

The Law Tech Clinic: Leading the way in Entrepreneurial Law Clinics

Jacqueline Weinberg and Ross Hyams, Monash University, Australia*

Abstract

Globalisation, economic forces and technological advancements are changing the way law is practised. Clients are seeking innovative solutions to an increasingly broad range of legal challenges. They want greater connectivity and streamlined delivery of legal services. The rate of change has accelerated in response to remote working, with the digital maturity of legal firms advancing more rapidly than ever before, utilising technology such as electronic billing practices, digital mailrooms, e-discovery, digital document signing and workflow automation.

Newly developed and deployed legal technology within the sector has increased demand for lawyers with the skills to adapt and thrive in a technological environment. Law firms favour graduates with a 'technology mindset' and aptitude to think beyond the traditional professional services model. The Monash University

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Faculty of Law, one of the leading law schools in Australia with a pioneering clinical program, has established a Law Tech Clinic (LTC). The LTC provides a unique opportunity for students to work on real client matters and receive end-to-end industry input to develop client-ready applications.¹

This paper describes the LTC's structure and how the clinic is designed to educate students on the changing demands of the legal industry, providing practical knowledge on legal technology usage to advance legal services. This paper outlines how the LTC enables students to develop professional and practical legal skills that will help them become successful entrepreneurial lawyers, adept at integrating technology with innovative legal services. Further, this paper demonstrates how the Monash Clinical Program, with a strong focus on best practice in clinical legal education, provides a perfect forum to run such a clinic. We demonstrate how students work with technological systems to assist industry partners, law firms and other organisations and provide accessible legal services to their clients.² Finally, this paper highlights how the LTC educates students on technological advances in legal practice, equipping them with frameworks for the knowledge, skills and attributes to be technologically proficient future legal practitioners. Although this discussion is in

¹ As will be described later in this paper, the Law Tech Clinic was developed as a collaboration between the Monash Clinical Program, industry partners and current law students from BotL, a student-led start-up (<https://www.botltech.com.au/>)

² To date Monash Clinical Program has run the Law Tech Clinic in collaboration with Lander and Rogers (<<https://www.landerson.com.au/>>) and see (<<https://www.youtube.com/watch?v=GZM-GKn7G3A>>), Maddocks (<<https://www.maddocks.com.au/>>) and KPMG (<<https://home.kpmg/au/en/home/services/tax/legal-services.html>>)

the Australian context, it can also apply to other jurisdictions as the associated issues with legal technology and its effects on legal practice are occurring globally.

1. Legal Technology and Legal Practice

To optimise client service, the legal profession has realised the need to engage in technology.³ Many legal service providers in the private and community sectors utilise remote computing access, law practice management systems, document storage and collaboration tools, email, messaging apps and videoconferencing.⁴ Additionally, document automation converts template documents such as leases, trusts, wills and business contracts into personalised legal instruments at a low cost.⁵

In *The End of Lawyers? Rethinking the Nature of Legal Services*, Richard Susskind posited that technology enhancements leading to improved, sustained and advanced methods of legal services delivery are inevitable and that lawyers must change how they operate.⁶

³ Sarah R. Boonin and Luz E. Herrera, 'From Pandemic to Pedagogy: Teaching the Technology of Lawyering in Law Clinics' 2022 (1) 68, *Washington University Journal of Law and Policy* 109 at 2.

⁴ Ibid. See also Jacqueline Weinberg and Jeffrey Giddings, 'Innovative opportunities in technology and the law: The virtual legal clinic' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age*. (Routledge 2022), Richard Susskind, *Online Courts and the Future of Justice* (Oxford University Press, 2019) 186, Sam Stebin and Ashley Pearson, 'Community Legal Centres in the Digital Era: The Use of Digital Technologies in Queensland Community Legal Centres' (2019) (1) 1 *Law, Technology and Humans* 64.

⁵ Ibid. See also Lisa Toohey et al, 'Meeting the Access to Civil Justice Challenge: Digital Inclusion, Algorithmic Justice, and Human-Centred Design' (2019) 19 *Macquarie Law Journal* 133.

⁶ Richard Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford, Oxford University Press, 2010). See also Richard Susskind and David Susskind, *The Future of the Professions: How Technology Will Transform the Work of Human Experts* (Oxford University Press 2015), Richard Susskind, *Tomorrow's Lawyers* (Oxford University Press, 2nd ed, 2015).

Susskind further argued that the focus of preparing for a career in law or for using a law degree for a variety of careers does not only lie in legal competencies. It also lies in upskilling and becoming able to learn entirely new skills and competencies that reflect the new reality of how law is used in the legal profession and more broadly in a multidisciplinary setting.⁷

At the time of his writing (2010), Susskind's prophecy was slowly coming to fruition, with lawyering technology steadily gaining prominence among a segment of lawyers.⁸ COVID-19 substantially pushed this reality along, with technology being used in every facet of the legal profession.⁹ Lawyers who never considered themselves technologically savvy were forced to rely on a broad range of technologies to maintain operations.¹⁰

COVID-19 forced lawyers, judges and other legal service providers to become proficient in technology in order to more efficiently serve clients and to improve law practice management and accessibility of legal services.¹¹ Law firms, courts,

⁷ Richard Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford University Press, 2010).

⁸ Karolina Mania, 'Legal Technology: Assessment of the Legal Industry's Potential' (2022) *Journal of Knowledge*, John Zeleznikow, 'Can Artificial Intelligence and Online Dispute Resolution Enhance Efficiency and Effectiveness in Courts' (2017) (2) 8 *International Journal for Court Administration* 30–45.

⁹ Emma Jones, Francine Ryan, Ann Thanaraj and Terry Wong, 'Defining Digital Lawyering' in *Digital Lawyering Technology and Legal Practice in the 21st Century* (2021).

¹⁰ Sarah R. Boonin and Luz E. Herrera (n 3).

¹¹ *Ibid.*

administrative agencies and other adjudication sites were required to maintain aspects of remote operations and services through technology platforms, including artificial intelligence (AI) bots, Zoom and MS Teams.¹²

Technology is impacting practice more than ever by incorporating AI technology to conduct document reviews, analyse contracts, conduct legal research and undertake other tasks.¹³ Legal services also use chatbots and guided interviews to assist self-represented litigants in finding resources.¹⁴ Litigators employ several tools in pre-litigation, such as e-discovery, and rely on complex visual and audio technologies in litigation to present evidence in an interactive format.¹⁵ The continuing development of virtual delivery of legal services requires practitioners to become adept with a variety of new skills and competencies. In particular, lawyers need to learn to communicate differently, gain mastery of the data in their disciplines, establish new working relationships with technology, and to diversify the services they offer.¹⁶ As Boonin et al posit, 'Now as the world haltingly returns to face-to-face interactions, the legal profession is unlikely to completely walk away from these adaptations. The

¹² Sarah R. Boonin and Luz E. Herrera (n 3). See also Tania Sourdin and John Zeleznikow, 'Courts, Mediation and COVID-19' (2020) (2) 48 *Australian Business Law Review* 138–158, Tania Sourdin, 'Justice and technological innovation' (2015) (2) 25, *Journal of Judicial Administration*, 96–105.

¹³ See Friedman and Guy, 'Litigation Post-Pandemic: The View from Corporate Legal Departments, (2021) 94, *The Advocate* 17.

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ Richard Susskind and Daniel Susskind, *The Future of the Professions: How technology will transform the work of human experts* (Oxford University Press, 2015) 114.

technology of lawyering has gained a larger, permanent foothold in a far broader range of legal settings.¹⁷

Smith and Spencer take this further, suggesting that the lawyer of the future 'will exist as a "polytechnic" or "many-skilled" professional, applying their legal expertise to a client's changing world in an increasingly agile way and within a range of organisational settings'.¹⁸ The legal profession is undergoing a technological transformation that is reshaping how lawyers practise and how the nature of legal services is delivered.¹⁹ Consequently, it is becoming essential for lawyers to develop a necessary understanding of core technologies, their features and functionalities, how they are being utilised and the impact of these technologies on the role of legal professionals.²⁰

2. Legal Technology and Legal Education

As lawyering roles change and new technologies emerge, law firms are challenged to rethink how legal services are delivered.²¹ Jones et al refer to the 'digital

¹⁷ Sarah Boonin and Luz Herrera (above 3). See also Lyle Moran, 'Legal Tech CEOs Urge Lawyers to Keep Innovating Beyond the COVID-19 Pandemic' (2021) ABA Journal <<https://www.abajournal.com/news/article/legal-tech-ceos-urge-lawyers-to-keep-innovating-beyond-the-covid-19-pandemic>> [<<https://perma.cc/KN5M-N9ZZ>>], A Johri, 'Engineering knowledge in the digital workplace: Aligning materiality and sociality through action in T. Fenwick and M. Nerland (Eds.), *Reconceptualising professional learning: Sociomaterial knowledge, practices and responsibilities* (Routledge 2014).

¹⁸ Alexander Smith and Nigel Spencer, 'Do Lawyers Need to Code? A Practitioner Perspective on the 'Polytechnic' Future of Legal Education' in *Modernising Legal Education* (2020) 18-37.

¹⁹ See Richard Susskind and David Susskind. *The Future of the Professions: How Technology will Transform the Work of Human Experts* (Oxford University Press, 2015).

²⁰ E. Jones, et al (n 9).

²¹ Ibid.

transformation' of the legal profession and the delivery of legal services, and how it is creating innovative opportunities for lawyers and law students to explore new areas of practice.²² As Jones et al state, 'lawyers not only need to be aware of emerging technologies but also have an understanding of how technology works to appreciate the impact that technology has on the practice of law'.²³ Lawyers must be knowledgeable in understanding where law and technology intersect, being aware of the implications of technology and becoming digitally literate to leverage the benefits of technology in legal work.²⁴ In other words, the legal profession must be knowledgeable in how lawyers can appropriately, safely and effectively use online technological innovations and techniques within the delivery of legal services, often through secure and authentic online law platforms.²⁵

Law graduates need access to resources to fulfil this need, to think about the future of legal practice and how technology can be harnessed to support innovation.²⁶ Law students are entering legal practices where online communications, paperless offices, cloud services and technology serving to facilitate law practice are all integral

²² Ibid 8.

²³ Ibid 8. See also Susskind, Richard and Daniel Susskind, *The Future of the Professions: How Technology Will Transform the Work of Human Experts* (Oxford University Press 2015).

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid. See also Thanaraj, Ann, 'The Proficient Lawyer: Identifying Students' Perspectives on Learning Gained from Working in a Virtual Law Clinic' (2017) 14(3) *US-China Law Review*, 137–167.

features of digital lawyering.²⁷ The repercussions of the COVID-19 pandemic will resonate in the legal profession for many years to come.²⁸

Technological advancements in legal practice challenge law schools and legal educators to educate students on adapting to change.²⁹ Law schools face increased pressure to prepare students for the realities of modern law practices and to equip students with the skills, knowledge and abilities necessary to meet demands of a global and digital workplace.³⁰ The future marketplace will require lawyers who can translate between business, technology and the law.³¹ Technological skill is becoming a seminal element of law student marketability and relevance.³²

Cantatore et al posit that the significant leap from 'student' to 'early career lawyer' or 'graduate lawyer' reflects a disconnect between the expectations of employers and graduate preparedness, requiring law schools to be more proactive in incorporating

²⁷ Ibid. See also Sourdin, Tania, 'Justice and Technological Innovation' (2015) 25 (2), *Journal of Judicial Administration*, 96–105.

²⁸ See Francina Cantatore et al, 'A Comparative Study into Legal Education and Graduate Employability Skills in Law Students through Pro Bono Law Clinics' (2021) 55 (3) *Law Teacher* 322.

²⁹ Ibid.

³⁰ See S Boonin and L Herrera (n 3), Ann Thanraj, Paul Durston, and Sam Elkington, 'A Blueprint for Designing Creativity into Learning Design' in Ann Thanraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age* (Routledge 2022), R.S Granat and S.L Kimbro, 'The Teaching of Law Practice Management and Technology in Law Schools: A New Paradigm' (2013) 88 (3), *Chicago-Kent Law Review*, 757, Anthony Volini, 'A Perspective on Technology Education for Law Students', (2020) 36 (2) *Santa Clara High Technology Law Journal* 165.

³¹ See Michele Pistone, 'Law Schools and Technology: Where We Are and Where We Are Heading', (2015) *Journal of Legal Education* 586.

³² See Simon Canick, 'Infusing Technology Skills into the Law School Curriculum', (2014) 42 (3) *Capital University Law Review* 663.

practice-based legal skills.³³ Whether the experience is gained through clinical education, external work placements or pro bono programs, practical work experience aims to increase students' self-confidence, practice knowledge and employability.³⁴

Law students have an increased expectation of graduate employability skills, including information and communications technology skills, problem-solving skills and resilience.³⁵ Thus, there is a need for legal educators to consider how education can best prepare future lawyers for this reality and the educational inputs that will best support those forging their careers in the legal sector.³⁶ According to Smith and Spencer, educators' focus should be on 'building students' core skills in legal, design and logic principles rather than learning specific technologies that may be rapidly superseded'.³⁷ Still Smith and Spencer emphasise that with technology becoming a key enabler of greater service efficiency, students need more than 'technology knowledge'.³⁸ Instead, students should be provided with 'the skills and knowledge that professional practice will demand from lawyers within the next ten years; and the form of educational and professional experience that best facilitates the acquisition

³³ Francina Cantatore et al, 'A Comparative Study into Legal Education and Graduate Employability Skills in Law Students through Pro Bono Law Clinics' (2021) *Law Teacher* 55(3) 315.

³⁴ *Ibid.*

³⁵ *Ibid.* See also Long, L.K. and P.A Meglich, 'Preparing Students to Collaborate in the Virtual Work World' (2013) 3(1), *Higher Education, Skills and Work-based Learning*, 6–16.

³⁶ See Smith, Alexander and Nigel Spencer, 'Do Lawyers Need to Code? A Practitioner Perspective on the 'Polytechnic' Future of Legal Education' in *Modernising Legal Education* (2020) 18-37.

³⁷ *Ibid* 18.

³⁸ *Ibid.*

of these skills and this knowledge'.³⁹ Accordingly, educators should focus more on enhancing the broader skill sets of students through experiential learning in client-facing settings where students are exposed to a wide and diverse range of learning opportunities.⁴⁰

Murray et al take this further, emphasising the need for students to fully comprehend 'why' legal tech is being used in legal practice.⁴¹ They speculate that if students do not understand 'why', teaching and assessing digital skills 'simply becomes one more hoop, through which a student must jump to gain their qualifications.'⁴²

These authors call for legal educators to enable students to explore how the use of practical legal tech could be adopted to enhance not only the digital skills of students but at the same time enable them to develop an understanding as to 'why' legal tech is used by lawyers and, accordingly, what skills need to be developed.⁴³ As Murray et al state, 'the aim must be for a student to understand the commercial realities of legal tech; a means of achieving efficiencies or compliance, solving legal problems, and of limiting the possibility of mistakes.'⁴⁴

³⁹ Ibid 18.

⁴⁰ Ibid.

⁴¹ Ryan Murray and Helen Edwards, 'Legal Tech and Sustainability' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age*. (Routledge 2022) 108.

⁴² Ibid 108.

⁴³ Ibid.

⁴⁴ Ibid 108.

Generally, most law schools and universities are confident that their students can gain employment after graduation, so they will try to equip their students with skills they feel are necessary or desirable within the workplace.⁴⁵ This has already led to an increased number of law schools offering modules, courses or programs focusing on digital lawyering.⁴⁶ According to Jones et al, “digital lawyering” is multifaceted, encompassing knowledge, skills, attributes and professional rules into a mindset and professional way of being’.⁴⁷ As such, it asks students to consider and develop their impressions on how they can contribute to the challenges of digital transformation of the workplace and the role law plays in innovations and in regulating the digital world.⁴⁸

3. Legal Technology and Clinical Legal Education

The merger of education and practice at the heart of clinical legal education has sparked the development of a rich, varied and constantly evolving clinical pedagogy.⁴⁹ An important strand in this movement links teaching technological competence and experiential education.⁵⁰ Within an experiential learning

⁴⁵ See Jones et al (n 9). See also Cantacore, Francina, ‘New Frontiers in Clinical Legal Education: Harnessing Technology to Prepare Students for Practice and Facilitate Access to Justice’ (2019) 5 (1) Australian Journal for Clinical Education 1.

⁴⁶ Jones et al (n 9).

⁴⁷ Ibid 10.

⁴⁸ Ibid.

⁴⁹ See Jeff Giddings and Jacqueline Weinberg, ‘Experiential Legal Education: Stepping Back to See the Future’ in Catrina Denvir (ed), *Modernising Legal Education* (Cambridge University Press, 2020) 38, Adrian Evans et al, *Australian Clinical Legal Education: Designing and Operating a Best Practice Clinical Program in an Australian Law School* (Australian National University Press, 2017).

⁵⁰ See Francina Cantacore, ‘New Frontiers in Clinical Legal Education: Harnessing Technology to Prepare Students for Practice and Facilitate Access to Justice’ (2019) 5(1) Australian Journal for Clinical

environment, students can learn about law technology and utilise technology beneficial to law practice.⁵¹ The most effective way to teach the technology of law is to experience it firsthand.⁵² Boonin et al add, 'the very project of clinical education lends itself to the task of teaching technology'.⁵³

Clinical programs are premised on the notion that the professional development of lawyers is incomplete without the opportunity for law students to inhabit the lawyer's role prior to graduation and legal practice.⁵⁴ The experiential curriculum aims to expose students to the realities of law practice while teaching them to reflect on their work, their clients' experience, the communities they serve and their roles in legal systems.⁵⁵ By design, clinical pedagogy evolves in response to the changing needs of communities, clients and the legal profession.⁵⁶

Education 1, James E. Cabral et al, 'Using Technology to Enhance Access to Justice' (2012) (1) 26 Harvard Journal of Law & Technology 241–324.

⁵¹ See Jacqueline Weinberg and Jeffrey Giddings, 'Innovative Opportunities in Technology and the Law: The Virtual Legal Clinic' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age*. (Routledge 2022), F Ryan, 'A Virtual Law Clinic: A Realist Evaluation Of What Works For Whom, Why, How and in What Circumstances?' (2019) 54(2), *The Law Teacher*, 237–248, Ann Thanaraj, 'The Proficient Lawyer: Identifying students' perspectives on learning gained from working in a virtual law clinic' (2017) 14(3) *US-China Law Review*, 137–167.

⁵² S Boonin and L Herrera (n 3).

⁵³ *Ibid* 13.

⁵⁴ See A Stickley, *Providing a law degree for the 'real world': Perspective of an Australian law school'* (2011) 45(1) *The Law Teacher*, 63–86, Ross Hyams, 'On teaching students to 'act like a lawyer': What sort of lawyer?' (2008) 13 *Journal of Clinical Legal Education*, 21–32, Ross Hyams et al, *Practical Legal Skills* (Oxford University Press 5th ed, 2022), Steven Wizner, 'The Law School Clinic: Legal education in the interests of justice' (2002) 70(5), *Fordham Law Review*, 1929–1937.

⁵⁵ See Frank S Bloch, (Ed.). *The Global Clinical Movement: Educating Lawyers for Social Justice*. (Oxford University Press 2011), A. Cody and B Schatz, 'Community law clinics: Teaching students, working with disadvantaged communities' in F. S. Bloch (Ed.), *The Global Clinical Movement: Educating Lawyers for Social Justice* (pp. 167–182) (Oxford University Press, 2011).

⁵⁶ See W.M. Sullivan et al, *Educating Lawyers: Preparation for the Profession of Law*. (Jossey-Bass 2007), Richard Susskind, *Tomorrow's Lawyers* (Oxford University Press 2013).

Clinical legal education also provides opportunities for students to develop new modes of 'thinking like a lawyer'.⁵⁷ Legal technology offers abundant opportunities for clinical students to engage in innovative and creative thinking, reflecting on technology's impact on those processes.⁵⁸ By encouraging students to assess and thoughtfully apply new law practice technologies critically, clinical programs enable students to develop a deeper insight into the benefits of learning in a professional setting.⁵⁹ A primary goal of clinics is to help students integrate their personal and professional identities.⁶⁰ Thoughtful deployment of technology in clinical settings can spark boundary exploration of professional relationships, particularly the lawyer–client relationship, as mediated by technology.⁶¹

It is imperative that students master a range of new technologies and communications methods for the dynamics of modern professional life and legal

⁵⁷ Jeff Giddings, 'Clinics and Australian Law Schools Approaching 2020' in A. Evans, A. Cody, A. Copeland, J. Giddings, P. Joy, M. A. Noone & S. Rice (Eds.), *Australian clinical legal education: Designing and operating a best practice clinical program in an Australian law school* (pp. 11–39) (ANU Press 2017), Marson, J., Wilson, A. & Van Hoorebeek, M. 'The Necessity of Clinical Legal Education in University Law Schools: A UK Perspective'(2005) 7 *Journal of Legal Education*, 29–43, Ross Hyams, 'The Teaching of Skills: Rebuilding, Not Just Tinkering around the Edges' (1995) 13(1) *Journal of Professional Legal Education*, 63–80

⁵⁸ S Boonin and L Herrera (n 3) 28.

⁵⁹ *Ibid.*

⁶⁰ See Jeff Giddings and Jacqueline Weinberg 'Experiential Legal Education: Stepping Back to see the Future' In C. Denvir (Ed.), *Modernising Legal Education* (pp. 38–56) (Cambridge University Press 2020), Neil Gold, 'Clinic Is the Basis For a Complete Legal Education: Quality Assurance, Learning Outcomes and the Clinical Method'(2015) 22(1), *International Journal of Clinical Legal Education*, 84–141, Margaret Barry, 'Clinical Legal Education in the Law University: Goals and Challenges' (2007) *Journal of Clinical Legal Education*, 27–50.

⁶¹ See C Goodman, 'Impacts of Artificial Intelligence in Lawyer-Client Relationships' (2019) 72(1) *Oklahoma Law Review*, 149–184.

practice.⁶² Clients wish to be more involved in the legal provision process, which necessitates changes in the lawyers' approaches and attitudes towards their clients, their management of client matters and their relationships with courts and other professionals.⁶³ Lawyers need to take a client-focused approach to communication and relationship-building to develop and convey the best possible options to clients. The idea behind this is to offer effective legal services in new, less costly and more client-friendly ways. This may involve using virtually delivered legal services better suited to the client's needs.⁶⁴

4. The Law Tech Clinic Within the Monash Clinical Program

A major review of higher education in 2008 in Australia, along with the government's response to this review, acknowledged the need for universities to prepare graduates for the world of work.⁶⁵ While experiential education in Australia has traditionally involved students engaging in live-client clinics maintaining a poverty law focus, more recently, there has been a growth in offerings such as externship clinical

⁶² Jacqueline Weinberg and Jeff Giddings 'Innovative opportunities in technology and the law: The Virtual Legal Clinic' in A. Thanaraj & K. Gledhill (Eds), *Teaching Legal Education in the Digital Age* (Routledge 2022)

⁶³ Jeff Giddings and Jacqueline Weinberg 'Experiential legal education: Stepping Back to see the Future. In C. Denvir (Ed.), *Modernising legal education* (pp. 38–56) (Cambridge University Press 2020).

⁶⁴ Weinberg and Giddings (n 62).

⁶⁵ See Denise Bradley et al, *Review of Australian Higher Education: Final Report* (Canberra, 2008).

placement programs,⁶⁶ work-integrated learning (WIL)⁶⁷ and industry-based experiences, mostly in the private sector. In externship placements and WIL, students work in host organisations to gain knowledge, understanding and skills essential to workplace practices.⁶⁸ This includes providing opportunities for building skills that law students need to prepare them to be competent lawyers in a technology-led environment.

Within the Monash Clinical Program, the LTC was established to provide a unique opportunity for students to develop a technology mindset and aptitude to think beyond the traditional professional services model and receive end-to-end industry input to develop client-ready applications. The LTC adheres to the educational aims of continuing legal education (CLE): providing students with legal education that enhances 21st-century legal practice and assists the broader community by utilising technology to extend legal services delivery to people whose needs would not otherwise be met.

⁶⁶ See Evans et al, *Australian Clinical Legal Education: Designing and Operating a Best Practice Clinical Program in an Australian Law School* (Australian National University Press, 2017) Evans et al refer to the term 'externships' to describe 'the form of clinical legal education where individual students are placed in an independent legal practice, community legal centre, government agency or not-for-profit organisation' at 56, Adrian Evans and Ross Hyams, 'Specialist Legal Clinics: Their Pedagogy, Risks and Payoffs as Externships' (2015) 22(2), *International Journal of Clinical Legal Education*, 147–180.

⁶⁷ Evans et al (n 66) refer to 'work-integrated learning' as 'a curriculum design, which combines formal learning with student exposure to real professional, work or other practice settings': at 43. For a broader discussion on the program risks of WIL, refer to Craig Cameron et al, 'The Program Risks of Work-Integrated Learning: A Study of Australian University Lawyers' (2018) 40(1) *Journal of Higher Education Policy and Management* 67. See also Janice Orrell, *Good Practice Report: Work-integrated Learning* (Australian Learning and Teaching Council, 2011); Stephen Billett, *Integrating Practice-based Experiences into Higher Education* (Springer, 2015).

⁶⁸ Refer to Evans et al (n 66).

5. Structure of the Law Tech Clinic

The LTC was developed as a collaboration between the Monash Clinical Program, industry partners and current law students from BotL,⁶⁹ a student-led start-up. As digital natives and current law students, BotL approached the Monash Clinical Program to collaborate on establishing an LTC. BotL aims to alter how Australian law schools prepare students for practice.⁷⁰ It realises that technology is integral to their professional and academic careers. As newly graduated law students who are viewed as the 'new lawyers' or '21st-century lawyers', they will be required to forge a pathway enabling this change and implementing innovative technological solutions at firms. Graduate law students require opportunities to upskill themselves to become changemakers in the industry and meet the digital disruption in markets, the public sector and society.⁷¹

To achieve this, the LTC focuses on educating law students on the intersectionality of technology and legal services. The students work within the clinic's legal tech framework to design and build transformative legal technology which will enhance

⁶⁹ BotL Co-Founder: Andrea Ko, Co-Founder: Henry Wu, Co-Founder: Sam Chen, Co-Founder and Director: Christine Zhong, Co-Founder and Director: Khoi Cao, Legal Experience Designer: Carl Azar, Operations Manager: Jade Smith (<<https://www.botltech.com.au/>

⁷⁰ <https://www.botltech.com.au/>>)

⁷¹ Margaret Hagan, Law by Design (Web Page) <<https://lawbydesign.co/>>. See also Interaction Design Foundation, 'What is Design Thinking' (Web Page) <<https://www.interaction-design.org/literature/topics/design-thinking>> Margaret Hagan, 'Design Comes to the Law School' in Catrina Denvir (ed), *Modernising Legal Education* (Cambridge University Press, 2020) 109.

legal services. The LTC equips law students with the skills to facilitate and participate in technological disruption in the legal industry as a result. It is designed to provide students with an understanding of the technologies available to legal practitioners and to educate students with practical design thinking and no-code app-building skills.

The LTC ensures that students have practical tools to assist them throughout their careers. To achieve this objective, the LTC is structured over two phases: Phase One, where students are taught theory about the intersection of technology and the law; and Phase Two, where students build their legal technology solutions to address real legal problems. Students collaborate with their peers to ideate and design a client-facing legal app. Students use a no-code app-building platform to build and refine their solution. They then present the deliverable to the industry partner in the final week of the unit.

By participating in this clinic, students not only develop the confidence to use legal technology to create innovative solutions but also an ability to adapt to the changing demands of legal practice and an appreciation of the diverse careers available in law. The LTC provides an opportunity for students, as 'future lawyers', to enter legal practice and use unfamiliar technological applications to ensure they develop skills and gain confidence in their use.

6. Design Thinking

The clinic's structure is consistent with Margaret Hagan's legal design process.⁷²

According to Hagan, legal design thinking refers to the 'application of human-centred design to law'.⁷³ Its fundamental objective is to create legal systems that are 'human-centred, usable and satisfying'.⁷⁴ Consideration of the target users' compelling needs is the crucial starting point when developing technological solutions.⁷⁵ In the legal context, the target users are generally lawyers, clients and other business professionals.⁷⁶ Once the developer comprehensively understands the users' circumstances, feelings, motivations and concerns, the developer creates legal tech solutions that aim to improve the user's experiences.⁷⁷

⁷² Ibid. See also Eva Köppen and Chirstoph Meisel, 'Empathy via Design Thinking: Creation of Sense and Knowledge' in Hasso Plattner, Christoph Meisel and Larry Leifer (eds), *Design Thinking Research: Building Innovators* (Springer, 2015) 15, Andrea Alessandro Gasparini, 'Perspective and Use of Empathy in Design Thinking' (Conference Paper, International Conference on Advances in Computer-Human Interactions, 22–7 February 2015) 50.

⁷³ Ibid. See also Carina Campese et al, 'Benefits of the Empathy Map Method and the Satisfaction of a Company with Its Application in the Development of Concepts for a White Glue Tube' (2018) 16(2) *Product: Development and Management* 104, Natasha Hampshire, Glaudia Califano and David Spinks, *Mastering Collaboration in a Product Team: 70 Techniques to Help Teams Build Better Products* (Apress, 2022) 37.

⁷⁴ See Astrid Kohlmeier and Meera Klemola, *The Legal Design Book: Doing Law in the 21st Century* (Ground M, 2021) 20; Natasha Iskander, 'Design Thinking is Fundamentally Conservative and Preserves the Status Quo' (5 September 2018) *Harvard Business Review* <<https://hbr.org/2018/09/design-thinking-is-fundamentally-conservative-and-preserves-the-status-quo>>.

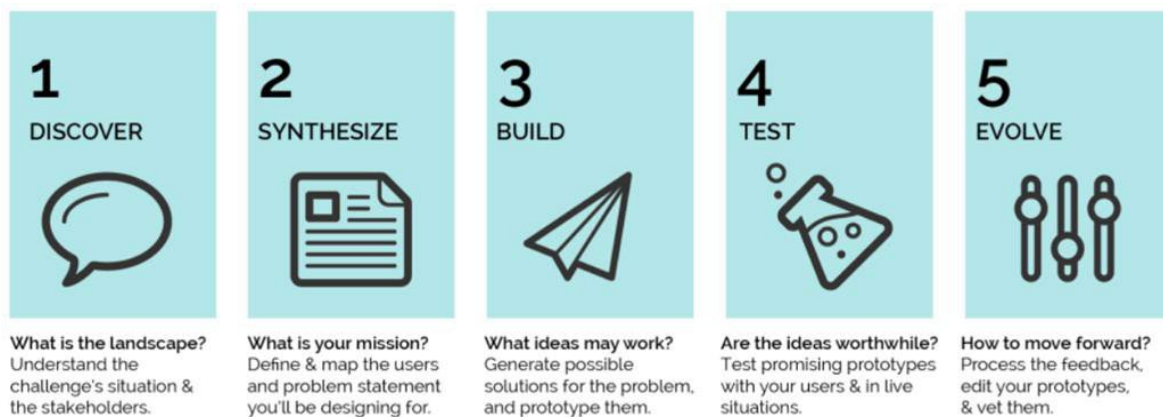
⁷⁵ Ibid. See also Patrick Cairns et al, 'Empathy Maps in Communication Skills Training' (2021) 18(2) *Clinical Teacher* 142, Rachel Hews et al, 'Law and Design Thinking: Preparing Graduates for the Future of Legal Work' (2022) 47(2) *Alternative Law Journal* 118.

⁷⁶ Ibid. See also Margaret Hagan, 'Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System' (2020) 36(3) *Design Issues* 3.

⁷⁷ Ibid. See also Connie Chang, 'Improving Access to Free Online Legal Information Through Universal Design: User Personas, User Journeys, a Proposal, and a Prototype' (2021) 40(4) *Legal Reference Services Quarterly* 199, Lene Nielsen, *Personas: User Focused Design* (Springer, 2nd ed, 2019) 4.

Hagan's steps to effective legal design are designing, synthesising, building, testing and evolving (see Figure 1).⁷⁸ Following this structure, the LTC separates the app-building process into the discovery process (with user interviews being a primary mode of research), design process, build process and test process so that the students can learn the different nuances between the stages.

Figure 1 *Hagan's Design Thinking Process for Lawyers*⁷⁹



6.1 Phase One

Phase One of the LTC is run over four weeks. During this phase, there is a focus on theoretical teaching about the legal technology landscape. The knowledge acquired during this period provides students with the foundations of how to approach and

⁷⁸ Ibid.

⁷⁹ Margaret Hagan, Law by Design (Web Page) <<https://lawbydesign.co/>>. Eduard Albay and Delia Eisma, 'Performance Task Assessment Supported by the Design Thinking Process: Results from a True Experimental Research' (2021) 3(1) Social Sciences and Humanities Open 1, Rikke Dam and Teo Yu Siang, 'Stage 2 in the Design Thinking Process: Define the Problem and Interpret the Results', Interaction Design (Web Page, 2020) <<https://www.interaction-design.org/literature/article/stage-2-in-the-design-thinking-process-define-the-problem-and-interpret-the-results>>.

design a solution to the legal problem. Both the BotL team and the Monash clinical supervisor actively engage with clinical students throughout phase one. Students attend interactive workshops delivered by distinguished industry professionals, including technology and cybersecurity lawyers, legal application designers and developers, legal technology consultants and start-up founders. These workshops introduce students to various aspects of the legal technology industry and encourage them to think broadly about alternative career pathways. Additionally, the workshops provide students with a foundational understanding of legal technology solutions to assist them with the app building in Phase Two.

The weekly workshops centre around various topics relevant to understanding the legal, technological and client-centred aspects of legal technology. These topics include:

- An Introduction to Legal Technology—to develop an understanding of technology and legal practice’s interrelationship.⁸⁰
- Lawyers’ Digital Tools—focusing on transforming how legal processes and services are delivered by leveraging the power of no-code automation and developing digital solutions to solve business problems.
- Legal Design Thinking—to understand design thinking principles and learn to ideate, prototype and execute legal apps.

⁸⁰ See L.K. Long and P.A Meglich, ‘Preparing Students to Collaborate in the Virtual Work World. (2013) 3(1), Higher Education, Skills and Work-based Learning, 6–16.

- Setting up a Legal Technology Start-up and Other Legal Service Companies—strategies to offer tailored solutions to law firms and organisations.
- Ethics and Legal Tech—focuses students on ethical issues they may encounter when implementing legal tech.⁸¹
- Legal Research Seminar—focusing on techniques for effective legal research.
- The Intersection of Artificial Intelligence and Public Law—focusing on automated legislative decision-making and the impact of technology on the rule of law.
- Each week, students are expected to complete the relevant reading materials accompanying the workshops. After each workshop, the BotL team and Monash Clinical supervisor arrange group reflections to encourage students to think more deeply about the workshop activities and what they learnt from the guest speakers.

6.2 Phase Two

Over eight weeks, with the support of BotL team and the Monash clinical supervisor, students engage in practical app building by applying the theoretical knowledge

⁸¹ See Mary-Anne Noone and Judith Dickson, 'Teaching Towards a New Professionalism: Challenging Law Students To Become Ethical Lawyers' (2004) 4(2), *Legal Ethics*, 127–145, Liz Curran, Judith Dickson and Mary-Anne Noone, 'Pushing the Boundaries or Preserving the Status Quo? Designing Clinical Programs to Teach Law Students a Deep Understanding of Ethical Practice' (2005) 8 *International Journal of Clinical Legal Education* 104, Kevin Kerrigan, 'How Do You Feel About This Client?' A Commentary on the Clinical Model as a Vehicle for Teaching Ethics to Law Students' (2007) *International Journal of Clinical Legal Education* 37, Anna Cody, 'What Does Legal Ethics Teaching Gain, if Anything, from Including a Clinical Component?' (2015) 22(1) *International Journal of Clinical Legal Education* 1.

they acquired in the first phase. This involves designing, building and refining the legal application.

The industry partner provides a project brief for students, typically outlining a particular issue or 'pain point' that a practice group is experiencing. Throughout the eight weeks of Phase Two, students work in teams to develop a legal tool addressing the project brief. To assist with this, students are allocated an industry partner supervising lawyer, who meets with them weekly to provide legal expertise and feedback on the build. The allocated lawyer also acts as a legal project manager who ensures that the end product meets client specifications. The student-lawyer mentorship is an important aspect of the clinic, as students learn to collaborate with industry professionals to develop a legal tool.

During Phase Two, in line with design thinking principles, students conduct user interviews with lawyers and firm clients to better understand existing processes, pain points and paths to improvement. Students research the relevant areas of law and design a framework of their tool on a mind map platform such as LucidSpark⁸² or Miro.⁸³ This process involves continuous feedback and iteration, with students sharing their progress with supervising lawyers, the BotL team and the Monash

⁸² See <<https://lucidspark.com/>>.

⁸³ See <<https://miro.com/weblinks>>.

clinical supervisor. The students build the tools on an app-building platform such as Josef⁸⁴ or Checkbox.⁸⁵

Since the legal industry is undergoing significant disruption, firms are increasingly searching for graduate lawyers who are forward-thinking, collaborative and have the practical skills to develop legal tech solutions. The LTC enables students to develop skills and practical experiences that are in high demand, including using technological solutions for efficiency in delivery and helping students to experience digital learning to prepare them for the tech-focused world of work.⁸⁶ Thanraj et al advocate for learning and teaching practices to cultivate creativity and encourage students to engage with 'digital fluency' developing their professional skills through the use of various tools.⁸⁷ According to these authors, creativity is the foundation for future-ready, digitally-empowered law students.⁸⁸ It affords opportunities for students 'to think differently, and innovate, drawing on the experiences of technology and classroom-based practices.'⁸⁹

⁸⁴ See <<https://joseflegal.com/>>.

⁸⁵ See <<https://www.checkbox.ai/>>.

⁸⁶ Thomson Reuters' Tech & the Law 2022 report (<<https://www.thomsonreuters.com.au/content/dam/ewp-m/documents/australia/en/pdf/other/tech-and-the-law-2022-report.pdf>>). The Thomson Reuters' Tech & The Law 2022 report covers the attitudes, perceptions and priorities that legal professionals have towards legal technologies.

⁸⁷ Ann Thanraj, Paul Durston, and Sam Elkington, 'A Blueprint for Designing Creativity into Learning Design' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age* (Routledge 2022).

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

From an industry perspective, the clinic encourages law firms and legal professionals to get involved in developing legal tech solutions that add value to clients. These student-developed solutions in the LTC streamline processes and eliminate pain points for lawyers, clients and other stakeholders.

At the conclusion of the clinic, students are provided with additional seminars by leading legal tech innovators that focus on how to pitch and market their innovations to assist them with preparing for their final presentation. Students then present their final tool to the industry partner and university representatives. During this presentation, students demonstrate the key features of the tool and explain how it solves the given project brief and describe their design choices.

After the final presentation, students provide a 'handover brief' to the industry partner. This document summarises the user scope of the tool, relevant research in the area and further steps to be taken in the future to enable the launch of the platform. The industry partner retains the tool and either deploys it or continues refining it.

7. Assessments and Learning Outcomes

The LTC is designed to develop teamwork, project management, stakeholder management and app marketing skills for students. Students have significant autonomy in the project management process, independently organising and

running meetings with the industry partners. For student assessment, the LTC falls within the Monash clinical placement unit framework with specific learning as detailed below.

On successful completion of this unit, students should be able to:

1. Independently undertake complex legal research and:
 - a. Assess and articulate options for clients/beneficiaries, including the strengths and limitations of available legal options.
 - b. Proactively develop solutions to complex legal problems.
 - c. Synthesise large volumes of material, identifying key information relevant to developing legal material supporting casework and/or policy advocacy material.
 - d. Recognise and appropriately respond to the strategic and ethical implications of different legal approaches.
 - e. Critically analyse legal principles and the legal system from a variety of perspectives, including theoretical perspectives and identifying gaps and inadequacies in providing legal support to clients/beneficiaries.
2. Effectively communicate (orally and written) legal information, principles, arguments, strategies and theories of justice with a wide range of audiences involved in the justice system, be it in terms of individual casework or wider policy advocacy.

3. Reflect on their own and/or peer performance, and assess capabilities as flexible, adaptable, and independent future legal practitioners by having developed self-reflection and self-management skills, independently synthesising this information.
4. Demonstrate practical legal skills as appropriate to the clinical placement undertaken.⁹⁰

Student performance is assessed according to detailed rubrics.⁹¹ Students are required to complete two reflective tasks and a video case report. The host organisation provides feedback on the student's performance, which is converted to an assessed mark by the Law Faculty clinical team.

8. Reflective Tasks

The reflective assessment tasks introduce students to critical reflection on their clinical placement in the LTC, providing students with an opportunity to review and build upon their experience. Students are required to submit two reflections on their participation, interactions, knowledge and experience while undertaking the LTC. Students are expected to approach the documentation process formally and thoughtfully, clearly conveying their experience to others.⁹²

⁹⁰ See <<https://www.monash.edu/law/home/cle>>.

⁹¹ See <<https://www.monash.edu/law/home/cle>>.

⁹² See Rachel Spencer 'Holding up the mirror: A theoretical and practical analysis of the role of reflection in clinical legal education' (2012) 18 International Journal of Clinical Legal Education, 181–216.

Students are provided with online seminars on reflective practice and reflective writing, focusing on the reflection process and models to assist with framing their reflection. For example:

Rolfe's reflective model—'What? So what? Now what?' is used as a communication structure and a presentation format in writing, management and business.⁹³

'The 4 Rs'—The 4 Rs process is based on 'reflection-on-action', where actions are analysed and reframed. Possible solutions are then developed. The process is designed to encourage students to address their ongoing learning from a practical, cognitive and emotional perspective while taking into consideration their values, ethics and beliefs.⁹⁴

Whatever model students choose, they are encouraged to reflect on the experience and think deeply and purposefully about their work in the clinic, what (besides

⁹³ See Rolfe, Gary, 'Reflective Practice: Where Now?' (2) 1 (2001) *Nurse Education in Practice* 21-29 and Rolfe, Gary, Freshwater, D. and Jasper, M. *Critical Reflection in Nursing and The Helping Professions: A User's Guide* (Basingstoke: Palgrave Macmillan 2001). Rolfe's reflective model is based upon three simple questions: What? So What? Now What? Once something has been experienced, the student will start to reflect on what happened. This will enable students to think through their experience, examine feelings about what happened and decide on the next steps. This leads to the final element of the cycle - taking an action.

⁹⁴ Ibid.

technical and legal content) is being learned and how that learning can be applied to future practice.⁹⁵

CLE relies on structured reflection to enable students to analyse the learning and insights they gain from their experience.⁹⁶ The Best Practices Report, compiled by leading clinical educators in Australia to guide clinical teachers on best practice protocols for teaching in clinical settings, portrays reflection as a learning outcome that can be utilised for 'critical analyses of legal concepts'.⁹⁷ Reflection is considered not only essential for effective legal practice but a critical component of clinical pedagogy.⁹⁸ As Evans notes, clinical legal pedagogy involves 'a system of reflection, self-critique and supervisory feedback by which law students learn how to learn from their experiences and observation and, at its most effective level, how to take

⁹⁵ See Michele Leering, 'Enhancing the Legal Profession's Capacity for Innovation: The Promise of Reflective Practice and Action Research for Increasing Access to Justice' (2017) *The Windsor Yearbook of Access to Justice*, 34(1) 189.

⁹⁶ Adrian Evans et al, *Best Practices: Australian Clinical Legal Education* (Report for Office of Teaching and Learning, 2013) See also Margaret Barry, Jon C Dubin and Peter Joy, 'Clinical Education for This Millennium: The Third Wave' (2000) 7 *Clinical Law Review* 1; Rachel Spencer and Susan L Brooks, 'Reflecting on Reflection: A Dialogue Across the Hemispheres on Teaching and Assessing Reflective Practice in Clinical Legal Education' (2019) 53(4) *The Law Teacher* 1, Susan Brooks, 'Fostering Wholehearted Lawyers: Practical Guidance For Supporting Law Students' Professional Identity Formation' (2018) 14(2) *University of St. Thomas Law Journal* 412.

⁹⁷ Adrian Evans et al, *Best Practices: Australian Clinical Legal Education* (Report for Office of Teaching and Learning, 2013).

⁹⁸ See Evans, Adrian et al, *Australian Clinical Legal Education: Designing and Operating a Best Practice Clinical Program in an Australian Law School* (Australian National University Press, 2017) ch 7; Michele Leering, 'Encouraging Reflective Practice: Conceptualising Reflective Practice for Legal Professionals' (2014) 23 *Journal of Law and Social Policy* 83, Rachel Spencer, 'Holding up the Mirror: A Theoretical and Practical Analysis of the Role of Reflection in Clinical Legal Education' (2012) 17 *International Journal of Clinical Legal Education* 181, Ross Hyams, 'Assessing Insight: Grading Reflective Journals in Clinical Legal Education' (2007) 17 *James Cook University Law Review* 25, C Maughan and J Webb, 'Taking Reflection Seriously: How Was It For Us?' in C Maughan and J Webb (eds), *Teaching Lawyers' Skills* (Butterworths, 1996)

personal responsibility for clients and their legal problems'.⁹⁹ It relies on structured reflection, enabling students to gain insight into their clinical experience.¹⁰⁰ Clinical educators emphasise clarity on what reflection is and the role it should play in the education or development of professionals.¹⁰¹ Clinicians recognise that utilising reflection broadens education from merely teaching legal skills to including interpersonal skills, effective communication, self-knowledge and self-identity. This learning is deeper and more meaningful for the students when they participate as lawyers and later reflect on their experiences.¹⁰² As students become reflective practitioners, they develop self-awareness in their roles as legal practitioners.

9. Video Case Report

Assessment Task Two is a video podcast presentation of 5–7 minutes prepared by students and uploaded for assessment. Students are expected to create a video providing a description and detailed analysis of the legal/ethical issues on a current matter they are involved in during their placement. Creativity in presentation is encouraged, so students may submit a case report with flowcharts, infographics, PowerPoints or Prezi presentations. The assessment task is intended to develop a

⁹⁹ Evans et al (n 97) 41.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Evans et al (n 97) 42. See also Roy Stuckey et al, *Best Practices for Legal Education: A Vision and a Road Map* (US Best Practices (Clinical Legal Education Association, 2007) 190.

student's skills in research, analysis and fact presentation, arguments and conclusions in law-related areas.

Students are encouraged to choose a topic for the video related to substantive law, the application of a law, or the operation of legal processes and/or professional ethics—provided that the issue has arisen in the day-to-day work at the placement.

The video should inform an intelligent but uninformed audience about the topic they have chosen. The video is assessed according to:

- understanding of the topic and the legal/procedural/policy/ethical issues it raises
- clarity of structure and accuracy of content
- originality
- effective use of time
- presentation (ability to persuade/inform the audience within a short period).

10. Host Organisation Assessment of Work Performance

Students are required to have full attendance at the host organisation during the placement. The host organisation provides a report on each student's performance, considering the student's ability to demonstrate practical, legal and professional skills.

11. Evaluation

Based on collated student feedback, students report that the LTC expands their understanding of how legal technology can enhance legal services, builds their interest in the legal technology industry and increases their practical no-code app-building skills. Some feedback comments include:

The development of a project which has a real end-user. It was an amazing experience to define a problem, and implement stages of the project to create a final product that achieves a key need. On one side the project required a close look into the law and our ability to comprehend it and put it into simple language but on the other side, it also required us to be creative and organised in our approach. (Student A)

The opportunities that are available for enhancing process, access to justice and efficiency. (Student B)

Predominantly, the main take away I think I have learned is the broad array of career options available to law students, other than traditional corporate pathways. Listening to all of the incredible speakers in stage 1, not all practising lawyers, or lawyers practising in alternative ways, was eye-opening. I am grateful for that exposure. (Student C)

12. Connecting Law Tech Education to Future Legal Practice

Teaching students about how technology impacts lawyering has steadily become a critical focus within clinical education.¹⁰³ In many clinical programs, legal technology and/or innovation have become a focus or primary method of clinical work.¹⁰⁴ Legal technology, access to justice clinics and law school experiential units that focus on technology have increased.¹⁰⁵ In Australia, several law schools have launched clinics where students develop apps and online materials, host hackathons and engage with other technology solutions for clients, pro se litigants, public interest organisations and the courts.¹⁰⁶ In many of these programs, legal technology and/or innovation are the focus or primary method of the clinical work.¹⁰⁷

Boonin et al posit that the clinics and externships focusing on legal education and legal practice's intersectionality are 'uniquely situated—and indeed compelled—to take on this role more broadly'.¹⁰⁸ These researchers further emphasise that clinicians are 'positioned to be leaders in teaching this technology to students, regardless of the substantive area of law in which their clinics specialize'.¹⁰⁹ Teaching lawyering technology enriches clinical pedagogy and identifies for students the essential

¹⁰³ See S Boonin and L Herrera (n 3) and E Jones, E et al, (n 9)

¹⁰⁴ Ibid. See also Cynthia L. Dahl & Victoria F. Phillips, *Innovation and Tradition: A Survey of Intellectual Property and Technology Legal Clinics*, (2018) *Clinical Law Review*, 25 (95) 137.

¹⁰⁵ See <<https://www.landars.com.au/media-centre/lander-and-rogers-law-tech-clinic-launches-in-sydney>, <https://www.maddocks.com.au/insights/maddocks-sponsors-law-tech-pop-up-course>>.

¹⁰⁶ <<https://globallegalhackathon.com/>>.

<<https://www.monash.edu/entrepreneurship/events/2019/global-legal-hackathon>>.

¹⁰⁷ See S Boonin and L Herrera (n 3).

¹⁰⁸ Ibid 25.

¹⁰⁹ Ibid 25.

elements of an infrastructure that can support the incorporation of technology into clinical practice.¹¹⁰ Clinical programs continue to recognise their role in preparing students for digitised legal workplaces. As such, it follows that these programs can and should embrace technology integration into their teaching and practices.¹¹¹

Clinical programs can equip law students with grounding practice habits, ethical frameworks and values necessary to apply technologies thoughtfully, creatively and responsibly in practice.¹¹²

Lawyering technology affects the lawyer's role in many ways: as an advisor, guide and advocate.¹¹³ Clinical students are invited to explore the effects of technology on their developing professional identities, broadening their scope of best practice to include virtual service delivery.¹¹⁴ Educating students to provide legal services to clients via technology means preparing them for how their personal and professional identities

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² Ibid. See Gary E, Marchant, Allenby, R Braden, Joseph R Herkert, (eds), *The Growing Gap Between Emerging Technologies and Legal-Ethical Oversight: The Pacing Problem*, (Dordrecht: Springer Netherlands 2011). Marchant et al examine the growing gap between the pace of science and technology and the lagging response of legal and ethical oversight that society relies on to govern emerging technologies. The authors offer potential paths to more responsive regulation and governance.

¹¹³ S Boonin and L Herrera (n 3).

¹¹⁴ See Jacqueline Weinberg and Jeffrey Giddings, 'Innovative Opportunities in Technology and the Law: The Virtual Legal Clinic' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age*. (Routledge 2022), Jeff Giddings, Jennifer Lindstrom and Jacqueline Weinberg, 'Risk, Reward and Technology – Responding Effectively to COVID19' (2021) International Legal Aid Group Conference, Sydney, Conference Papers, Booklet 2, 146-152, Jacqueline Weinberg (2020, September). 'The Virtual Legal Clinic at Monash Law – providing online access to justice since 2017'. <<https://acjiblog.wordpress.com/2020/09/23/the-virtual-legal-clinic-at-monash-law-providing-online-access-to-justice-since-2017/>>.

will be redefined in the digital age.¹¹⁵ Technology has transformed not only legal practice but specifically the clients' relationship to the law and legal institutions.¹¹⁶ A focus on the intersection of legal technology and legal service with an emphasis on access to justice and legal design, consolidates key future-ready skills for law students to address diverse client needs by breaking down legal solutions into a set of simple rules brought to life by technological solutions.¹¹⁷

Clinical students are encouraged to tailor their communication and advice to the situation and context of each client as part of a client-centred approach, including the reasons clients cannot access onsite legal services.¹¹⁸ These insights provide students with opportunities to analyse and reflect on the relationship between law and access to justice and the contributions that lawyers make.¹¹⁹ Students are encouraged to explore issues of unequal access to technology and focus on developing skills that will enhance digital communication and client-centredness, such as self-awareness and responsibility.¹²⁰

¹¹⁵ S Boonin and L Herrera (n 3)

¹¹⁶ Ibid. See also Jeff Giddings, 'It's More Than a Site: Supporting Social Justice Through Student Supervision Practices' in Chris Ashford and Paul Mckeown (eds), *Social Justice and Legal Education* (Cambridge Scholars, 2018).

¹¹⁷ Ann Thanaraj, Paul Durston, and Sam Elkington, 'A Blueprint for Designing Creativity into Learning Design' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age* (Routledge 2022).

¹¹⁸ See Jacqueline Weinberg and Jeff Giddings, 'Innovative Opportunities in Technology and the Law: The Virtual Legal Clinic' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age*. (Routledge 2022).

¹¹⁹ Ibid.

¹²⁰ Ibid.

By using technology in practice, students reflect on how and why technology has the ability to facilitate or hamper client relationships, offering new insights into client-centeredness and cultural competency.¹²¹ Clinical Legal Education has long been aligned with a social justice mission with clinics prioritising the delivery of services to groups who have limited opportunities to advocate effectively for themselves.¹²² As students become aware of the reality of their clients' circumstances and how important legal representation is to resolving their clients' problems, they become more aware of their responsibility.¹²³ They realise that, in all likelihood, their clients would not have access to legal advice if not for their assistance, and thus their social consciousness is raised.¹²⁴

¹²¹ Ibid.

¹²² Most Australian law school clinical programs are established within, or closely connected to community legal centres (CLCs). CLCs are independent, non-profit, community-based organisations that provide free and accessible legal and related services to everyday people, including people experiencing discrimination and disadvantage. CLCs mostly provide legal assistance with tenancy, credit and debt, administrative law, social security, criminal law matters and family/domestic violence. These are all areas of work that have an affinity with issues of social justice. (Clinical Legal Education Guide (Kingsford Legal Centre, 13th ed, 2019).

¹²³ Jacqueline Weinberg, 'Preparing Students for 21st-Century Practice: Enhancing Social Justice Teaching in Clinical Legal Education' (2021) *International Journal of Clinical Legal Education*; Stephen Wizner, 'Is Social Justice Still Relevant' (2012) 32(2) *Boston College Journal of Law & Social Justice* 345, Stephen Wizner and Jane Aiken, 'Teaching and Doing: The Role of Law School Clinics in Enhancing Access to Justice' (2004–2005) 73 *Fordham Law Review* 997.

¹²⁴ Stephen Wizner, 'The Law School Clinic: Legal Education in the Interests of Justice' (2001–2002) 70(5) *Fordham Law Review* 1931. See also Jacqueline Weinberg, 'Preparing students for 21st-century practice: Enhancing Social Justice Teaching in Clinical Legal Education' (2021) *International Journal of Clinical Legal Education*, Jeff Giddings, 'It's More than a Site: Supporting Social Justice Through Student Supervision Practices' in Chris Ashford and Paul McKeown (eds), *Social Justice and Legal Education* (2018) Cambridge Scholars Publishing, 43-64, Stephen Wizner and Jane Aiken, 'Teaching and Doing: The Role of Law School Clinics in Enhancing Access to Justice' (2004) 73 *Fordham Law Review* 997.

Clinical pedagogy has long focused on improving students' capacity to manage uncertainty, exercise judgment and enhance client services under challenging conditions.¹²⁵ Clinicians can leverage lawyering technology to teach problem-solving, flexibility and adaptation in real-life applications.¹²⁶ Clinicians can assist students in embracing technological uncertainty and equip them to provide direction to clients who experience technical failures or face barriers to accessing technology.¹²⁷ By helping students centre the perspectives and experiences of clients within technology, clinicians can help students recognise their own biases, assumptions and privileges.¹²⁸

Integrating technology within clinical programs cuts across many facets of clinical legal education, including client interviewing, core skills development and reflective practice.¹²⁹ Clinical pedagogy views skills teaching as truly complementary to a clinic's social justice mission, enabling students to suspend judgment, communicate and listen across differences and explore solutions creatively.¹³⁰ The aims and outcomes of CLE build on students' problem-solving skills, reflective thinking about legal culture and lawyering goals, learning how to both behave and think like a

¹²⁵ Evans et al, *Australian Clinical Legal Education: Designing and Operating a Best Practice Clinical Program in an Australian Law School* (Australian National University Press, 2017).

¹²⁶ Sarah Boonin and Herrera, *LE* (n 3).

¹²⁷ *Ibid* 27.

¹²⁸ *Ibid* 28.

¹²⁹ See Jacqueline Weinberg and Jeff Giddings 'Innovative Opportunities in Technology and the Law: The Virtual Legal Clinic' in A. Thanaraj & K. Gledhill (Eds), *Teaching Legal Education in the Digital Age* (Routledge 2022).

¹³⁰ Evans et al, *Australian Clinical Legal Education: Designing and Operating a Best Practice Clinical Program in an Australian Law School* (Australian National University Press, 2017).

lawyer, and understand the issues of access to justice and social justice.¹³¹ Students learn to identify how various technologies affect the execution of different lawyering skills and offer feedback to students that specifically addresses their deployment of technology.¹³² In this way, students are ready to transfer and apply their lawyering skills in the technology-infused legal settings and will emerge as new lawyers.¹³³

13. Conclusion

Clinical programs play a central role in preparing lawyers for practice. This includes preparing them to be technologically competent lawyers, regardless of their law clinic's specialty.¹³⁴ As clinical educators, we need to instill in our students an understanding of how technology impacts legal practice and provide them with the opportunity to reflect on this new reality.¹³⁵

There are many challenges faced by law graduates emerging in the workplace.¹³⁶

Increased expectations in the legal profession require students to seize experiential education opportunities to be competitive for sought-after graduate positions.¹³⁷

¹³¹ Ibid.

¹³² S. Boonin and L. Herrera (n 3 29).

¹³³ Jones, E, et al (n 9).

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ See Cantatore, Francina et al, 'A Comparative Study into Legal Education and Graduate Employability Skills in Law Students through Pro Bono Law Clinics' (2021) *Law Teacher* 55 (3) 334, M Pistone, (2015) 64(4) 'Law Schools and Technology: Where We Are and Where We Are Heading' *Journal of Legal Education*, 586–604.

¹³⁷ See Cantatore, Francina et al, 'A Comparative Study into Legal Education and Graduate Employability Skills in Law Students through Pro Bono Law Clinics' (2021) *Law Teacher* 55 (3) 334.

Advances in legal tech, automation and AI will alter a lawyer's work substantially in the future.¹³⁸ Accordingly, it is more important than ever for law graduates to hone the skills required for the profession and be well rounded to meet future challenges.

As Thanraj et al emphasise:

The future- readiness of a law student working towards becoming a digitally proficient professional is less about the tech itself and more about understanding what technology works best in a given situation and how to optimise and work in ways which are augmented by technology and legal expertise.¹³⁹

Within the context of the legal industry, this means that the legal practitioner who is a 'digitally proficient professional' will be able to appreciate the multi-dimensional aspects of their client's problem across the physical and digital worlds, and be resourced with innovative ideas about how to attempt to resolve it through the medium of technological tools and solutions where appropriate.¹⁴⁰

¹³⁸ See Amy Simpson, 'Coronavirus, Remote Working and the Virtual Law Firm' (2020), <www.lexisnexis.co.uk/blog/future-of-law/coronavirus-remote-working-and-the-virtual-law-firm> (accessed 24 September 2020).

¹³⁹ Ann Thanraj, Paul Durston, and Sam Elkington, 'A Blueprint for Designing Creativity into Learning Design' in Ann Thanaraj and Kris Gledhill (Eds), *Teaching Legal Education in the Digital Age* (Routledge 2022) 86.

¹⁴⁰ *Ibid.*

Law clinics like the LTC provide students with the opportunity to prepare for the real challenges faced in practice by enhancing their communication skills, teamwork, empathy and resilience.¹⁴¹ The LTC provides students with real-world insights into the intersection between legal services and technology. It enables them to reflect on the skill sets that represent critical competencies for them as future lawyers.

¹⁴¹ Cantore et al, 'A Comparative Study into Legal Education and Graduate Employability Skills in Law Students through Pro Bono Law Clinics' (2021) *Law Teacher* 55 (3) 315.