student Engagement About How Students Benefit from Law School*, 11 *U. ST. THOMAS L.J.* (forthcoming 2013) (manuscript at 31), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2196073](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2196073).

vides an opportunity to actively engage with the course content and develop knowledge for themselves.<sup>141</sup>

¶53 Furthermore, "[t]here is no point in helping students develop deep learning skills if the educational environment is giving them the message that surface ones are rewarded."<sup>142</sup> Law professors need to consider the method of delivery and avoid teaching strategies that promote a "linear or step-by-step approach [to learning]" as this would defeat the concept of professional problems being complex and requiring a range of approaches to solve."<sup>143</sup> In addition, we must recognize that lawyers must know "how to do more than just analysis."<sup>144</sup> The use of research hypotheticals that require students to determine the relevant facts, identify the legal issues, construct an efficient search, choose and use the best resource available in their search results, and *ultimately* advise the client challenge students to think like lawyers. Using research hypotheticals that require the students to assess the client's situation and provide advice creates a bridge to practice that gets students to move from an academic manner of thinking to that of a problem-solving lawyer.<sup>145</sup>

¶54 The flipped classroom model creates an educational environment that responds to how students want to structure their particular learning environments. It also motivates students to achieve more through the use of group work and research hypotheticals that raise performance expectations by requiring students to think and interact like lawyers.

### Replacing Linear Techniques and Tools with Researching Hypotheticals and Devising Client Solutions

¶55 The flipped classroom model responds to the call for a legal research curriculum that embraces a deeper understanding of information literacy. Researchers report that law students have already moved beyond an interest in being taught a linear, do-it-this-way skill set.<sup>146</sup> They experience no difficulty in finding the law and, in most instances, ignore planning, preferring instead to jump in and start researching.<sup>147</sup> The most effective teaching strategy for these students is to provide instruction and hands-on research opportunities in a guided environment. Such instruction will help students understand the difference between resources, efficiently analyze and process results in the electronic environment, and gain confidence in their developing research abilities.<sup>148</sup>

¶56 In addition, research assignments should reflect that students no longer need instruction in how to find the law. In our LL.M. legal research course, the preclass instructional materials include a variety of research examples that alert students to the complexity and changing nature of legal research. The research

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141. Ctr. for Digital Educ., *supra* note 10.

142. Shackel, *supra* note 23, at 112.

143. *Id.* See also Tracy A. Thomas, *Teaching Remedies as Problem-Solving: Keeping it Real*, 57 ST. LOUIS U. L.J. 673 (2013).

144. Thomas, *supra* note 143, at 676.

145. *Id.* at 685.

146. See Margolis & Murray, *supra* note 52, at 150.

147. *Id.* at 151.

148. See *id.* at 152.



hypotheticals reinforce this as well. For example, the research hypothetical may deliberately include such twists as researching a code section that has just undergone legislative renumbering and, as a result, includes no related case annotations or secondary sources. To properly resolve this research obstacle, students must apply additional research skills based on an understanding of how to interpret a statutory section. Whereas students who were taught only that “the next step is to click here to find the case annotations” would have exhausted their research skills, informed learners can apply learned skills to new situations.

¶57 The transition to a pedagogy based on informed learning requires an increased focus on hands-on research<sup>149</sup> as “[i]nstruction is likely to be more successful and more easily mastered when it is based on an experiential, learn-by-doing pedagogy.”<sup>150</sup> The flipped classroom model, based on active learning, provides the needed hands-on research opportunities. Active learning activities “require students to be more than passive learners and are founded on the premise that students learn the best when they take responsibility for their own education.”<sup>151</sup> Therefore, adopting a pedagogy that uses active learning techniques in the classroom develops a student’s responsibility for learning and motivates that learning.<sup>152</sup>

¶58 Dispensing with the talking-head face-to-face conventional classroom lecture opens the way for activities such as problem-based learning (PBL) that keep students engaged in class.<sup>153</sup> PBL is an active learning process that requires a student to analyze the problem presented, identify information needed to devise a solution, locate and study the needed information, and apply the newly acquired knowledge to the problem.<sup>154</sup> PBL also “recognizes that students need to develop core skills in responding to and managing unique situations, which are ill defined, in which they have no previous experience and which often have no clear solution.”<sup>155</sup> “Legal research instruction lends itself particularly well to this paradigm.”<sup>156</sup>

¶59 In our redesigned LL.M. legal research course, students work collaboratively in a PBL lab setting to research and devise solutions to a research hypothetical. The research assignments often include questions that do not have a “right” answer, which challenges students to think critically when applying their research.<sup>157</sup>

149. *Id.* at 154.

150. Feliú & Frazer, *supra* note 112, at 188–89.

151. Hill, *supra* note 135, at 499. *See also* MARY E. HUBA & JANN E. FREED, LEARNER-CENTERED ASSESSMENT ON COLLEGE CAMPUSES 36 (2000) (addressing active involvement of learners); Tom Cobb, *Public Interest Research, Collaboration, and the Promise of Wikis*, 16 PERSPECTIVES: TEACHING LEGAL RES. & WRITING 1, 5 (2007) (advising faculty to add active learning techniques to their classes); Gregory S. Munro, *How Do We Know If We Are Achieving Our Goals? Strategies for Assessing the Outcome of Curricular Innovation*, 1 J. ASS’N LEGAL WRITING DIRECTORS 229, 235 (2002) (“Law students should be active participants in their education.”).

152. *See* Hill, *supra* note 135, at 499.

153. *Id.* at 501.

154. Shackel, *supra* note 23, at 112–13.

155. *Id.* at 112.

156. Feliú & Frazer, *supra* note 112, at 189.

157. For help with designing problems, see Barbara Ferrer Kennedy, *Revitalizing the One-Shot Instruction Session Using Problem-Based Learning*, 47 REFERENCE & USER SERVICES Q. 386 (2008) (providing guidance on developing authentic hypotheticals for PBL labs); Alexius Smith Macklin,

Thus the PBL lab sessions “[work] to facilitate a deeper learning of the law,” which develops in the student the ability to take learning from one setting and apply it to the next problem.<sup>158</sup> The use of PBL, with its “emphasis on autonomy and collaborative, active learning, . . . appears to be one way to encourage students . . . to develop the skills needed to deal with the dynamic complexity with which they are increasingly confronted and which they will need to continue to navigate in the course of legal practice.”<sup>159</sup>

### Creating Collaborative Learning Opportunities

¶60 Flipped classrooms that use group work also operate as “learning communities” that “enhance confidence and relationship building” and “encourage cooperative and collaborative learning.”<sup>160</sup> In a cooperative learning environment, students create individual work products.<sup>161</sup> In a collaborative learning environment, students create one final shared product.<sup>162</sup> The advantages of cooperative learning include “improved attitudes towards the subject matter being studied, increased critical thinking skills, and overall higher achievement.”<sup>163</sup> Collaborative work produces a better final product as a result of the group’s interactions<sup>164</sup> and has a profound impact on learning.<sup>165</sup> When students have to combine their ideas, skills, and experiences to create a shared product, they do more than master the material and produce a product.<sup>166</sup> “They also learn about their biases and assumptions, strengths and weaknesses, and their ability to help others succeed.”<sup>167</sup> As a result, collaborative work develops the interpersonal, strong problem-solving, organization, communication, leadership, and team-building skills that lawyers use<sup>168</sup> but that are not often taught in law schools.<sup>169</sup>

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*Integrating Information Literacy Using Problem-Based Learning*, 29 REFERENCE SERVICES REV. 306 (2001). See also Deborah E. Allen et al., *Problem-Based Learning*, NEW DIRECTIONS FOR TEACHING & LEARNING, no. 128, Winter 2011, at 21 (examining effectiveness of PBL in graduate academic environments).

158. Thomas, *supra* note 143, at 686.

159. Shackel, *supra* note 23, at 113.

160. Learning communities are popular in the undergraduate arena and serve a variety of functions. Typically the goal with undergraduates is to provide students with the necessary tools and support to help them transition from high school to university. Oscar J. Salinas, *Law School Learning Communities: A Community of Learners for the Benefit of All Learners*, LAW TCHR., Fall 2012, at 28, 29. Similarly, learning communities in the LL.M. program work to ease students’ transition to a new learning environment.

161. Hemingway, *supra* note 54, at 561.

162. *Id.*

163. *Id.* at 562.

164. *Id.* at 557.

165. ROBIN NEIDORF, *TEACH BEYOND YOUR REACH: AN INSTRUCTOR’S GUIDE TO DEVELOPING AND RUNNING SUCCESSFUL DISTANCE LEARNING CLASSES, WORKSHOPS, TRAINING SESSIONS, AND MORE* 168 (2d ed. 2012).

166. *Id.*

167. *Id.*

168. See Marjorie M. Shultz & Sheldon Zedeck, *Predicting Lawyer Effectiveness: Broadening the Basis for Law School Admissions Decisions*, 36 LAW & SOC. INQUIRY 620, 624–27 (2011) (discussing and summarizing research on the characteristics possessed by successful lawyers); Sophie M. Sparrow, *Can They Work Well on a Team? Assessing Students’ Collaborative Skills*, 38 WM. MITCHELL L. REV. 1162 (2012).

169. See Hemingway, *supra* note 54, at 558.

¶61 Group research assignments that start in the lab setting and are completed after class provide a safe and encouraging environment for all learning styles. By starting the research assignment in the lab, the students are able to contribute to a collaborative effort in an environment that includes a safety net—professor verification of research strategies, assistance with difficult material, and redirection if necessary. As the professor moves among the groups, asking for or receiving assistance is less intimidating and less demoralizing. The atmosphere in the LL.M. legal research course is nonthreatening and supportive of learning. Students are comfortable and may even lapse into their native languages to help one of their teammates understand the research process or the issue at hand.

¶62 Work that requires students to prepare prior to class and work collaboratively in a team setting during class to solve a client's legal problem motivates students to learn and to take responsibility for their own learning.<sup>170</sup> Problem solving in a team setting also requires students to be prepared for class or be ready to explain the lack of preparation to a team member.<sup>171</sup> In addition, due to the shared grade on the research project, the students are more likely to hold their coworkers accountable for the timely completion and quality of the work.

¶63 In this regard, the PBL group research assignments mimic a real-life legal work environment<sup>172</sup> by encouraging cooperative and collaborative learning and accountability in groups that change weekly. This environment produces a shared outcome along with opportunities for the leadership role in the group to flow from student to student based on each individual's particular skills. In such a setting, students learn to rely less on the professor and "instead appreciate the collective wisdom of the group and their peers."<sup>173</sup>

¶64 In this problem-solving setting, "[s]tudents not only acquire skills and knowledge as they solve problems, but also become responsible for their own learning, which enhances their motivation and self-efficacy."<sup>174</sup> Developing these capacities in law school means students will, as informed learners, "acquire and maintain a capacity to sustain their continuing professional development" when they are practicing law.<sup>175</sup>

¶65 Carole Silver's recent research results indicate that one of the primary motivations for LL.M. students, in addition to gaining an understanding of U.S. law, is the ability to learn about and interact with other future lawyers, and, in particular, American J.D. students.<sup>176</sup> A legal research course taught according to the flipped classroom model with PBL labs offers opportunities to explore this type of interaction. Ideas to explore include using J.D. students in research simulations,

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170. Hill, *supra* note 135, at 501.

171. *Id.*

172. For a discussion of group learning in law schools and the role of interpersonal skills in associate evaluations in the legal profession, see Verna Monson & Michelle Tichy, *Turning Legal Classrooms Upside Down: The Pragmatic and Moral Power of Cooperation to Foster Ethical Professional Identity in Legal Education* (2012), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2021455](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2021455).

173. Thomas, *supra* note 143, at 679.

174. Hill, *supra* note 135, at 501.

175. *Id.* at 502.

176. Silver, *supra* note 46, at 549.

or as peer mentors, legal research tutors, or coordinators of the work outside the classroom. Such interactions can only help to improve the experience and satisfaction of the LL.M. student with the LL.M. program and enhance the global literacy of J.D. and LL.M. students alike.

### Serving a Variety of Learning Styles

¶66 In the traditional podium classroom, "students often try to capture what is being said at the instant the speaker says it. They cannot stop to reflect upon what is being said, and they may miss significant points because they are trying to transcribe the instructor's view."<sup>177</sup> This situation is further exacerbated when the student is a nonnative English speaker dealing with unfamiliar legal education classroom norms.

¶67 Teaching LL.M. students also involves teaching adult learners. Understanding adult learners requires that we acknowledge that their personal history and experience, preferred learning styles, motivations for learning, and psychological states are going to affect the learning environment.<sup>178</sup> Neidorf suggests that despite the complexities of teaching adult learners, it is possible to create a rich and rigorous learning environment by providing the following five elements:

- "A little TLC: Care about your students" and project that you do care by exhibiting a warm and encouraging attitude.
- "Cheerleading and coaching: Celebrate success and find the teachable elements of failure." Encourage your students to contact you for help and make yourself available when contacted for additional help.
- "Collaborative projects: Teamwork pushes learning to new level" as students discover as much as about themselves as they do about the material. Group work also offers opportunities to develop supportive learning communities.
- "Flexibility": As an instructor, be open to "different learning methods, timeframes, or approaches to the material."
- "Practical usage: . . . Demonstrate the practical value of the knowledge . . ."<sup>179</sup>

¶68 Adult LL.M. students are less likely to acknowledge that they do not understand or to admit frustration with the learning environment. It is valuable to be able to deliver the instructional material outside of the classroom for these students to process at their own pace. These materials, whether they are short videos or interactive tutorials, may be stopped and replayed or watched in their entirety numerous times by the student.<sup>180</sup> Preparing the instructional content units by, for example, dividing a fifty-minute lecture into five ten-minute segments that include examples as well as the instructional content, enables students to process the information concept by concept at their own pace.

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177. EDUCAUSE, *supra* note 16, at 2.

178. Neidorf, *supra* note 165, at 41–61.

179. *Id.* at 60.

180. This ability to stop and replay is particularly useful for the nonnative English speaker.

¶69 Teaching law students is, in some respects, no different than teaching any other students. The students who tend to get our attention are the best and brightest, the ones who readily grasp the material and who ask the most challenging questions.<sup>181</sup> The legal research professor in a flipped classroom model PBL lab, however, immediately becomes aware of students who are struggling and may need extra help with the material. As the professor moves from group to group in the PBL lab, he or she can spend time reviewing a concept with a group or a few students without delaying those students who understand and are ready to move forward. These short individual and small-group interactions provide the professor with the opportunity to coach and, more important, find teachable moments.

### Presenting Opportunities for Formative Assessment

¶70 For internal assessment<sup>182</sup> to be meaningful it must be aligned with the teaching objectives, be relevant to the instructional activities, and include formative as well as summative assessments.<sup>183</sup> Formative assessment focuses on improving student learning during the process of learning.<sup>184</sup> For formative assessment to be successful in improving learning, it must be delivered while there is still time for the student to make learning style adjustments or the professor to make instructional adjustments.<sup>185</sup> In the flipped classroom model, legal research professors have two distinct opportunities to engage in formative assessment. One is reviewing the feedback on the weekly research assignments. The other arises in the PBL labs. During the PBL lab sessions, the professor is able to view the information world through the eyes of the learner and observe the “learners’ way of using information.”<sup>186</sup> This allows the professor to engage in immediate formative assessment of students’ performance.<sup>187</sup> Repurposing class time into PBL labs provides the legal research professor with the opportunity to correct misunderstandings and encourage experimentation in a safe environment. The immediacy of the informal formative assessment, combined with feedback on the weekly assignments, gives students multiple chances to measure their understanding of the material. Students who have multiple formative assessment opportunities to measure their progress “will, generally, master the material and perform better in the final analysis.”<sup>188</sup>

### Understanding the Role of Technology in Our Students’ Lives

¶71 Our students live and interact conspicuously with technology, but that does not guarantee informed learning and, in some instances, may hinder the acquisition of knowledge.<sup>189</sup> We recognize that our students come to law school

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181. BERGMANN & SAMS, *supra* note 9, at 23.

182. See generally Feliú & Frazer, *supra* note 112 (providing a discussion of external assessment standards of the American Bar Association and others).

183. *Id.* at 188.

184. *Id.*

185. *Id.*

186. Bruce & Hughes, *supra* note 85, at A3.

187. See Thomas, *supra* note 143, at 684 (discussing formative assessment in PBL labs).

188. *Id.*

189. See Bruce et al., *supra* note 87, at 539.

with "high level consumer technical skills and low level professional technical skills."<sup>190</sup> A common issue for legal research professors is that students who adroitly use smartphones, tablets, and sophisticated software are unable to recognize the various legal information resources in the electronic environment.<sup>191</sup> We also recognize that our students "attempt to develop legal research skills by adding to their existing knowledge of research sources and process, which may include the likes of Google and Wikipedia."<sup>192</sup> The inability of students to distinguish among resources in the ever expanding electronic universe without "informed learning or information skills of the conceptual kind may mean that [they] become poor learners."<sup>193</sup>

¶72 At this point in the evolution of legal education, it is the legal research professor who most often confronts the challenge of educating students about how technology contributes to the practice of law.<sup>194</sup> The flipped classroom PBL labs provide a rich informed learning experience for students to learn about information in the online environment. For example, the professor can step back and allow different groups to approach the hypothetical differently. The varying results are then discussed and the students determine why one search strategy worked better than another. The exercise requires students to examine the information in a particular source and explain its value or deficiency in responding to the hypothetical. In the end, the students have not only identified and used information critically, but they have also gained an understanding of the differences in the available information that may not be readily apparent from a long list of search results.

### Preparing the Digital Lawyer

¶73 The focus of this article has been on identifying the best pedagogical model to use in transforming law students into informed learners and developing within them the ancillary professional skills of emotional intelligence, professionalism, and a sense of accountability and ownership. However, the flipped classroom model also responds to increasing calls from within the legal academy that we must educate our students in information technology. Our students will practice in a world in which "legal work is increasingly done by machines."<sup>195</sup> Competent lawyers in the digital environment will not only understand how to search and efficiently retrieve information from large and varied databases, they will also know and understand such things as the design and capabilities of the search engine, database structure, metadata, web coding, e-discovery, and knowledge management.<sup>196</sup>

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190. Jeanne Eicks, *Educating Superior Legal Professionals: Successful Modern Curricula Join Law and Technology*, in EDUCATING THE DIGITAL LAWYER, *supra* note 24, at 5-1, 5-3.

191. For example, a specific question to locate, apply, and provide the citation to a statute may result in answers that include citations to the *Code of Federal Regulations* or a statute from an inappropriate jurisdiction because such sources are near the top of search results. Similarly, students may fail to see particular resources because they are found in a different pane of the web page than the one displaying the results.

192. Cordon, *supra* note 51, at 403, ¶ 21.

193. Bruce et al., *supra* note 87, at 539.

194. Eicks, *supra* note 190, at 5-3.

195. Marc Lauritsen, *Lawyering in an Age of Intelligent Machines*, in EDUCATING THE DIGITAL LAWYER, *supra* note 24, at 2-1, 2-1.

196. Donnelly, *supra* note 121, at 1-27.



¶74 The flipped classroom's PBL labs present an opportunity to work with students to further prepare them for the practice of law in a digital environment. PBL labs allow the professor to introduce search algorithms, relevance and ranking, metadata, and other aspects of information technology.<sup>197</sup> Legal research courses are one of the few places in law school where students actively interact with information technology, which makes legal research professors uniquely positioned to teach students about the digital environment.

### Using the Flipped Classroom to Teach Legal Research

¶75 The legal research course in the international LL.M. program at the McKinney School of Law was taught as a flipped classroom for the first time in the fall semester of 2012, and continued as a flipped classroom in the spring semester of 2013. The decision to move to the flipped classroom model was an evolutionary one. In earlier semesters, LL.M. students often asked for the classroom lecture PowerPoint presentation at the conclusion of the class period. In response, the slide notes were cleaned up and in some instances expanded, and the presentation converted to a PDF to enable its use on any device. The PowerPoint was then loaded to a course web site for the students to refer to as they completed the weekly research assignment.

¶76 Two thoughts came to mind after doing this activity for a few weeks into my first semester of teaching the LL.M. legal research course in the spring of 2011: First, I recognized that a PowerPoint presentation with notes converted into a PDF simply added to the reading load of graduate law students for whom English was not the first language. Second, notes cannot explain everything, and often the interactivity from the live in-class presentation<sup>198</sup> was lost in the move to create a universal PDF. Shortly thereafter I moved to narrating the PowerPoint presentations after class using the PowerPoint Presenter add-on and posting the presentation to the course management system (CMS) after class. This essentially gave me an opportunity to extend the class period. I often added additional explanatory content or examples in those areas that appeared to have caused the students difficulty during the in-class session. In addition, I created PowerPoint presentations as feedback for the weekly research assignments. At some point I realized that I was duplicating work for myself and the students and that the feedback would be much more meaningful if it could be immediate and in-person.

¶77 In the fall semester of 2011, I reduced the lecture sessions and introduced four PBL lab sessions. A combination of what I was already doing and a sense that there was a better alternative led to my decision to flip the legal research course. In

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197. See Letter from Jean M. Wenger, President, & Kate Hagan, Exec. Dir., Am. Ass'n of Law Libraries, to Hon. Randall T. Shepard, Chief Justice, Chair, ABA Task Force on the Future of Legal Educ., & Art Gawin, Dep. Dir., ABA Ctr. for Prof. Resp. (Feb. 6, 2013), *available at* <http://www.aallnet.org/main-menu/Leadership-Governance/committee/cmte-final-reports/2012-2013/flertf.pdf> (emphasizing the ability of law librarians to educate law students in information technology, knowledge management, and competitive intelligence).

198. Interactivity that was often lost in the conversion to PDF included features such as the overlaying of screen shots, live links, and animations.



the fall semester of 2012, I flipped the LL.M. legal research class for the first time. Since I was already teaching a second-year J.D. legal research course online (and was comfortable with teaching online), I was prepared for the usual technological challenges and the additional time commitment.<sup>199</sup> What I was not prepared for was the increased student involvement in the class. Student interest increased with the use of more detailed research hypotheticals.<sup>200</sup> Classroom camaraderie and deeper professor-student relationships developed as a result of the lab interactions. Even more important was that the lab sessions provided instant feedback to me about what was working or needed tweaking in the instructional materials.

¶78 I reserve the first few class sessions of the legal research course to cover general U.S. legal topics. The number of sessions may vary depending on where the students are in their understanding of the U.S. legal system or whether the course is taught in the first or second semester of the program. Before the class moves to the lab sessions, the methodology is thoroughly explained to the students. A significant part of one class period is dedicated to explaining to students the CMS, the predelivered instructional materials, the structure of the PBL lab sessions (including the use of ever-changing groups), and that the work on the research hypothetical will extend beyond the fifty-five-minute lab. Each lab session starts with a few minutes of introduction that includes a general review of the instructional materials and the research hypothetical before the students convene their groups and start the work.

¶79 Hypotheticals involve the typical legal research subject areas of U.S. federal and state statutory, regulatory (including agency web sites), and case law. The course also covers international law, free and low-cost online resources, and secondary sources, including model practitioner forms and typical court documents.<sup>201</sup> The online tutorials and instructional materials are updated each semester as necessary to stay current, relevant, and interesting. The research hypotheticals are detailed and require the students to identify the relevant facts and legal issues. The legal issues become more complex as the semester advances and typically require the students to provide advice to the fictional client in situations. Often these situations have no "right" answer.

¶80 The use of technology "enables professors to be much more creative in their efforts to convey information in a manner aimed at awakening student interest and laying the foundation for higher-analytical work."<sup>202</sup> Fortunately, unlike many technological teaching innovations that "rock" the higher education arena,

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199. I am one of four legal research instructors who collaborated to design and implement an online legal research course at the McKinney School of Law in the fall of 2010. The course, a required, full-semester, graded, one-credit course in our second-year J.D. curriculum, is taught entirely online and the instructional and assessment materials continue to be modified each semester.

200. In the fall semester of 2012, all the research hypotheticals involved the same corporate client. Using the same client allowed for more complicated fact patterns since the students retained the basic knowledge of the client throughout the entire semester.

201. See Donnelly, *supra* note 121, at 1-15 (criticizing legal research instruction that does not include coverage of materials many lawyers use on a daily basis, such as model forms and typical court documents).

202. Pettys, *supra* note 29, at 1309.

the flipped classroom requires little financial investment.<sup>203</sup> The technology for creating predelivered lectures and tutorials is widely available, relatively inexpensive, and for the most part easy to learn and use.<sup>204</sup> I use the Articulate product, Storyline, and PowerPoint Presenter to create the web-delivered instructional materials and presentations. The legal research presentations include avatars, animated text, quizzes, short exercises, and embedded tutorial videos. I can require students to interact with the tutorials by typing answers into text boxes and responding to self-assessment questions in the presentations. Storyline includes the ability to name and index the slides. This feature allows students to move quickly to the point in the presentation that they may want to replay for additional review. The Indiana University CMS also offers the ability to track when students log in and measure how long they engage with the material, although I have not utilized this feature.

¶81 Though a small sample, the students taking the class in the fall of 2012 gave the flipped classroom model relatively high marks.<sup>205</sup> The anonymous student course evaluations included, among others, the following statements and responses:<sup>206</sup>

- This course increased my analytical and problem solving skills: 100% strongly agree.
- I found the group work helpful in understanding the practice of law: 100% strongly agree.
- This course emphasized important lawyering skills: 100% strongly agree.
- The professor helped students apply theory to solve problems: 92.9% strongly agree.
- I would enjoy taking another course taught this way: 83.3% strongly agree, 16.7% agree.

¶82 In some areas there might be a tendency to require less work from LL.M. students. It is easy to imagine legal research instruction becoming one of those areas. Teaching an LL.M. legal research course is more challenging and requires more work for the legal research professor than teaching a J.D. legal research course. In addition, few of the students stay in the United States to practice law.<sup>207</sup>

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203. This statement does not include the financial cost in terms of faculty time. See Lawrence A. Tomei, *The Impact of Online Teaching on Faculty Load: Computing the Ideal Class Size for Online Courses*, 14 J. TECH. & TCHR. EDUC. 531 (2006) (discussing research findings that online courses significantly increased faculty workload for all three elements of teaching: instructional content, counseling, and student assessment; and increased by fourteen percent the time devoted to online teaching).

204. Academic licenses are available for Articulate Storyline, Adobe Presenter, Camtasia Studio, and other software. See Tawnya K. Plumb, *Creating Electronic Tutorials: On Your Mark, Get Set, Go!*, 22 J. ELEC. RESOURCES LIBRARIANSHIP 49 (2010) (reviewing nine software options for creating e-tutorials).

205. Sixteen students completed the course evaluations at the conclusion of the course in the fall of 2012. The students were asked to respond to twenty-four questions about the course and the professor. The course evaluations are on file with the author.

206. Course evaluations are administered at the last meeting of the course. The professor is not in the classroom at the time the evaluations are completed. In addition, the evaluations are collected and delivered to the law school administrator by someone other than the professor.

207. Silver, *supra* note 2, at 2394–99 (noting the difficulty of determining how many students stay in the United States after graduation, but estimating the number to be slightly more than 18%).

I, however, never considered making the course easier. Instead, my design of the legal research course for the LL.M. students was greatly influenced by the following story from a Chinese-speaking writing professor in reflecting about her own efforts to learn English:

As I think about what we might do to complicate the external and internal scenes of our students' writing, I hear my parents and teachers saying: "Not now. Keep them from the wrangle of the marketplace until they have acquired discourse and are skilled at using it." And I answer: "Don't teach them to 'survive' the whirlpool of crosscurrents by avoiding it. Use the classroom to moderate the currents. Moderate the currents, but teach them to struggle from the beginning."<sup>208</sup>

## Conclusion

¶83 Legal educators must acknowledge that "the university . . . like all other human institutions . . . is not outside but inside the general social fabric of a given era." Accordingly, law students must be equipped with the knowledge and skills enabling them to compete and to survive as players in the "knowledge economy"; to participate as intelligent citizens in a globalizing polity; and to serve as ethical professionals in the changing and uncertain world of globalized practice.<sup>209</sup>

Expert and efficient delivery of legal research instruction will become even more relevant as law schools seek to redefine legal education to better equip students to work in a global practice environment.

¶84 It is unclear whether the legal academy, in its quest to understand how to better prepare students for the practice of law, will redefine itself as radically as some researchers have suggested.<sup>210</sup> However, after all the budget reductions and restructurings, the legal academy must be "something better" than simply a smaller and less expensive version of its former self. Teaching legal research to LL.M. students using the flipped classroom model moves the academy toward that "something better." The flipped classroom effectively prepares students for the practice of law and further scholarly work. It provides an opportunity for students to work collaboratively and for faculty to engage more closely with students by developing deeper professional relationships. Law students must transform themselves into informed learners to be successful lawyers, judges, and academicians. Teaching pedagogies such as the flipped classroom support and advance this transformation.

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208. Min-zhan Lu, *From Silence to Words: Writing as Struggle*, in NEGOTIATING ACADEMIC LITERACIES: TEACHING AND LEARNING ACROSS LANGUAGES AND CULTURES 71, 82 (Vivian Zamel & Ruth Spack eds., 1998).

209. Shackel, *supra* note 23, at 111.

210. See Paul Campos, *The Crisis of the American Law School*, 46 U. MICH. J.L. REFORM 177 (2012) (noting that the current cost structure of legal education is unsustainable and questioning the efficacy of the three-year graduate law school model); Thomas D. Morgan, *The Changing Face of Legal Education: Its Impact on What It Means to Be a Lawyer*, 45 AKRON L. REV. 811 (2012). Campos suggests that legal education reform should mirror the structure of legal education in other countries around the world. "This more comprehensive approach to reform assumes that learning to think deeply about law is a skill and habit that future lawyers should be given every chance to acquire as undergraduate students studying law as a subject of concentration in a general liberal arts degree program. It further assumes that postgraduate legal education for future lawyers should consist of vocational training that takes place in explicitly vocational contexts, such as supervised apprenticeship and externship programs." Campos, *supra*, at 221.