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Chapter 5

Innovative Technologies in U.K. Legal Education

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Abstract

Are law schools equipping graduates with the skills required for 21st century legal practice? Should an understanding of the impact of artificial intelligence and machine learning on legal services now be a pre-requisite for the contemporary law degree? Will coding be as important as constitutional theory?

This chapter will argue that the digital age requires a commitment to developing the capacity of law students to respond to technological innovation. Practice-ready law graduates need more than a traditional legal skill base to navigate their way through a changing legal landscape. Law schools need to respond by developing a legal curriculum that equips law graduates to flourish in a digital environment.

The authors assess the impact of digital transformation on the legal profession and consider the implications for contemporary legal education, both in terms of content and pedagogy. They argue that pedagogical innovations can enhance the teaching of law and consider the extent to which technological literacy should be integrated into the curriculum.

Introduction

Technological innovation has begun to change the delivery and accessibility of professional legal services, and has opened up new ways of accessing legal information, support and advice. How should law schools respond to this changing legal landscape? This chapter will assess the impact of digital transformation on the legal profession and administration of justice to consider whether practice ready law graduates need more than a traditional legal skills base to navigate their way through a changing legal landscape. It will then explore how pedagogical innovations can enhance the teaching of law and consider the extent to which technological literacy should be integrated into the curriculum. It will draw on two case studies to illustrate how law schools have begun to respond by developing pedagogies that equip law students to deal with the protean nature of technological change. It will also consider the differences between the UK and Indian perspectives on this issue, drawing on the discussion in Halder's companion chapter.

How technology has impacted on legal services

The market for legal services is changing rapidly; technological innovation and globalisation are disrupting traditional models of delivery. The internet is revolutionizing all aspects of legal practice, including the way in which legal

professionals interact with colleagues and clients, how they conduct legal research and how legal practices are managed (Law Society, 2019). Adoption of technology not only impacts on working methods but on how disputes are resolved; there has been significant growth of online dispute resolution (ODR) providing an alternative method of resolving legal problems. One example is the European Commission ODR platform (launched in 2016) which allows consumers to address issues with goods or services purchased online. Consumers and traders in the EU, Iceland, Norway and Liechtenstein can use the service and thereby reduce the need for expensive litigation. Technology provides an opportunity to re-examine how we resolve disputes, employing new processes that potentially enhance access to justice (Katsch et al, 2017). Improvements in mobile and online communication tools are likely to lead to further developments and growth in ODR.

Digitalisation is also reshaping the administration of justice. In April 2016, the higher criminal courts in England and Wales moved to fully digitalised evidence files, and the introduction of virtual hearings (Ministry of Justice, 2018). But most significant is the £1billion Her Majesty's Courts and Tribunal Service (HMCTS) reform programme which aims to integrate technology into the justice system (HM Courts & Tribunal Service, 2018). There are 50 projects in the programme including a digital divorce service, online plea and allocation in criminal cases and a common platform accessible by all participants in the criminal justice system. In terms of the modernisation programme, perhaps the most ambitious element is the adoption of the proposal of Lord Justice Briggs to create an online civil court to resolve money cases up to £25,000 (Briggs, 2016). Implementation and testing are ongoing, it is too early to judge how far the court will transform our justice system, but along with ODR it has the potential to increase access to justice and further transform the legal landscape.

Advancements in technology are not confined to the administration of justice; the practice of law is changing through a shift towards delivering legal services via internet-based technology. Law firms are integrating technology within their practices to enhance the way they operate, responding to demands from clients to provide more efficient and cost-effective services. Advances in mobile technologies has seen the emergence of virtual law firms. Adoption of new technologies which increase productivity are likely to result in less demand for lawyers over the coming years, with the Law Society estimating that the adoption of new technologies and changes in ways of working will lead to 20% less legal services jobs by 2038 (Law Society, England and Wales, 2018). Technologies such as artificial intelligence, online data rooms and machine learning are becoming an increasingly important aspect of lawyering. As well as impacting on existing areas of law, such as contract, intellectual property and commercial law, advances in technology also give rise to new areas of law, including robotics law which offer new employment opportunities both in the practice of law and in the development of new careers for lawyers (Susskind, 2017).

The emergence of legal tech start-ups is significant; investment in new legal technology businesses is now at £16 million (Steer *et al*, 2018). It is still a fragmented

market with a wide variety of technological applications being developed but encouragingly lawyers are the CEOs and founders of 45% of the legal tech start-ups (Steer *et al*, 2018). Examples include Crowd Justice, a crowdfunding platform for legal actions, and Juro, a contract management platform that uses an AI enabled workflow. Coupled with this is the development of the rise of alternative legal providers such as Legal Zoom which offers a document creation service, and fixed price legal plans for access to lawyers. New entrants into the market are innovating using technology to redesign legal services with the potential to create affordable solutions for those who lack the means to pay privately for a lawyer and address the access to justice gap.

Technology within Law Schools

Generation Z, born between 1995 and 2012, and coming of age from 2013 to 2020, are now entering law school, digital natives, born into the mobile revolution and having grown up exposed to high levels of technology (Koulopoulos, 2015). Understanding the motivations and skills of this generation is important in understanding how far legal education should respond to digital transformation. It is difficult to get an accurate picture of how far technology is being incorporated within legal education in the UK. Some law schools offer theory-based law and technology modules but very few incorporate practice-based law-tech courses. Manchester University now offers final year law students the opportunity to collaborate with lawyers, business and computer academics to design law-tech applications that support access to justice (Steer *et al*, 2018). Law students need core legal skills, but also digital skills as an essential requirement to respond to technological change. Digital skills are defined as:

Digital competence involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), and problem solving (European Commission, 2019 p.1).

The need for these digital skills raises important question regarding how law schools can prepare their graduates for a changed, and changing, legal landscape. Susskind (2017) argues that we need to consider what we are training lawyers for and his concern is that we are training them to be 21st century lawyers but 20th century ones.

The technology changes triggered by the economic shock (Recession of 2008) have changed the tools lawyers used to deliver legal services. New lawyers entering the profession must be ready to practice in today's more efficient and more technology-driven workplace. For the most law schools, are not currently equipped to teach these new skills and technologies (Staudt *et al*. 2013, p.697).

But to what extent should technological literacy be integrated into the curriculum? What knowledge and skills do law students need, and how should these be incorporated into the curriculum to deliver a flexible and integrated response to the rapid pace of technological change? Jackson (2016) argues that legal education has been slow to respond to changes in technology and adapt its curriculums. However,

it is increasingly clear that law students need technological acumen and proficiency that goes beyond everyday tech skills. The proposition is not that we teach law students to code, although this happens on a number of law technology courses, but instead give them an understanding of how technology works to effectively engage with the legal issues. Technological applications give rise to a host of legal and ethical issues, from privacy online to how new technology is used. Due to the evolving nature of technology there will be new ethical and legal implications that lawyers will need to respond to. Technological competence is also required to respond to technological innovation. Evolving technologies are permeating all aspects of legal practice and this requires law students to operate in a new legal paradigm. For example, several large UK-based law firms now offer seats (or training contracts) in legal technology. The law school should engender a commitment to continuous learning to ensure students recognise the value of embracing new technological applications. Developing pedagogies to allow students to understand how law relates to broader society and to recognise the potential of harnessing technology to fill the access to justice gap should underpin the curriculum. The pervasive nature of technology requires it to be embedded in new curricula designs. Affording law students opportunities to prepare for a technologically changing world is becoming an increasingly pressing demand on contemporary legal education.

How are Law schools responding to technological change?

Law schools have already begun to respond by developing new pedagogies that equip law students to deal with the protean nature of technological change. The integration of online legal research databases are now commonplace amongst law schools in the UK and beyond (including, as Halder indicates, in India). By virtue of its place within an increasingly digitised higher education sector, the delivery of legal education has embraced technologies such as lecture capture, virtual learning environments and the integration of social media into the curriculum. However, it is the contention of this chapter that the pedagogy and practice of the clinical legal education movement has a distinct role to play in responding the influence of technology and the practice of law and legal education. Clinical legal education (“CLE”) is a uniquely fertile environment to develop pedagogies that develop the capacity for students to thrive in a technologically transformed and transforming legal landscape. This can be illustrated by reference to three key features of CLE practice; its interdisciplinary origins and outlook, the focus on the practical application of legal principles and finally its use of reflective pedagogy. Each will be discussed in turn below.

As discussed by Grimes and Arthurs in their chapters in this collection, the development of clinical legal education over the latter half of the twentieth century, demonstrates it to be a counter-cultural movement within mainstream legal education, and one which has embraced pedagogical innovation and inter-disciplinarity. This is illustrated by the origins of the modern CLE movement, which are commonly traced back to Frank (1933). Here the argument was made that the law schools should move away from the academic based case law approach, which remains the orthodoxy in common law jurisdictions, and move towards a practical model inspired by medical school clinical teaching. Giddings (2013) highlights that *clinic* is derived from the Greek *klinikos*, which can be translated as “from the bed”. He argues that this shows

the inspiration that legal clinical education has taken from medical education which emphasises the importance of applying theoretical knowledge in a practical setting, usually for a real or simulated client.

The interdisciplinary origins of CLE illustrate the capacity of this approach to legal education to look beyond disciplinary boundaries, a tendency that is also evident in the common practice of working with partners beyond the university. Externship placements and partnership work to provide students with practical legal experience is commonplace in the UK CLE community, as evidenced by the most recent survey of clinical practice (Carney *et al*, 2015). The focus on providing students with opportunities to experience practical, client facing, applications of legal principles is an integral feature of CLE pedagogy. It is also one which has led to an entrepreneurial and experimental approach to legal education evidenced by the flourishing of a large repertoire of activities that shelter beneath the umbrella of clinical legal education (Drummond and McKeever, 2015; Kemp, 2016). It is the concern to keep the curriculum grounded in practical activities that exposes the CLE academics and students to the effects of technological change on legal services and makes them well placed to pioneer the law school response to it.

Thirdly, clinical legal education emphasises the value of experiential learning, where students are active in the learning process and have the opportunity to reflect and learn from experience. In doing so, it goes beyond skills training and calls on students to engage with the law as an open-ended subject and to scrutinise wide ranging social and legal issues which facilitates professional ethical development in a practical context. (Drummond and McKeever, 2015, p. 12). In this way students are given a framework to both experience and reflect on the influence of technology on legal practice.

Thus, CLE provides an environment which can act as a testbed to develop pedagogical responses to the increasing influence of technology on professional legal practice and access to justice. It has already developed a pedagogy which exposes law students to the issues that arise from the practical application of legal principles, whether in simulated or real-world settings. It is entrepreneurial in developing new and varied ways in which to provide students with practical activities, very often with partners in the legal sector. CLE often forms the bridge between the practical and the theoretical aspects of legal education and is therefore well placed to prepare students to engage with the impact of technology on the legal profession as the following two case studies illustrate.

Case Study 1 Online law clinic

The creation of a technology clinic provides students with opportunities to engage with technology and develop core competencies. Arguably what we teach in law school needs to reflect changes we are seeing in the delivery of legal services (Susskind, 2017) thus ensuring students are better prepared for the realities of legal practice (Donnelly, 2013). The Open University (“OU”) in the UK created the Open

Justice Centre in 2016 to build a bridge between the OU law school and the wider community, and between law students and the legal profession. It has pioneered the use of experiential learning in distance legal education- it provides opportunities which have a tangible impact upon students' employability by combining the provision of real word professional experience with the development of transferable skills. The defining feature of its pedagogy is the innovative use of experiential learning. The Open Justice Centre has worked to develop pro bono opportunities to allow students to apply their legal knowledge and skills in practical settings to develop transferable professional skills. The challenge was to develop activities that combine experiential learning in a distance law degree- professional pro bono activities require close supervision, carefully managed group work and strong relationships with the legal community. All these present challenges for a distance learning institution.

Our solution was to create an innovative virtual law clinic allowing students to deliver legal services online and serve clients who may not have the opportunity to access a face to face law clinic, The Open Justice Law Clinic. A "virtual law practice" enables the delivery of legal services online through a secure web portal where communication is encrypted and protected (Granat et al, 2017). The clinic supports students in using technology to advise clients under the supervision of qualified solicitors using a leading industry legal case and practice management system, Clio . Familiarity with practice management software is important because it is what lawyers use to manage day to day case work and the operations of their practice. The software allows the clinic to manage the cases, contacts, calendars, documents, tasks, time recording and client communications via one platform.

The students work with clients online to support them with their legal problems and provide advice and information to help them resolve their issues. One of the defining features of the clinic is that it is accessible to anyone with an internet connection- utilising technology to reach clients across the UK. Students interview clients online via Adobe Connect, appointments are offered flexibly including evenings and weekends. All other interaction between clients, students and supervisors takes place within the practice management system via secure messaging. The clinic replicates practice by working electronically and sharing documents via a secure portal. The clinic uses an automated document assembly; all case and contact information is stored within Clio enabling the creation of documents prepared from templates. Students are encouraged to time record not only as important practice ready skill but for the clinic to track the value of the pro bono work. Working in the clinic affords students the opportunity to gain an understanding of the legal process but also practical experience of using technology to facilitate access to justice.

Case Study 2 – Utilising smartphone applications in clinical legal education

The exponential growth in the computing power of smartphones has resulted in an equally rapid growth in the use and ownership of these devices. The forecast for the number of smartphone users by 2022 is predicted to be 53.96 million (Statista, n.d.). The near ubiquity of smartphone ownership in the UK has already begun to have an influence on the way legal services have been developed and accessed (Law Society, 2018). This has led to law schools incorporating this smartphone technology into their clinical curricula. One example of this development are projects which allow law students to develop smartphone apps which disseminate legal information. For

example, the Universities of Manchester, London Southbank and the University of Birmingham have all begun to experiment with challenging their students to engage with this form of technology to experiment with new ways of disseminating legal knowledge a thereby improving access to justice (Legal Cheek, 2018).

The Open Justice Centre at The OU Law School has developed a similar interdisciplinary project in conjunction with computer science academics which gives law students the chance to develop a smartphone app that will provide legal information. This could potentially be applied to a number of legal topic areas, but the initial phase of the project will design an app to support litigants in person in understanding procedures relevant to discrimination and employment law. Students conduct legal research on the topic area and work with computing specialists to translate this information into a form that would be suitable for inclusion into a smartphone app format and sufficiently accessible to be useful to member of the public with little or no prior legal knowledge. Students are expected to reflect on their experience of participating in the context of overarching themes of social justice, legal ethics and professional identity. In doing so, they are given practical exposure to the dynamic role of technology in transforming the way legal services and access to justice is being transformed by digital technologies (for example, a student produced Smartphone App is available on the Open Justice website).

The Open Justice Centre has also experimented with incorporating smartphone based virtual reality into the clinical curriculum to support the development of legal communication skills in a distance learning module. The challenges involved in teaching presentation skills in a distance learning setting is recognised in the literature (Rogerson-Revel, 2015; McDougal and Holden, 2017). To help meet these challenges students were provided with communication and presentation skills training to enhance their ability to engage in their clinical work. A smartphone based virtual reality application (VR App) was developed as a bespoke experiential learning application to provide learners with an immersive simulated environment in which to practise their presentation skills, receive automated feedback and increase their confidence and effectiveness in delivering presentations. It provides three virtual worlds; a prison, community centre and secondary school classroom, each populated with avatars which respond to the presentation with pre-recorded questions. There is also a prototype court room virtual world. Students can upload presentation slides to the virtual world, record their presentation and watch themselves deliver the presentation from the point of view of an audience member. The VR App also scores the presenters eye contact with the audience and where a presenter fails to make eye contact the audience avatars begin to behave restlessly. It is designed to be used on a smartphone in conjunction with a basic hand-held VR headset which was provided to students. The VR App is freely available for both IOS and Android devices and can be found by searching for 'Open Justice VR.'

The incorporation of smart phone based virtual reality into legal education is a recent development and as a result there is little research literature on its effectiveness in this context. However, there is evidence that it has the potential to deliver positive outcomes in higher education settings (Merchant et al, 2014) and its ability to provide an immersive sense of presence in a virtual environment has clear potential in clinical

settings where the ability to practice legal skills in a simulated setting is of great value (Sanchez, 2005; Dede, 2017; Slater, 2017; Maharg, 2017). Nwaneri (2016, p.107) alludes to this potential by suggesting that “virtual worlds offer particular promise for those seeking innovative and cost-effective ways to integrate more professional training and skills development into the law school curriculum.”

However, in common with the adoption of many types of novel educational technologies, there are considerable challenges to be faced in successfully incorporating smartphone technologies into the clinical curriculum, challenges which are also encountered elsewhere within the higher education setting. Fitzgerald *et al*'s (2013) review of the start of Mobile Augmented Reality Technology in education makes the point that there is a danger in allowing the technology to drive the pedagogy which can lead to the failure of technologies to make their anticipated impact in educational settings. This insight seems equally applicable to the development and transfer of smartphone apps into the clinical curriculum.

The Indian context

Educating law students about the impact of technology on the delivery of legal services and legal education extends across jurisdictions. Professor Halder's chapter addresses some of the interesting technological developments happening in India, many of which resonate with our experiences in the UK. Similarities exist between jurisdictions as information technology is also driving change in the administration of justice in India, with the introduction of the e-court system and digital case management systems. Like the UK, India is grappling with the challenges of digitization and how best to prepare law graduates for a rapidly changing legal environment. Although the kind of work lawyers of the future will do is changing, this change will happen on a global scale and will pay no respect to jurisdictional boundaries. As such, the extent and manner in which legal education responds to the realities of emerging practices will determine how prepared law students are for the changes happening within the legal market place. The market for legal services is increasingly becoming more competitive, expert legal knowledge is being commodified, and this has significant implications for lawyers of the future (Deloitte, 2016). The risk is that if legal educators fail to adequately prepare law students for these changes, they will be unable to take advantages of the opportunities that exist from technology (Goodenough *et al*, 2012).

India has also recognised the importance of equipping Indian lawyers with the skills and capabilities required in a globalised and technological arena; clinical legal education is a feature of Indian legal education with legal aid clinics becoming an increasingly significant aspect of the activities that take place within Indian universities. Organisation of clinical projects in India varies from institution to institution as it does in the UK and experimenting with the incorporation of technology into the curriculum appears limited to only a handful of universities; which is symptomatic of resource and infrastructure challenges that can also present obstacles to innovation in the UK context. What is clear is that new and innovative models of clinical legal education are starting to emerge across all jurisdictions, which

offer an effective way to teach the skills and attitudes required to enable law students to respond imaginatively to the changes and opportunities that technology can bring.

Clinical programmes have the potential to provide a wide range of learning opportunities that integrate technology into the law curriculum. Those experiences not only develop the skills and competencies required for professional practice, but as students engage with technology, it provides a richer understanding of the possibilities technology can offer to enhance the legal process (Goodenough *et al*, 2012). To achieve this, both the UK and India can draw on some of the experiences of American universities in developing technology education into their curriculums. Jackson (2016), identified 18 American law schools that had law and technology as core part of its mission. In these programmes, students are part of legal innovation labs using a variety of technological tools including document assembly, development of mobile technologies and designing legal templates to provide technological solutions to legal problems. Jackson (2016) predicts that by 2020 most American law schools will offer some form of technology and legal education. Law schools in other jurisdictions therefore need to bridge the gap between providing a traditional legal education and one that includes some form of technology instruction; failure to integrate the two may result in law students becoming increasingly disadvantaged in a globalised legal marketplace.

The incorporation of technology into legal education extends beyond giving students an understanding of how technology can be harnessed to provide innovative solutions to legal problems; technology raises serious ethical challenges that students need opportunities to recognize and explore. Professor Halder's chapter raises the issues of data protection and privacy within the Indian jurisdiction. Emerging technologies pose new opportunities and threats; how the law responds and regulates technological innovation are issues that should feature in the legal curriculum (Land *et al*, 2018). Students need opportunities to critically examine the relationship between law and technology to evaluate whether developments in technology have the potential to undermine the interests and values the law serves to protect (Cockfield, 2003). Integrating and blending technology into legal education has the potential to enrich the legal curriculum; opportunities exist to develop inter-disciplinary partnerships to encourage the facilitation of technology within legal education (Goodenough *et al*, 2012).

Law schools in India and the UK need to consider their responsibilities to educate their students to deal successfully with a rapidly changing legal workplace (Pitstone, 2014). Clinical legal education has the potential to develop pedagogical responses that offer new models of teaching and learning that can meet the needs of law students which respond to the increasing influence of technology on professional legal practice and access to justice. Now is the time for law schools to re-evaluate the place of technology in their curriculums and consider whether they should be teaching students about the legal and ethical implications of technological disruption. Technology has the power to transform the delivery of legal services and the administration of justice (Susskind, 2017); the argument for law schools to actively engage students in the

debate around the role of technology within law is therefore a compelling one.

Conclusion

Technological innovation is disrupting the delivery of and accessibility of professional legal services and there are new ways to access legal information, support and advice. The extent of the impact of digital transformation of the legal profession and administration of justice can be felt across jurisdictions, including in the UK and India. Law schools need to respond by considering the skills and capabilities law graduates now require to navigate their way through a changing legal landscape. This chapter has argued that the clinical legal education movement provides a rich seam of pedagogical innovation that can be utilised to help law schools respond with imagination and flexibility. Law schools have the opportunity to enhance the teaching of law and by integrating technological literacy into the curriculum. If this opportunity is taken, they can succeed in developing pedagogies which equip their students to deal with the protean nature of technological change and flourish within the emerging legal paradigm.

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