Research article

Making the case for a digital lawyering framework in legal education

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Abstract

In 2015, in a practice report on lawyering in a digital age published in the International Journal of Clinical Legal Education, the author and colleague Michael Sales made a modest proposal that could make law graduates more capable of serving their clients in a modernised and efficient manner. It was proposed that, in addition to offering law clinics and other forms of experiential activities, law schools could adopt a digital lawyering skills framework as part of their curricula to teach students how to use technology to assist in the delivery of legal services. The author submits in this article that digital lawyering skills will assist law students in learning core competencies needed in an increasingly technological profession whilst increasing the availability and convenience of legal services. The author therefore proposes to law schools and legal education regulators that they consider a consultative digital lawyering framework that could be subject to further review in the future. The framework is currently being utilized in a second-year Lawyers' Skills module taught by the author, and it has been revised intuitively and through feedback after each lesson. The proposed framework in this paper is in its final version.

Keywords: Digital lawyering framework, technology, legal education, virtual law clinics

Introduction

This paper presents an opinion on the future direction of legal education and, given the emerging trends and challenges of online delivery of legal services, proposes a digital lawyering framework to be incorporated into the existing law curriculum across law schools. This approach would allow schools to future-proof their graduates through creating opportunities in the curriculum to develop legal and hybrid skill sets, as well as introducing new practice roles that are more technical in nature, given the emerging trends and challenges of online delivery of legal services. The question is, what steps are academics in law schools taking to prepare our academic institutions for the disruptive and transformational changes in legal services that lie ahead?

The proposed digital lawyering framework in this paper contemplates that students will explore the potential uses of technology in law as well as how different forms of technology are already being used in legal practice both in the UK and globally. As the backdrop to demonstrate how digital lawyering can be embedded into the law school curriculum, this paper utilizes a recent construction: a virtual law clinic (VLC). This VLC is designed to ensure that an entire legal transaction, from establishment of the client-advisor relationship through billing for the work, can be undertaken on its platform, under supervision, with continual opportunities for performance, feedback, constructive reflection, and evaluation, all to help turn the experiences gained into actual learning and development.[1]

A VLC allows educators to use a student-centred, bespoke platform that promotes creative thinking about the best uses of technology to enhance students' experience; its use also enables students to share experiences with others through constructive reflection designed to achieve higher levels of learning and increased information retention. The VLC thus allows collaborative learning through facilitated online communication. It further allows actual exploration of various forms of technology for use in learning such practice skills as client interviewing, negotiating, managing a case including time-keeping, scheduling, interactions, advising clients, and dealing with all aspects of a case. Students are also expected to be aware of the risks of using technology for legal practice. Safety, privacy, appropriateness, and ethical issues posed by the use of technology in practice are therefore also covered.

Recent findings from the Legal Education and Training Review (LETR),[2] discussed below, show the need for legal educators and law schools to deliver a curriculum that both meets the requirements of the regulators and teaches the values and realities of the profession. It is also clear from the findings that law schools will decide how law graduates' attributes will be developed in this rapidly-changing legal sector.[3]

Recognizing these realities, this paper proposes that modern legal education should include opportunities to learn about alternative forms of technology-driven legal service delivery, including ethical rules (both in the UK and internationally) and their impact on the delivery of online legal services. Learning practical ways of using technology to increase productivity and efficiency of practice whilst gaining experience in online dispute resolution, e-practice, and project management instil valuable skills

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[1]A full practice report on the development and design of a VLC can be read in Ann Thanaraj & Michael Sales, *Lawyering in a digital age: a practice report on the design of a virtual law clinic at Cumbria*, 22 Int'l J. Clinical Legal Educ. 334 (2015), http://journals.northumbria.ac.uk/index.php/ijcle/article/view/471.

[2]Legal Education and Training Review, *Setting Standards: The future of legal services education and training regulation in England and Wales* (June 2013), http://www.letr.org.uk/the-report [hereinafter, LETR Report]. The report was commissioned by legal professional bodies in England and Wales for solicitors, barristers and legal executives. *Id.* at v-vi.

[3]*Id.* at ix (Executive summary of the report).

that an accomplished graduate seeking professional employment, in particular in a modern law firm, will require.

The proposal is intended to spark interest and discussions in law schools about how their existing curricula can be changed to incorporate its suggestions. The proposal's approach has been used in the VLC curriculum at the University of Cumbria as part of a second-year module. Research on its benefits, including areas for improvement in the construction and pedagogic design of the VLC, is ongoing to ensure that the framework meets the goal of equipping students with the knowledge, awareness, skills, and attributes for legal practice.[4]

Technology in the legal services landscape

The use of technology to enhance legal practice and process is not new. Law firms have embraced various forms of e-communication methods, including, where possible, e-filing systems and database conflict checks, for a number of years. These developments have resulted, in part, from The Legal Services Act 2007 (LSA 2007),[5] which sought to change the legal landscape by making legal service markets more commercially focused, innovative in their services and delivery, and more diverse in their offerings for consumers. The Act created an opportunity for lawyers and non-lawyers to work together to deliver legal services through alternative business structures, supported with a flexible approach as to how legal services are being offered to clients and, through making changes, to offer greater access to justice for clients.[6]

In a recent paper, Legal Services consultant Roger Smith OBE explored the impact technology has on legal services.[7] The impact can be seen in the ways in which law firms are carrying out processes more efficiently using online practice management software, innovative practices, and artificial intelligence to standardize and, where possible, automate procedure. In turn, there has been reduction in firms' overheads, as well as new business models such as online legal services and an increased awareness of cybercrime, civil wrongdoing, and data protection and security.[8]

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[4]Research on some of the benefits of the VLC training initiative and curriculum can be seen in Ann Thanaraj, *"The proficient lawyer": identifying students' perspectives on learning gained from working in a virtual law clinic*, 14 U.S.-CHINA L. REV. 137 (2017), http://www.davidpublisher.org/Public/uploads/Contribute/5927cc6bd693a.pdf [hereinafter Thanaraj, *Proficient Lawyer*]; Ann Thanaraj, *Internationalizing Education: Evaluating the growth of intercultural communication and competency in students through an international negotiation project using an online law office*, 6 J. PEDAGOGIC DEV. 42 (2015), https://journals.beds.ac.uk/ojs/index.php/jpd/article/view/257 [hereinafter, Thanaraj, *Internationalizing*]; Ann Thanaraj, *Understanding how a law clinic can contribute towards students' development of professional responsibility*, 23 INT'L J. CLINICAL LEGAL EDUC. 89 (2016), http://www.northumbriajournals.co.uk/index.php/ijcle/article/view/521; Ann Thanaraj, *Constructive reflection: Getting the best out of reflective learning*, 5 INT'L J. FOR INNOVATION EDUC. & RES. 40 (2017), http://www.ijier.net/index.php/ijier/article/view/500. In addition, research on some of the areas for improvement in the design and learning construct embedded in the VLC can be seen in Ann Thanaraj, *Evaluating the Potential of Virtual Simulations to Facilitate Professional Learning in Law: A Literature Review*, 6 WORLD J. EDUC. 89 (2016), http://www.sciedu.ca/journal/index.php/wje/article/view/10607 [hereinafter Thanaraj, *Evaluating*].

[5]Legal Services Act 2007, c. 29 (Eng.), http://www.legislation.gov.uk/ukpga/2007/29/contents.

[6]For a discussion of the impact of the Legal Services Act, *see* Legal innovation 2013: New developments in an old profession (Baker Tilly Legal Innovation Rep., June 2013).

[7]Roger Smith, OBE, Digital Delivery of Legal Services to People on Low Incomes (The Legal Educ. Found. Ann. Rep., May 2016), https://www.thelegaleducationfoundation.org/digital/digital-report.

[8]Blair Janis, *How Technology is Changing the Practice of Law*, 31 GPSOLO (Am. B. Assoc. Solo, Small Firm & Gen. Prac. Div., May/June 2014), http://www.americanbar.org/publications/gp_solo/2014/may_june/how_technology_changing_practice_law.html.

Examples of how technology is already being employed for the delivery of legal services are increasingly numerous. They include the Dutch *Rechtwijzer* website, which provides step-by-step guidance through the use of interactive questions for claimants to assure them of their legal position and provide advice on how to present their case.[9]

Virtual law firms are not new in England, either. The law firm of Scott-Moncrieff and Associates Ltd, run by Lucy Scott-Moncrieff, the 2012/13 Law Society of England and Wales' President and the newly-appointed House of Lords Commissioner for Standards, has for over thirty years used a computerised case management system, a secure intranet, and an online forum to allow the firms' lawyers to practice from anywhere.[10] It allows for technology to break down the barriers of geographical distance from clients and allow the provision of advice and representation to clients through face-to-face, online, Skype or phone contacts.[11]

Apart from the innovative use of technology to facilitate flexible working conditions and access to legal services, firms are now utilizing artificial intelligence to enhance their commercial practices. In 2014, it was reported that the University College London and Hodge Jones & Allen, a law firm based in London, initiated research to create software that assesses the merits of personal injury cases by combining statistical techniques and assessing features of cases. The project used data from some 600 cases in the law firm's repository.[12] The findings from this collaboration are being implemented when making initial assessments of the chances of success in a case, thereby allowing the firm to prioritise fee-earning cases.

With the continuing advances in computer simulations and artificial intelligence decision-making algorithms, the ability for software to evaluate evidence and questions of morality is fast becoming a reality. An example of this is a simulated virtual "judge" which, when provided with enough data, is capable of reaching the same judgments as a human in four out of five cases. This simulated "judge" algorithm has been tested with data collected from human rights cases ranging from torture to degrading treatment and privacy violations.[13]

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[9]Website: http://rechtwijzer.nl. The website was developed by the Hague Institute for the Internationalisation of Law (HiiL) and funded by the Dutch Legal Aid Board. Smith, *supra* note 7, at 34; *see also* News, Online Legal Advice and Conflict [sic] Support: A Dutch Experience, Univ. Twente (20 Mar. 2015, https://www.utwente.nl/en/news/!/2015/3/94613/online-legal-advice-and-conflict-support-a-dutch-experience. The first report about the Dutch Rechtwijzer website explains that this is an online Legal Advice and Conflict Support service. The report was prepared by van Dijk and Giebels and published by the University of Twente in March 2015. It is available on the website of the Hague Institute for the Internationalisation of Law. *See Netherlands Project Rechtwijzer*, HiiL, http://www.hiil.org/project/?itemID=2641 (last visited 18 July 2017).

[10]The Scott-Moncrieff law firm website can be accessed at: https://www.scomo.com. It is a virtual law practice with a registered office in London. Interestingly, another law firm, Excello Law, originated as a virtual law firm with jurisdiction in England and Wales whose lawyers, supported by the latest technology, worked remotely across the country. However, its business model has now evolved to embrace both virtual and traditional office practices. *See* George Bisnought, Commercial firm opens in Leeds as expansion plans gather pace, Excello Law (16 Apr. 2015), https://www.excellolaw.co.uk/announcements/virtual-no-more-excello-law-evolves-model-with-fourth-office.

[11]The author submits that using Skype to undertake legal services may not be the safest method of keeping and ensuring client data, security, and confidentiality because there is always a risk of hacking. Consider, for example, the phone hacking scandal reported in the UK. *See Phone-hacking trial explained*, BBC (25 June 2014), http://www.bbc.com/news/uk-24894403.

[12]*Hodge Jones & Allen embraces predictive modelling for PI work*, Legal Futures (10 Nov. 2014), http://www.legalfutures.co.uk/latest-news/hodge-jones-allen-embraces-predictive-modelling-pi-work.

[13]Nikolaos Aletras et al., *Predicting judicial decisions of the European Court of Human Rights: a Natural Language Processing perspective*, 2 Peer J Computer Sci. e93 (Oct. 2016), https://peerj.com/articles/cs-93.

Also taking advantage of artificial intelligence, the University of Liverpool and the Riverview online law firm (with a registered office in Wirral, two other offices in London and Manchester, as well as two U.S. offices in New York and New Jersey) are working together to apply artificial intelligence to a range of legal tasks including assessing the merits of personal injury cases.[14] According to Riverview, "[a] primary objective is to automate some of the cognitive abilities of knowledge workers to provide organisations with intelligent decision support tools."[15] Further, the *Managing Partner* journal reported in 2015[16] that automation and artificial intelligence are being used by law firms for a number of commercial benefits such as enabling "integrated analytics; knowledge management; voice mining; client self service [sic]; client relationship management; intelligent documents; expertise systems; collaboration; marketing automation; virtual assistants/e-personal assistants; and intelligent agents (for example, IBM's Watson AI)."[17]

Online dispute resolution (ODR) is another area of legal services embracing the use of technology. The Civil Justice Council for England and Wales set up the Online Dispute Resolution Advisory Group in 2014 to explore the potential of ODR for civil disputes of values less than £25,000.[18] The Group's report, published in 2015, found the current civil justice system process to be too expensive, time-consuming, and complicated for low-value cases.[19]

In order to improve the current system, the advisors proposed creating HM Online Court (HMOC), an online court service. This service would be client-focused because of its proposed flexible, affordable, and user-friendly nature, with the aim of improving clients' access to justice whilst reducing the number of cases and the associated costs of hearing the civil cases in court.[20] The proposed HMOC would consist of a three-tier process, beginning with an automated and interactive triage stage designed to help claimants complete their claim form and upload documents and evidence. Next would be a conciliation stage handled by a case officer, and finally, if the conciliation were unsuccessful, a determination stage overseen by a civil court judge by means of a face-to-face trial, video, or telephone hearing.[21]

The Canadian Civil Resolution Tribunal[22] is an online tribunal of similar design that was launched, in 2015. It is a public scheme designed as an alternative pathway to the traditional courts for resolving small claims under 25,000 Canadian dollars relating to debts, damages, recovery of personal property, and certain types of condominium disputes.[23]

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[14]Press Release, Riverview Law, Riverview Law and University of Liverpool announce Artificial Intelligence partnership (5 Jan. 2015), http://www.riverviewlaw.com/riverview-law-university-liverpool-announce-artificial-intelligence-partnership.

[15]Report, Riverview Law, Legal Efficiency Report as seen in The Times – Case Study on Riverview Law & University of Liverpool (19 Feb. 2015), http://www.riverviewlaw.com/legal-efficiency-report-seen-times-case-study-riverview-law-university-liverpool. *See also* Ray Kurzweil, *Don't Fear Artificial Intelligence*, TIME, 19 Dec. 2014, http://time.com/3641921/dont-fear-artificial-intelligence.

[16]*Legal revolution: The 'future normal' for law firms*, 17 MANAGING PARTNER (March 2015), http://entrepreneurlawyer.co.uk/wp-content/uploads/2010/03/MP_March-2015_Technology_EntrepreneurLawyer.pdf.

[17]*Id.* at 45.

[18]Online Dispute Resolution Advisory Group, Civil Justice Council, Online Dispute Resolution for Low Value Civil Claims (Feb. 2015), https://www.judiciary.gov.uk/wp-content/uploads/2015/02/Online-Dispute-Resolution-Final-Web-Version1.pdf [hereinafter CJC Report]. The Council was chaired by Professor Richard Susskind, OBE, and IT Adviser to the Lord Chief Justice.

[19]*Id.* at 3 (Introduction and overview by Professor Richard Susskind OBE).

[20]*Id.* at 8-9 (The case for ODR).

[21]*Id.* at 19-21 (Principal recommendations in further detail).

[22]CIVIL RESOLUTION TRIBUNAL, http://www.civilresolutionbc.ca.

[23]*Id.* at *Getting Started* screen, https://civilresolutionbc.ca/how-the-crt-works/getting-started. *See also* the description of the Tribunal in CJC Report, *supra* note 18, at 12-13.

Apart from ODR alternatives to court, other examples of ODR services such as the eBay and PayPal resolution centres[24] broaden access to justice and resolve disputes more cost-effectively and expediently. As reported by the ODR Advisory Group in 2015, some sixty million disagreements have been resolved online annually.[25] Helplink, based in Galway, Ireland, offers various online services, including different types of mental health and conflict resolution services, for fixed fees that vary according to the service.[26] The Mediation Room, a company registered in England and Wales,[27] provides online mediation that makes use of the possibilities of private communication with the parties and then anonymous suggestions of solutions to encourage the parties to resolution.

One step further is the use of technology in the courts themselves. In a 2015 Interim Report on the England and Wales Civil Courts Structure Review, Lord Justice Briggs[28] advocated for "[t]he opportunity to use digital tools and modern IT to improve the issue, handling, management and resolution of cases of all kinds."[29] The Review cited a number of "reform principles," built around a focus on users, "accessibility," a strong brand on justice, "transparency and accountability," and "financial viability"[30] as reasons to engage with and embed technology into the legal system. The benefits and practicalities of virtual court systems in England and Wales have also been discussed as part of the Ministry of Justice's digital strategy.[31]

A shift to e-disclosure and computerised criminal case processes has already changed criminal legal practice.[32] Further, in criminal courts, video-conferencing designed to deliver speed and efficiency and improvements to the criminal justice system has demonstrated the potential to cut down on the need for physical courts.[33] An initiative by the Ministry of Justice in England and Wales was the Virtual Court pilot scheme, which took place in 2009.[34] The scheme involved a collaboration between two magistrates'

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[24]*See* Jack Goldsmith & Tim Wu, Who controls the internet? Illusions of a Borderless World (2006).

[25]CJC Report, *supra* note 18, at 11-12, 16.

[26]Helplink Support Services, http://www.helplink.ie, *described in* Roger Smith & Alan Paterson, *Face to Face Legal Services and Their Alternatives: Global Lessons from the Digital Revolution* (a report prepared with the involvement of the International Legal Aid Group) 46 (Nov. 2013), https://www.strath.ac.uk/media/faculties/hass/law/cpls/Face_to_Face.pdf [hereinafter, ILAG Report]. The Helplink website explains that it is "a non-profit organisation providing accessible Mental Health and Conflict Resolution services."

[27]The Mediation Room website home page tells visitors it is about "What to know about resolving disputes without the cost, time, anxiety and relationship damage of a court." The Mediation Room, http://www.themediationroom.com, *described in* ILAG Report, *supra* note 26, at 46.

[28]Judiciary of England and Wales, Civil Courts Structure Review: Interim Report by Lord Justice Briggs, 15 Dec. 2016, https://www.judiciary.gov.uk/wp-content/uploads/2016/01/ccsr-interim-report-dec-15-final1.pdf.

[29]*Id.* at 4, ¶ 1.7.1 (The HMCTS Reform Programme).

[30]*Id.* ¶ 1.8.

[31]The Ministry of Justice has set out its strategy to digitally transform its services online. UK Ministry of Justice, Ministry of Justice Digital Strategy (Dec., 2012; last edited 7 Jan. 2013), https://www.gov.uk/government/publications/ministry-of-justice-digital-strategy

[32]England, Wales & N. Ireland Association of Chief Police Officers' (ACPO), Good Practice Guide for Computer-Based Electronic Evidence, https://www.cps.gov.uk/legal/assets/uploads/files/ACPO_guidelines_computer_evidence[1].pdf (last visited 10 July 2017); *see also* Susan Monty, *E-disclosure predictive coding*, L. Soc. Gazette, 14 Mar. 2016 (addressing the development in predictive coding), https://www.lawgazette.co.uk/practice-points/e-disclosure-predictive-coding/5054119.article.

[33]UK Ministry of Justice, Transforming our justice system: summary of reforms and consultation 4 ¶ 1.5 (Sept. 2016), https://consult.justice.gov.uk/digital-communications/transforming-our-courts-and-tribunals/supporting_documents/consultationpaper.pdf.

[34]Matthew Terry, Dr Steve Johnson, & Peter Thompson, *Virtual Court pilot Outcome evaluation* (Ministry of Just. Res. Series 21/10, Dec. 2010), https://www.justice.gov.uk/downloads/publications/research-and-analysis/moj-research/virtual-courts.pdf

courts and fifteen police stations in London and Kent. In the pilot, a secure video link was used by defendants located in police stations to appear in court, rather than having to be transported to court.[35] The pilot found that the cost of using the video link technology was high but that this could be mitigated by expanding the use of the technology to collaborate between the court, police, witnesses and victims. It also approved of creating an electronic file sharing system across the court system.[36]

Technological advances in the justice system have also been taking place in the United States. In 2016, the American Bar Association's[37] (ABA) Commission on the Future of Legal Services proposed new approaches to the delivery of legal services.[38] Various ABA committees have also explored the impact of using technology to deliver legal services, such as the ABA's Standing Committee on Ethics and Professional Responsibility and the ABA's Standing Committee on the Delivery of Legal Services.[39] State Bars such as those of Michigan[40] and New York,[41] amongst many others, have begun to explore the impact technology and globalisation are having on the practice, delivery, and accessibility of legal services.

Rising above the horizon: The call for law schools to embed technology into legal education

Professor Susskind, IT Adviser to the Lord Chief Justice,[42] has discussed the impact that digitalisation and technology have had on legal services. In his book, *The End of Lawyers?: Rethinking the Nature of Legal Services*,[43] he advised that enhancements in technology leading to improved, sustained, and advanced methods of legal services delivery are inevitable and, consequently, that lawyers should change the way they work. This, of course, means that law schools need to change the way they educate.

This need for education change is not confined to legal education. In the UK, the independent Skills Commission,[44] whose membership includes a variety of educational leaders from across the country, meets monthly in the UK Parliament to discuss skills and training in the country's broad vocational

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[35]*Id.* at 7 (Research summary: Technology).

[36]*Id.* at ii (Lessons learnt).

[37]The ABA was founded in 1878 to support legal professionals across the United States with the aims of upholding the administration of justice; establishing, reviewing and modifying professional ethics; and improving the delivery of legal services whilst ensuring that the education of future legal professionals and models of legal services are adequate to meet the needs of the public. American Bar Association homepage, http://www.americanbar.org/about_the_aba.html.

[38]ABA Commission on the Future of Legal Services, Report on the Future of Legal Services in the United States (2016), http://abafuturesreport.com/#1.

[39]*See* https://www.americanbar.org/groups/professional_responsibility/committees_commissions/ethicsandprofessionalresponsibility.html (Ethics and Professional Responsibility Committee web page); https://www.americanbar.org/groups/delivery_legal_services.html (Delivery of Legal Service Committee web page). *See also* Cara E. Greene, Esq. Do Lawyers Have An Ethical Duty To Understand Technology?, Paper presented at the ABA Sec. Lab. & Emp. L., Nat'l Symp. on Tech. & Lab. & Emp. L. (21-23 Apr. 2013): http://www.americanbar.org/content/dam/aba/events/labor_law/2013/04/aba_national_symposiumontechnologyinlaboremploymentlaw/16_greene.authcheckdam.pdf.

[40]AMERICAN BAR ASSOCIATION, REPORT ON The Future of Legal Services IN THE UNITED STATES (2016) https://www.americanbar.org/content/dam/aba/images/abanews/2016FLSReport_FNL_WEB.pdf

[41]N.Y. St. B. Assoc., Report of the Task Force on the Future of the Legal Profession (2 Apr. 2011), https://www.nysba.org/futurereport.

[42]*See* note 18, *supra*.

[43]Richard Susskind, OBE, The End of Lawyers?: Rethinking the Nature of Legal Services (rev. ed. 2010).

[44]*See* the Skills Commission homepage, available at: http://www.policyconnect.org.uk/sc/home.

landscape. In its 2014 report titled, 'Still in tune: The skills system and the changing structures of work,'[45] the Commission set out the impact technology has on the workforce; this includes flexible ways of working – in the office, from a distance, predominantly online – and the impact this flexibility has on the way we communicate with each other and the possibilities of improving ways to conduct business and make it more efficient. Ultimately, the commission found that the skills system in the UK is inadequate and does not match the needs of modern working structures.[46]

In addition, the House of Lords appointed a Select Committee on Digital Skills, which issued its 2014-15 session report in 2015.[47] Among other things, because of a series of "profound technological changes dominated by digital—a 'second machine age,'"[48] the report stated, "Digital technology will also challenge traditional methods of delivering education, meaning schools and teachers will have to adapt. New models of learning— such as increased online learning and employer-designed short courses—need to keep pace with evolving technology and digital change."[49]

Universities are in an influential position to bridge the gap between what the employment industry requires and the academic skills, practical skills, and personal values they instil in their graduates. The Universities and Colleges Information Systems Association (UCISA), a body representing most UK higher education providers, aims "to promote excellence in the application of information systems and services in support of teaching, learning, research and administration in higher and further education."[50] It makes recommendations to universities to create effective, authentic, and meaningful experiences using technology to meet subject and professional requirements that are relevant to students' future employment ambitions.[51] It issued a report in 2014 recommending that higher education institutions embed digital capabilities throughout in a variety of ways, and stated, "Institutions should develop digital capabilities through a range of opportunities and emerging practices which motivate and reward students and staff and positively change culture."[52]

These universal changes in the use of technology, and the expectations that students will be keeping up with the changes, will impact legal education and legal training specifically. Law schools will need to ensure their graduates are ready to work sustainably and contribute to the diversifying and flexible legal services market, equipped with the knowledge and skills of digital lawyering and how technology may professionally, safely, and ethically contribute to the practice of law.

While the need for change is clear, actual change has been slow to come. The 2013 Legal Education and Training Review (LETR) report, referenced above, was a joint project undertaken by the Solicitors Regulation Authority (SRA), the Bar Standards Board (BSB), and ILEX Professional Standards (IPS).[53] The project set out to evaluate and review the current standard of legal education and training in England and

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[45]Skills Commission (UK), Still in Tune? The Skills System and the Changing Structures of Work (2014), http://www.policyconnect.org.uk/sites/site_pc/files/report/602/fieldreportdownload/skillscommission-stillintune.pdf.
[46]Id. (Foreword by Barry Sheerman, MP, & Dame Ruth Silver, Co-Chairs of the Skills Commission).
[47]House of Lords, Select Committee on Digital Skills, Make or Break: The UK's Digital Future (Feb. 2015), https://www.publications.parliament.uk/pa/ld201415/ldselect/lddigital/111/111.pdf.
[48]Id. at 6.
[49]Id. at 7.
[50]About UCISA, UCISA, https://www.ucisa.ac.uk/about (last visited 12 July 2017).
[51]Id.
[52]UCISA, Digital Capabilities Survey Report 2-3 (2014), https://www.ucisa.ac.uk/-/media/files/publications/surveys/digicaps_with%20authors_21aug15.ashx?la=en.
[53]LETR Report, supra note 2, at v.

Wales, with the aim of making suitable recommendations for improvements. The LETR report noted the implications that technology has for employment in the legal market[54] and called for "a greater understanding of the transformative potential of information technology" that would involve understanding future directions of technology creation and use in society and the law.[55]

The response to the LETR recommendation on the use of technology in legal education has not, so far, been profound. The professional regulatory body for solicitors, the Solicitors Regulation Authority (SRA), has not directly addressed the technology recommendation but generally acknowledges that legal education, legal services, and the regulators will need to be aware of the emerging changes and the necessity to address the use of technology in future regulatory codes.[56] The regulatory body for barristers, the BSB, has commented generally on the use of technology in education, stating that "modern online delivery techniques (such as webinars and e-learning) might prove valuable."[57] There was little, however, in the way of acknowledging the changes to practice already on board and how much further law schools will need to go to bridge the gap between current legal education and the advances already in place.

More helpfully, however, the revised Benchmark Statement for Law of July 2015[58] includes a broad approach to how law schools can make explicit the value of technological training and interpret for themselves the extent to which "advances in teaching practice and information technology"[59] are reflected in the curriculum, including possible assessment methods that could include the "creation, use and management of online resources."[60] General technological references were made in recommendations that "students experience a range of teaching methods throughout their law programme [including] online learning environments"[61] and "information and communications technology[] are adequate to … gain the knowledge and acquire the skills set out in this Statement."[62] This broad approach allows law schools flexibility whilst giving students the opportunities to engage in learning some digital capabilities.

With changes taking place across the Atlantic in the American and Canadian legal education landscapes, by 2014, the ABA Task Force Report[63] and Canadian Bar Association[64] had embraced change and urged law

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[54]*Id.* ¶ 3.96.

[55]*Id.* ¶ 4.70.

[56]*See* News releases, Solicitors Regulation Authority, SRA responds to LETR research report (25 June 2013), http://www.sra.org.uk/sra/news/press/sra-response-letr.page. In March 2016, the SRA published a report on *Risk resources: IT and innovation* (2016), https://www.sra.org.uk/risk/resources/it-innovate.page, which explored how legal services can be delivered in innovative, efficient and affordable ways.

[57]Bar Standards Board, *Future Bar Training. A Programme of review and reform that will bring our training regulation up to date and assure high standards in barristers' services for the future* (Feb. 2015), https://www.barstandardsboard.org.uk/media/1650565/future_bar_training_programme_update_february_2015_pdf__va499362_.pdf.

[58]Quality Assurance Agency for Higher Education (QAA), *Subject Benchmark Statement: Law* (July 2015), http://www.qaa.ac.uk/en/Publications/Documents/SBS-Law-15.pdf.

[59]*Id.* § 3.7.

[60]*Id.* § 3.5.

[61]*Id.* § 3.3.

[62]*Id.* § 3.4.

[63]ABA, Task Force on the Future of Legal Education, Report and Recommendations (Jan. 2014), http://www.americanbar.org/content/dam/aba/administrative/professional_responsibility/report_and_recommendations_of_aba_task_force.authcheckdam.pdf. Note, in particular, *id.* at 14 ¶ G.1; 26 ¶ E, and 27 ¶ F.

[64]Canadian B. Assoc. Legal Futures Initiative, Futures: Transforming the Delivery of Legal Services in Canada § 7.4 (2014), http://www.cba.org/CBAMediaLibrary/cba_na/PDFs/CBA%20Legal%20Futures%20PDFS/Futures-Final-eng.pdf. For a discussion of the changing legal landscape in Canada, *see* Noel Semple, *Legal Services Regulation in Canada: Plus Ça Change?* (Univ. Windsor L. Publics., Spring 2017), http://scholar.uwindsor.ca/cgi/viewcontent.cgi?article=1029&context=lawpub.

schools to observe that innovations in legal services require greater understanding and use of technology in law schools. In particular, the ABA's comment to its Model Rules of Professional Conduct Rule 1.1 (on the Client-Lawyer Relationship) reminds lawyers that they need to be aware of the technological changes and the benefits and risks associated with the delivery of online legal services in order to competently represent clients.[65] Moreover, some U.S. states, such as Florida, have adopted "Minimum Continuing Legal Education Standards" requiring lawyers to work with non-law professionals with competency in IT, confidentiality, and handling of data and security[66] in order to meet the challenges of using technology in practice.

There are still some challenging debates to be had on the level of technical proficiency that should be required to ensure legal competence. Further, it must still be decided what is the most effective means of delivering the training. But initiatives for the inclusion of a digital lawyering curriculum into legal education are most likely to involve collaborative and experiential learning, a key theme emerging from the influential Carnegie Report on Educating Lawyers.[67] This approach, as with the technology skills themselves, is focused on preparing students to be equipped with client-centred, business awareness skills.

Future-proofing our law graduates: A proposal for a digital lawyering framework

The ongoing shift towards digital lawyering and the LETR 2013 discussion of technology in legal education raise many questions as to the extent and depth of knowledge lawyers will need to have about technology and its uses to engage in competent legal practice. In parallel, many questions about how law schools can better educate and equip students have arisen.[68]

Nevertheless, more direction and impetus from professional bodies would help law schools focus on which aspects of technology are of importance in legal education.

This section makes a modest attempt to suggest additions needed to modernise the existing law school curriculum to meet the education and training needs of the future legal industry. These additions aim to offer law students the opportunity to develop an understanding of digital lawyering and experience its uses and applications to gain a realistic view of the future of legal services and the profession.

It has long been recognised that, using their intellectual and academic knowledge, law graduates should be able to offer clients practical, well-reasoned solutions based on critical analysis, principles of

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[65]*See* the ABA's comment [8] to the Model Rules of Professional Conduct 1.1 (Client-Lawyer Relationship):

> To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_1_competence/comment_on_rule_1_1.html. The Model Rules provide ethical rules to regulate attorney conduct in most of the states in the US with potentially heavy penalties for failure to comply, depending on the state in question.

[66]The Supreme Court of Florida has approved a rule requiring state lawyers to take technology-related CLE courses. *See IN Re: Amendments To Rules Regulating The Florida Bar 4-1.1 And 6-10.3* (29 Sept. 2016), http://www.abajournal.com/files/OP-SC16-574_AMDS_FL_BAR_SEPT29_(1)_copy.pdf.

[67]William M. Sullivan et al., Educating Lawyers: Preparation for the Profession of Law 187-88 (The Carnegie Foundation for the Advancement of Teaching, 2007) (also known as *The Carnegie Report*); summary available at http://archive.carnegiefoundation.org/pdfs/elibrary/elibrary_pdf_632.pdf.

[68]A recent scoping paper examines the current innovations in law schools and provides insight into how institutions are addressing challenges and trends. Dr Vicky Kemp et al., *Clinical Legal Education and Experiential Learning: Looking to the future* (Report commissioned by The Univ. Manchester Sch. of L. 2016), http://hummedia.manchester.ac.uk/schools/law/main/news/Clinical-Legal-Education-Final-Report28.09.2016.pdf.

law, justice, and ethics. Law graduates should be able to self-manage, reflect on their own learning, work collaboratively, and communicate effectively, whilst also taking responsibility for their own personal and professional development.[69]

But in recent years, technology has become increasingly central to our day-to-day activities, changing the ways in which we learn new skills, operate in the workplace, and interact with one another. Consequently, the proficient lawyer practising in the year 2023[70] will require a broader range of competencies, skills, abilities than before. Such a lawyer must have an outlook that reflects not simply what the new technologies do but the manner in which they do it, alongside sound knowledge of information security, data protection, and the ethical constraints of practising law online.

The concept of digital lawyering as a theoretical framework within legal education is a relatively new idea. In this paper, 'digital lawyering' is defined as the use of appropriate, safe, and effective online technological innovations and techniques both for delivering training in legal education and for delivering legal services. This sort of lawyering, while novel in many respects, still requires the professionally responsible lawyer to exercise the traditionally-required knowledge, skills, and aptitude for the purpose of collaborating, advising clients, undertaking dispute resolution and other forms of advocacy, and undertaking legal transactions.

The 'Digital Lawyering Framework' diagram (Figure 1) illustrates the intersection between the use of bespoke technology and the paradigms of clinical legal education and collaborative learning. Building upon the existing VLC curriculum used in a module designed by the author, this paper proposes that the 'Digital Lawyering Framework' is a theoretical framework that enables students to explore, examine, develop, and reflect on:
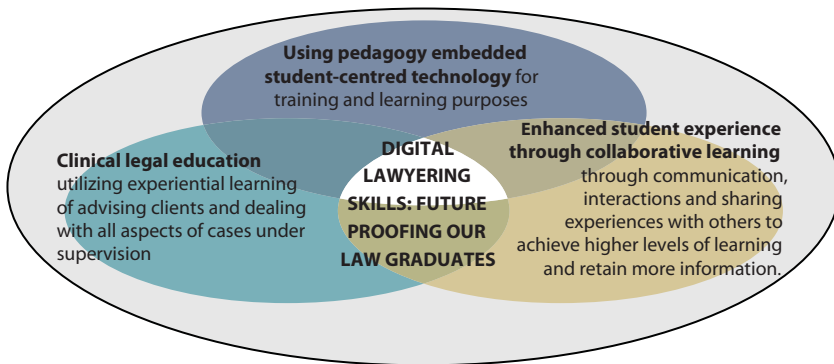
Figure 1: Illustration of the digital lawyering theoretical framework.

- Learning about law in a deep and active learning context supported with feedback
- The current trends in the delivery of legal services and how to use new technologies required to meet those demands
- Being self-aware through online collaboration with clients, peers, tutors, and other professionals

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[69]*Id.* at 43.

[70]The year 2023 was chosen for this article to reflect the traditional seven-year period for qualification post-A levels.

- Developing judgment skills and professional responsibility
- Evaluating professional identity and values including an examination of one's own personal epistemology
- Developing awareness and understanding of the extent of professional competencies required of a lawyer
- Recognizing the character and attributes necessary of a competent digital professional
- Offering ways for individuals to reflect upon their practical experiences, encouraging evaluation of their approach to working online, and evaluation of their values and personal identity within the profession
- Raising awareness of the effects of modern technology on society and its impact on different demographics
- Creating an understanding of digital literacy within society and how individuals must adapt to the needs of different groups in order to promote an inclusive attitude

As such, the VLC integrates theory and practice by combining academic inquiry with actual experience and constructive reflection, with the aim of increasing knowledge, developing skills, clarifying values, and developing students' capacity to contribute to the changing legal practice.

The digital professional

The framework aims to create a lawyer who is capable of practicing law and delivering legal services online. This goal requires learning a full range of skills from collaboration and communication to interviewing, investigating, and advocacy, all competently undertaken on a virtual platform whilst being aware of and adhering to the ethical and professional duties governing a lawyer. As a digital professional, the proficient lawyer will develop the skills, knowledge, and attributes to use digital technologies effectively, appropriately, and responsibly.

At the forefront of using technology in clinical legal education is the recently launched Virtual Law Clinic (VLC).[71] The VLC is built on the premise of the digital lawyering framework. Set up as a virtual law office, it has been designed to enhance and modernise the legal education of students in light of emerging changes and trends in the delivery of legal services. It is also being used as a tool for training, prior to students embarking on digital practice of law under supervision.

A recent paper by the author[72] explored ten students' reflections on their employability skills, personal attributes, and values after they had the opportunity to undertake four months of experiential training on the VLC. There was evidence of the students' commercial awareness, professionalism, principles of values and justice, intellectual creativity, critical and creative thinking, developing originality of thought, creative problem-solving, digital professional skills, case management skills, ability to use constructive reflection for effective personal and professional development, ability to collaborate as well as work independently, and ability to cope with uncertainty.

The digital lawyering framework informs the design and pedagogy behind the construction and utilization of the VLC. To create the VLC, the most current iteration of the digital lawyering framework in use is mapped onto a digital learning platform, designed[73] to achieve the learning outcomes of clinical legal education and to embed collaborative[74] and experiential learning practices into legal transactions.

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[71]*See* Thanaraj & Sales, *supra* note 1.

[72]Thanaraj, *Proficient Lawyer*, *supra* note 4.

[73]For reflections and thoughts on designing a simulated virtual law clinic platform, *see* Thanaraj, *Evaluating*, *supra* note 4.

[74]Collaborative learning comes from Vygotsky's principle of zone of proximal development, a theory that a learner can learn with the help of guidance. The zone of proximal development provides the necessary guidance to build up the skills needed to undertake tasks through communication and interactions with others. Lev S. Vygotsky, *Interaction*

Together with this, the platform will promote authentic development by providing opportunities for reflection on the professional learning[75] experience.

Being considered digitally competent is more than being able to source information online; it means possessing the understanding, knowledge, and skills required to enable the effective use of technology to analyse and to evaluate information critically.[76] By using the VLC as part of the legal curriculum, students are exposed to some of the changes in the future of the legal profession and the legal services market. The case activities in the VLC offer an opportunity to experience online dispute resolution in teams; work with an e-practice management system; learn basic project management techniques; and understand privacy, confidentiality, and data security issues and their impact on legal transactions. By undertaking case work online, students will also develop personal and professional responsibility and accountability along with methods of working efficiently and collaborating online.

Importantly, it is intended that students will become aware of representing the client in a manner that is consistent with the rules of the profession. This is especially important when establishing a lawyer-client relationship online, understanding and working with online practice management systems, and learning safe handling of data and the interpretation and implementation of professional conduct rules within an online law clinic.

A broad range of competencies are required for an individual to be considered digitally competent. A solid level of technical knowledge and experience of online working can only be gained through regular practical experience. The knowledge gained from experience provides individuals with the necessary confidence and adaptability required to learn and utilise new technologies in both their personal and professional lives. In addition to this, digitally-competent professionals will feel confident in choosing particular solutions for online tasks and will be able to adapt their communication style in order to work effectively within different mediums. As with traditional communication methods, the need to be able to evaluate and respond to information ethically and without bias from reputable sources is essential.[77]

The digitally-competent professional should have an awareness of advancements in technology and, in particular, keep abreast of developments within IT security.[78] It is not enough for students and

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Footnote continued

Between Learning and Development, *in* Readings on the Development of Children 29 (Mary Gauvain & Michael Cole eds. 1997), http://www.colorado.edu/physics/phys4810/phys4810_fa08/4810_readings/vygot_chap6.pdf Further, the value of group or collaborative learning was explored by Gokhale, who explained that there is improved learning and retention of information when learning together rather than individually. Anuradha A. Gokhale, *Collaborative Learning Enhances Critical Thinking*, 7 J. Tech. Educ. 22 (1995), https://scholar.lib.vt.edu/ejournals/JTE/v7n1/pdf/gokhale.pdf.

[75]For practices on reflective learning in professional education see Ann Thanaraj, *Student engagement with e-portfolios: purpose, benefits and problems*, 6 Prac. Res. Higher Educ. 25 (2012), http://194.81.189.19/ojs/index.php/prhe/article/viewFile/128/216.

[76]In 2001 Marc Prensky proposed the idea that people are either "digital natives" or "digital immigrants," depending on when they were born. *See* Marc Prensky, *Digital Natives, Digital Immigrants Part 1*, 9 On the Horizon 1 (2001), http://www.emeraldinsight.com/doi/pdfplus/10.1108/10748120110424816. However, this concept was highly criticised until 2011, when David White and Alison Le Cornu developed the "Visitors and Residents" framework for exploring the various ways in which individuals engage with digital technology. *See* David White & Alison Le Cornu, *Visitors and Residents': A new typology for online engagement*, 16 First Mind (5 Sept. 2011), http://firstmonday.org/article/view/3171/3049.

[77]David Bawden, *Information and digital literacies: a review of concepts*, 57 J. Documentation 218 (2001) [hereinafter, Bawden, *Information*]; *see also* David Bawden, *Origins and Concepts of Digital Literacy*, *in* Digital Literacies: Concepts, Policies & Practices 17 (Colin Lankshear & Michele Knobel eds., 2008).

[78]Alexander J.A.M. van Deursen, *Internet skills: vital assets in an information society* (University of Twente Res. Info., 17 Dec. 2010), http://doc.utwente.nl/75133.

practitioners to be able to retrieve and analyse online information; they must also understand the risks involved in the handling, sharing,[79] and safe storage of data.[80] Improving and building upon knowledge is essential and therefore a digitally-competent professional should be aware of the areas where they require further professional development. Given the abundance of the retrievable data online, there is a need to develop one's ability to evaluate content found online and make informed judgements on its reliability.[81]

The digital lawyering framework

Academics in law schools can use the authentic tasks embedded within the functions of the VLC as a starting point for incorporating digital lawyering to the law curriculum.[82] Figure 2 below illustrates the intended principles (learning outcomes) derived from the proposed digital lawyering curriculum. A discussion of each principle follows the diagram.
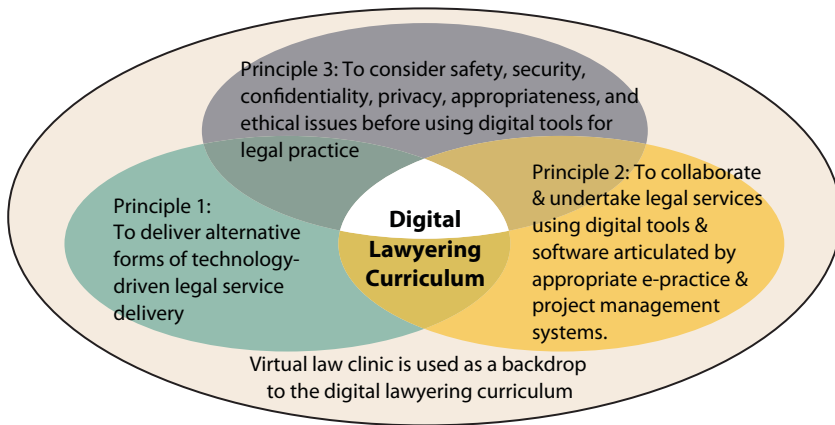
Figure 2: Illustration of a proposed digital lawyering framework.

Principle 1: Acquire the knowledge and skills to use digital tools and software to deliver alternative forms of technology-driven legal service

The knowledge and skills relevant to communicating and practicing online include the ability to select an appropriate online communication/collaboration tool for a particular purpose or audience and the awareness of acceptable etiquette when working online with clients and other professionals.

Specific to lawyering professional skills, students will need to be flexible in both communicating and listening because each client they encounter will have a different concept of accessibility and varying levels of comfort in communicating online. Taking this further, students will need to become aware of

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[79]Bawden, *Information*, *supra* note 80.

[80]In this context, van Deursen and van Dijk reported, significantly, that in performance tests of internet skills, with participants from different target groups and educational levels, nobody really evaluated the information found. Alexander J.A.M. van Deursen & Jan A.G.M. van Dijk, *Using the Internet: Skill related problems in users' online behavior*, 21 Interacting with Computers, 393 (2009).

[81]Roman Brandtweiner et al., *How to become a sophisticated user: a two-dimensional approach to e-literacy*, 12 New Media & Soc. 813 (2010); *see also* Paul Gilster, digital literacy (1997).

[82]*See* Thanaraj & Sales, *supra* note 1.

alternative forms of technology-driven legal service delivery, including best practices for the use of these delivery models, with a focus on the legal ethics of online delivery of legal services.[83]

Through material embedded in the digital lawyering curriculum, students can learn about the impact on the legal profession and practice of emerging trends such as unbundled legal services supported by alternative business structures, alternative billing methods, and collaborative methods of online delivery.[84] Such learning can be promoted through the integration of multiple virtual communication strategies and tools within the platform, and providing opportunities for students to use these strategies and tools to complete practical and professional tasks with meaningful feedback that encourages reflection.

Principle 2: Acquire the knowledge and skills to collaborate & undertake legal services using digital tools & software articulated by appropriate e-practice & project management

Students also need to learn how to collaborate effectively to deliver legal services online. The digital lawyering curriculum should include training about authentic activities such as team theory and creating effective teams. To engage in such activities, they must understand the range of online communication tools and how to use them for collaboration, planning, and the sharing of tasks and goals. Utilizing the VLC platform and its bespoke components, students can learn how to evaluate the different practice and project management systems available for use within a law practice; the value of online systems as opposed to traditional systems to meet business needs; and how they may increase productivity, meet organisational needs, and deliver an efficient legal service.

Learning together, students will be able to develop personal and professional responsibility and accountability, both individually and in teams, to improve working practices online. As students experience more of the VLC platform and undertake work though the platform, they will gain understanding and experience in online dispute resolution, develop awareness of the purpose and necessary skills of digital lawyering, learn advanced online legal research skills, and discuss current and emerging legal technology —all of which could instil some business acumen into future lawyers.[85]

Further, students will learn project management skills, key principles, and methodologies that enable lawyers and law firms to deliver work that meets clients' expectations and achieves business objectives. The digital lawyering curriculum should embed a basic introduction to the principles and practice of project management and how they can be utilised in legal practice, along with the need to balance a variety of constraints such as clients' budget, time, and service costs whilst maintaining the quality and standards prescribed by professional supervisory bodies.

With such experience, over time, students will be able to identify the risks and benefits of using cloud-based project management software and tools to plan a legal project; project time, resources, and

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[83]*See* THE LAW SOCIETY OF ENGLAND AND WALES, THE FUTURE OF LEGAL SERVICES, Executive Summary 4-9 (Jan. 2016), https://www.lawsociety.org.uk/news/documents/future-of-legal-services-pdf/.

[84]See Nick Hilborne, *SRA: clients may not need "detailed information" where work is referred to firms' separate businesses*, LEGAL FUTURES (29 Oct. 2015), http://www.legalfutures.co.uk/latest-news/sra-clients-may-not-need-detailed-information-where-work-is-referred-to-firms-separate-businesses; Nick Hilborne, *Join them to beat them: Law Society urges firms to use ABS to compete with accountants*, LEGAL FUTURES (30 Oct. 2015), http://www.legalfutures.co.uk/latest-news/join-them-to-beat-them-law-society-urges-firms-to-use-abs-to-compete-with-accountants; Jonathan Smithers, *Evolution of legal services: The impact of ABS in England & Wales*, CBA/ABC NAT'L (26 Oct. 2015), http://www.nationalmagazine.ca/Blog/October-2015/Evolution-of-legal-services-The-impact-of-ABS-in-E.aspx.

[85]Smith, *supra* note 7.

cost and translate these factors into project management plans; and work collaboratively and effectively utilizing individual's strengths in an online team within the project management framework.[86]

There is also a need to understand what critical thinking is; find information from multiple sources; put information together to inform decision making; and evaluate quality, credibility, and importance of the information gathered. Through the VLC initiative, students can be introduced to the principles and practice of eDiscovery and learn about available eDiscovery software, the use of predictive coding technology,[87] the risks of such software, and ethical and best practices in handling and requesting for eDiscovery. As part of this study, students will also be able to learn about how to present, preserve, and manage digital information and evidence for civil and criminal court matters. Broader skills such as problem-solving, and critical and analytical thinking skills, are exercised when discussing practical eDiscovery issues.

Principle 3: The knowledge and skills to consider the safety, security, confidentiality, privacy, appropriateness and ethical issues before using digital tools for legal practice

This principle includes understanding the repercussions of unprofessional and unethical behaviour online, taking into consideration issues of safety, privacy, and digital footprint in online interactions. Specific to lawyering and professional skills, students will need to develop an understanding of the roles of technology, privacy, and security and how they affect the online practice of law.

Technical and theoretical knowledge is needed to understand client confidentiality, the status of privileged communication online, and the legal ethics associated with online practice. Within the context of everyday practice, establishing the proficient lawyer-client relationship online, authenticating client identity online,[88] handing billing and financial procedures, and the use of social media and its impact on professional work are crucial aspects that affect online practice.

There is also a need to become aware of the laws and its applicability within the areas of privacy, human rights, defamation, copyright, marketing, intellectual property, and many more.

When communicating and sharing information online, it is important that students stay mindful of the legislation that governs creative output and copyright, human rights, and the use of data pertaining to other individuals. In addition, students need to learn how to ensure that information they collect and store about others is in accordance with UK data protection laws.[89]

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[86]*Innovation in legal project management*, ALLEN & OVERY, http://www.allenovery.com/advanceddelivery/legal-project-management/Pages/default.aspx (last visited 13 July 2017).

[87]Monty, *supra* note 32.

[88]Sergey Filippov, *Financial Services in the Digital Age: How Strengthened Digital Identity Will Open Markets, Drive Innovation and Deliver Growth*, EUROPEAN DIGITAL F. (June 2016), http://www.lisboncouncil.net//index.php?option=com_downloads&id=1275; *see also* David Navetta, *The Duty to Authenticate Identity: the Online Banking Breach Lawsuits*, INFOLAWGROUP LLP (17 Apr. 2012), http://www.infolawgroup.com/2012/04/articles/reasonable-security/the-duty-to-authenticate-identity-the-online-banking-breach-lawsuits.

[89]Data Protection Act 1998, c. 29 (UK), http://www.legislation.gov.uk/ukpga/1998/29/contents. For information about laws beyond the UK, the global law firm DLA Piper published a Data Protection Handbook, which provides an overview of the key privacy and data protection laws and regulations across the globe. The handbook can be downloaded from https://www.dlapiperdataprotection.com/index.html?t=law&c=GB. *See also* the website for the Information Commissioner's Office (UK), an "independent authority set up to uphold information rights in the public interest, promoting openness by public bodies and data privacy for individuals." https://ico.org.uk.

Students further need an awareness and understanding of the security of client data online.[90] In addition, they need to know how to ensure that data is encrypted and stored within a secure infrastructure, where it is stored, what backup and recovery strategies to use, and how to handle data discovery requests. Secure ways of sending and sharing information and the relevance of metadata from documents are also important to understand. Further, understanding safe ways of communicating confidential data and the necessity of encryption,[91] along with the risks associated with using public wireless access (Wi-Fi) to view clients' files, are paramount. Related to these areas are the need to understand indemnity for protecting information contained in the online platforms from identity theft or data loss and the ethical issues related to the use of technology in law practice. In particular, students must understand the risks of cloud services and know how to ensure that data protection regulation is adhered to by the vendor.

Students must be familiar with opinions related to the use of technology in law practice and learn how those apply to the practical side of practice management. In particular, they must be able to select technology applications that comply with rules of professional conduct, by ensuring that all forms of communication and data handling are safe and encrypted. Students should also be aware that, with online-based legal practices, multijurisdictional claims can arise, raising the challenges of learning the applicable laws and obtaining the licenses needed to handle those claims.

Table 1, below, maps the principles that form the digital lawyering framework, including the intended knowledge and understanding, intellectual, professional, and employability outcomes. This mapping can help academics in law schools embed all or some of the framework into a new or existing curriculum. The mapping allows for a broader and fuller curriculum that will prepare students for the profession by introducing them to lawyering and clinical work online, along with awareness and recognition of ethical and professional responsibility. The digital lawyering framework has the potential to be powerfully engaging and contribute to new insights for students, allowing them to apply the law in a practical context whilst becoming familiar with the skills and aptitude necessary for a digitally competent and proficient lawyer. This learning further improves the students' employability.

The aims and intended learning outcomes of the digital lawyering framework should be stated clearly in the module documentation. They also should be explained to students so that they are aware of the nature of the framework, its intentions, and the learning which they could potentially derive from their experience. Students' learning is enhanced when they are able to understand what it is that they are meant to be learning and when they are given the opportunity to reflect on it. The purpose of the curriculum can be explained to students as a method of experiencing and gaining practical understanding of what it is like to be a digitally competent and proficient modern lawyer, whilst developing their commitment to the ethics, values, and aptitudes of a lawyer. Students should also be made aware that they will be introduced to elements of uncertainty and risk in professional contexts, and that they will develop an understanding of the benefits and limitations of technology in professional practice, including, in particular, data risks, security, and privacy issues.

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[90]Nate Lord, *Law Firm Data Security: Experts on How to Protect Legal Clients' Confidential Data*, Digital Guardian (21 June 2016), https://digitalguardian.com/blog/law-firm-data-security-experts-how-protect-legal-clients-confidential-data.

[91]The author submits that all online tools used for legal services should be encrypted using 256-bit SSL; otherwise, the data could be easily breached if accessed over an insecure network.

Table 1: A curriculum map demonstrating skills and attributes of a digital professional law graduate.

DIGITAL LAWYERING SKILLS CURRICULUM MAP	Using digital tools and software to deliver alternative forms of technology-driven legal service	Collaborating & undertaking legal services using digital tools & software articulated by appropriate e-practice & project management	Considering the safety, security, confidentiality, privacy, appropriateness and ethical issues before using digital tools for legal practice
Knowledge and understanding	Demonstrate: • The necessary broader awareness and understanding of the political, social, and economic context in which the values, principles and rules of the profession and legal system work • Knowledge about selecting technology applications that comply with rules of professional conduct • Etiquette of working and communication online • The laws and its applicability within the areas of privacy, human rights, defamation, copyright, marketing, intellectual property and data protection when handling online transactions	Demonstrate: • Knowledge about suitable online communication and working practices • Effective online project management for legal practice to meet business needs and efficiency in services	In communication and collaboration online, being able to demonstrate: • Understanding of the repercussions of unprofessional and unethical behaviour online • Clear and precise understanding of issues on safety, privacy, and digital footprint in online interactions • Awareness and focus on the legal ethics of online delivery of legal services • Identifying risks and benefits of using cloud-based project management • Ethical and best practices in handling of data, information requests, eDiscovery etc.
Intellectual skills	Demonstrate: • An awareness and understanding of the legal ethics of online delivery of legal services • Intercultural communication skills together with the skills and understanding of communicating online[92]	Demonstrate: • Awareness of the necessary skills, knowledge and aptitude for successful digital lawyering • Critical attitude towards research/ gathering of information is put together to inform decision making; evaluating quality, credibility, & importance of the information gathered	Demonstrate: • An understanding of the role of technology, privacy and security and how it affects the online practice of law • Safety, privacy, and digital footprint in online interactions • Risks associated with using public wireless access (Wi-Fi) • Safe ways of holding data and communicating confidential data • Encryption and storage of data in infrastructure, backup and recovery strategies • Secure ways of sending and sharing information and the relevance of metadata

Table 1: *Continued.*

DIGITAL LAWYERING SKILLS CURRICULUM MAP	Using digital tools and software to deliver alternative forms of technology-driven legal service	Collaborating & undertaking legal services using digital tools & software articulated by appropriate e-practice & project management	Considering the safety, security, confidentiality, privacy, appropriateness and ethical issues before using digital tools for legal practice
Professional skills	Demonstrate: • Basic skills of advocacy, client interviewing and negotiating techniques online • Awareness of the ethical and social implications of a practicing lawyer and the ability to conform to the relevant codes of conduct online • Awareness of the emerging move towards unbundled legal services supported by alternative business structures, alternative billing methods and collaborative methods of online delivery • A willingness to continuously improve skills and abilities through critical self-reflection • Understanding the repercussions of unprofessional and unethical behaviour online • Creative ways of online collaboration • A willingness to continuously improve skills and abilities through critical self-reflect	Demonstrate: • Understanding the range of online communication tools and how to use them for collaboration • Responsibility and accountability both individually and in teams to improve working practices online, individually and in teams • Understanding of the working practices of eDiscovery software, the use of predictive coding technology, the risks of such software, ethical and best practices in handling and requesting for eDiscovery • Online dispute resolution for solving disputes • Safe and sensible attitude in digital activities • Professional skills of working online such as ability to manage information and utilize information legally	Demonstrate: • Accurate knowledge of handling client confidentiality, the status of privileged communication online and an awareness of the legal ethics associated with this • Practices of establishing lawyer-client relationship online, authenticating client identity online, handing billing and financial procedures • Technical knowledge of safe handling of data and professional codes of conduct • Reflective and carefully considered attitude towards the use of technology • Ethical working practices • Professional values and identities such as showing initiative, creativity, autonomy, collaboration and adaptability
Transferable and employability skills	Demonstrate: • An ability to organise and prioritise work and engage in effective teamwork • Organise and prioritise in order to meet professional standards and enhance employability • Plan and manage independent research and problem solving • Professional attributes such as flexibility and adaptability, social and cross-cultural awarenes	Demonstrate: • Basic theoretical understanding of the principles and application of project management in law practice • General problem-solving, critical and analytical thinking skills	Demonstrate: • A developed knowledge base on issues of security of client's data, the storage of data, sending and sharing information, safe ways of communicating confidential data • Understanding of indemnity for hosting information services

92 *See* Thanaraj, *Internationalizing, supra* note 4, at 42-54.

Conclusion

This paper lays out the emerging trends in technology in the practice of law and, the shortfalls that legal education in England and Wales currently faces in transmitting technology skills to students. Given the emerging trends and challenges of online delivery of legal services, it provides an opinion on the future direction of legal education and makes a proposal for incorporating a digital lawyering framework into the existing law curriculum at law schools seeking to future-proof their graduates.

This paper advocates for the use of the recently-constructed VLC using the pedagogical doctrines in Figure 1 coupled with a clear digital lawyering framework developed from three key principles in Figure 2. The intended learning outcomes outlined in Table 1 offer a method by which digital lawyering can be embedded into the curriculum. Overall, the paper offers some of the knowledge, skills, attitudes, and values necessary for a modern and proficient digitally-competent lawyer.

Specifically, it is proposed that modern legal education should contain opportunities to learn both about alternative forms of technology-driven legal service delivery and about the ethical rules (both in the UK and internationally) that impact the delivery of online legal services. Knowing practical ways of using technology to increase productivity and efficiency whilst gaining experience in online dispute resolution, e-practice, and project management are valuable employability skills. Technical, theoretical, and practical knowledge gained from the experience of learning, through the VLC, about matters such as handling client confidentiality and the communication, storage, and security of client data are absolute core requirements of a digital lawyering curriculum.

The research undertaken on the design, construction, revision, and modification of the VLC and its accompanying digital lawyering framework has produced an ambitious and innovative technology-enhanced clinical model. It offers a realistic training tool for students about the emerging trends and challenges in legal practice and prepares them to offer access to legal advice and support to those who may otherwise not be able to travel to a clinic or firm. By embedding the principles of the proposed digital lawyering framework and its corresponding curriculum about technology into the law curriculum, together with using a corresponding online experiential learning programme such as one that allows students to undertake legal transactions through a virtual law clinic, law schools will help their students develop the capability to:

(1) Gain the required skills, knowledge, and aptitude necessary for a competent digital professional to represent a client in a manner that is consistent with the rules of the profession.

(2) Gain a technical knowledge and the experience of working collaboratively online to develop knowledge of data protection, confidentiality, IT security, and the safe handling of information, whilst building trustworthy relationships with clients and other stakeholders online.

(3) Develop an awareness of the practical application of law, recognition of the current trends in the delivery of legal services, and knowledge of new technologies required to meet those demands.

(4) Engage in personal and professional development; develop their judgment skills and professional responsibility; and evaluate their professional identity and values, including an examination of one's own personal epistemology, through a constructive reflection and feedback process.

The author hopes that this modest proposal will spark interest and discussions in law schools and amongst legal education regulators about how existing curricula can take on some additional components to future-proof law graduates—perhaps as part of a wider discussion on how legal education can be reconsidered. It is also hoped that law schools will continue to be at the forefront of developing

innovative ways of using technology in legal education. They are well-positioned to assess the potential benefits and risks of attempting to reduce the access to justice gap and to train students for the needs of the profession, both as lawyers and in the wider employment sector.

Other research by the author that stems from the VLC project[93] has led to new insights into how students study in a practical context, helps to disseminate an interesting new method of clinical education, analyses its influence on professional learning, assesses students' cognitive and epistemic development, and considers essential lawyering and professional skills development and the impact they have on employability.

Scope for further research

- Developing an assessment instrument to effectively measure the achievement of the intended learning outcomes set out in the digital lawyering framework proposal
- Interpreting and assessing for learning the concept of 'digital literacy in legal education' by building on the proposed frameworks
- Undertaking a narrower piece of work to scope out any discernment or any apprehension and barriers that law academics may have in utilizing technology in the design of legal education,[94] in particular in the teaching of lawyering/professional skills.

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[93]*See* Thanaraj articles cited *supra*, note 4.
[94]Ann Thanaraj & Steve Williams, *Supporting the Adoption of Technology Enhanced Learning by Academics at Universities*, 5 J. TEACHING & LEARNING WITH TECH. 59 (2016), http://jotlt.indiana.edu/article/view/18985.