'Mainstreaming Climate Change in Legal Education'

Te Piringa Faculty of Law, University of Waikato and IUCN Academy of Environmental Law Webinar

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The need for reform of legal education

Climate change raises complex, polycentric, uncertain and changing problems. These are 'hot' situations.¹ The law deals inadequately with hot situations. The law values simplicity, certainty and stability, as these yield consistency and predictability. But an unchanging law cannot regulate and guide conduct in changing situations. The law must itself become 'hot', adapting and evolving in response to changing situations. Hot law to address hot situations.

Lawyers need to recognise the necessity for law to change - to become hot - and how the law can do so. This recognition needs to start at law school. The curriculum for a law degree needs to educate students on contemporary issues and how these impact the legal profession. One of the most pressing issues facing society, and the legal profession today, is the climate change crisis. Law students need to be educated on the problems caused by climate change, the challenges these climate change problems create for the law and the practice of law, and the ways in which these challenges can be addressed, including by reform of the law and the practice of law. This legal education should not be relegated to the sidelines, as a mere elective course on climate change or environmental law that students can choose to study if the students are so inclined and available. It should be instead integrated into the curriculum of all relevant law courses.²

¹ Elizabeth Fisher, 'Environmental Law as 'Hot' Law' (2013) 25 *Journal of Environmental Law* 347, 347 – 354.

² Warren G Levy, 'Toolkit for Integrating Climate Change into Ten High-Enrollment Law School Courses' (2019) 49(2) *Environment Law* 513, 516-522.

Typically, the law curriculum seeks to educate students in three areas: substantive law, adjective law and the practice of law. In terms of depth and emphasis, the curriculum focuses primarily on substantive law, less on adjective law and barely anything on the practice of law. This has consequences. Students are ill-equipped by their legal education at law school to engage effectively in the practice of law. They are even less equipped to be climate conscious in their practice of law. ³

Reform of legal education, therefore, needs to be directed not only to mainstreaming climate change in the law curriculum but also to changing the focus and mix of legal education to study in greater depth adjective law and the practice of law and to integrate those areas with the study of substantive law. Students need to understand how adjective law interrelates with substantive law, and how the practice of law makes real both substantive law and adjective law.

In this lecture I will explain what reforms in the law curriculum I suggest could beneficially be made to mainstream climate change in legal education. I start with the teaching of substantive law. I suggest that in the design of the curriculum for substantive law courses the convenors should include in course readings judicial decisions, academic literature and explanatory materials that explain the core concepts and rules of the body of substantive law in a climate-change context. This will promote students' consciousness of the climate crisis and its consequences and the choices that can be made in the interpretation and application of the body of substantive law in practice.

I secondly address the teaching of adjective law. This includes the law on procedure, evidence and remedies in litigation. I suggest that climate litigation has exposed a rich vein of adjective law. Climate litigation has tested the rules of procedure and evidence and inspired innovative remedies. Judicial decisions developing doctrine on procedure, evidence and remedies in a climate change context can beneficially be included in course readings.

I finally address the teaching of the practice of law. That is a subject rarely taught in law school. This is an unfortunate omission. The teaching of substantive law and

³ ibid 516, 520.

adjective law is necessary, but that knowledge needs to be made real by teaching the craft of lawyering.

Critical to the craft of lawyering is thinking like a lawyer. I suggest there are six ways of thinking like a lawyer that need to be taught at law school. These are, first, the forms and techniques of legal reasoning; second, the use of legal imagination; third, intradisciplinary thinking – thinking within the discipline of law but across the boundaries of the bodies of substantive law; fourth, inter-disciplinary thinking – thinking across the boundaries of disciplines of knowledge other than law of relevance to environment problems; fifth, multi-jurisdictional thinking – thinking across jurisdictional boundaries to consider international and foreign law; and sixth, ethical thinking. The art of thinking rationally, imaginatively, intra-disciplinarily, inter-disciplinarily, multi-jurisdictionally and ethically is especially important for the law and lawyers to be able to tackle the climate crisis.

But thinking like a lawyer is insufficient; thoughts need to be communicated. The art of communicating legal thinking orally and in writing needs to be taught. The art of speaking and writing like a lawyer is needed for the effective practice of law.

Reform of substantive law teaching

Substantive law refers to the bodies of law that deal with different aspects of the substance of the law. The bodies of domestic substantive law include the law of contract, tort and property; of equity; of business associations and corporations; of consumer law and trade practices law; of public law, both administrative law and constitutional law; of human rights; of tax law; of criminal law; and the rules of law grouped under the rubric 'environmental law', such as those dealing with planning, pollution, natural resources, water and climate change. Substantive law also includes international law.

Teaching substantive law involves identification of and instruction on the concepts and rules of law that define and frame these different bodies of substantive law. The aim is to teach "mastery of core concepts and skills".⁴

Instruction on the core concepts and rules of law is assisted by understanding the circumstances in which and the purposes for which they have been developed. The concepts and rules may have originated in the common law or statute law or both. Regardless of their source, the concepts and rules of law will have been developed in response to societal influences, including society's values and the social, economic and environmental conditions that prevailed at the time and place. This responsiveness of the law to societal influences needs to be identified in teaching the concepts and rules of law. In doing so, the students will develop an understanding of why and how the law needs to adapt in response to changes in the social, economic and natural environments: in short, the need for hot law to address hot situations.

Any instruction on the concepts and rules of law in any body of substantive law necessarily needs to be selective. There is insufficient time in an introductory course to delve deeply into the relevant doctrine. Whilst the core concepts and rules of the body of substantive law need to be identified, any elaboration of the concepts and rules needs to be economical, efficient, and effective. There needs to be selectivity in the judicial decisions, academic literature and explanatory materials that are used to teach the concepts and rules of law.

This necessary selectivity, although posing challenges for curriculum design, also creates opportunities for inclusion of judicial decisions, academic literature and explanatory materials that explore the relevant concepts and rules of law in a climate change context. Levy has presented a toolkit of climate change-related cases and other readings that could be used in the teaching of nine substantive law courses and one adjective law course of civil procedure in the United States. This toolkit could be replicated for teaching the equivalent courses in other jurisdictions, such as Australia and New Zealand. Time does not permit me to propose such a toolkit here, but I can sketch some ideas for the content of a toolkit.

Starting with the cases, a judicial decision in climate litigation might illustrate the interpretation, application or development of a relevant concept or rule of law in a body of substantive law just as well as, or even better than, a judicial decision in litigation in a non-climate change context. This is especially true in bodies of substantive law

⁴ Michael Hunter Schwartz et al, *What the Best Law Teachers Do* (Harvard University Press, 2013) 26.

where there is a longer history of climate litigation, such as administrative law and human rights law. There is now an established body of jurisprudence throughout the world on the judicial review⁵ and merits review⁶ of administrative actions and decisions concerning climate change and its consequences.⁷ These decisions are just as apt, and sometimes even more apt, to illustrate relevant rules of administrative law, such as the content and application of grounds of review in a climate change context. So too, in litigation concerning the relevant rules of law in a climate change context. Early litigation concerning the adverse impacts of chronic air pollution on constitutional rights, primarily the right to life, has given meaning and content to these rights.⁸ More recent litigation has focused on the particular impacts of climate change on human rights.⁹ Emerging litigation is focusing on the specific right to a clean, sustainable and healthy environment.¹⁰

⁵ In Australia, judicial review cases include *Gray v Minister for Planning* (2006) 152 LGERA 258; *Walker v Minister for Planning* (2007) 157 LGERA 124 (NSWLEC), overturned in *Minister for Planning v Walker* (2008) 161 LGERA 423 (NSWCA); *KEPCO Bylong Australia Pty Ltd v Independent Planning Commission (No 2)* (2020) 247 LGERA 130 (NSWLEC); (2021) 250 LGERA 39 (NSWCA); *Bushfire Survivors for Climate Action Inc v Environment Protection Authority* (2021) 250 LGERA 1 and *Mullaley Gas and Pipeline Accord Inc v Santos NSW (Eastern) Pty Ltd* (2021) 252 LGERA 221. In New Zealand, judicial review cases include *Thomson v Minister for Climate Change Issues* [2018] 2 NZLR 160 and *Smith v Fonterra Co-Operative Group Limited* [2020] 2 NZLR 394 (NZHC); [2022] 2 NZLR 284 (NZCA); [2022] NZSC 35 (leave granted to appeal to NZSC).

⁶ In Australia, merits review cases include *Gloucester Resources Ltd v Minister for Planning* (2019) 234 LGERA 257 and *Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors (No 6)* [2022] QLC 21.

⁷ For administrative law cases elsewhere, see Brian J Preston, 'Climate Change Litigation' (2009) 26 Environmental and Planning Law Journal 169, 178-183; Brian J Preston, 'Climate Change Litigation (Part 2)' (2011) 2 Carbon & Climate Law Review 244, 244-256 and Brian J Preston, 'Mapping Climate Change Litigation' (2018) 92 Australian Law Journal 774, 782-787.

⁸ Air pollution cases considering constitutional rights include *M.C. Mehta v Union of India and Others* 1987 SCR (1) 819 (Supreme Court of India, 20 December 1986) (caustic chlorine plant gas leak and pollution case); *M.C. Mehta v Union of India and Others* (1997) 2 SCC 353 (Supreme Court of India, 30 December 1996) (Taj Trapezium Matter); *Farooque v Government of Bangladesh* WP 891 of 1994 (Supreme Court of Bangladesh, 15 July 2001); *Prakash Mani Sharma v His Majesty's Government Cabinet Secretariat* WP 3440 of 2053 (Supreme Court of Nepal, 11 March 2003) *and Mansoor Ali Shah v Government of Punjab* (2007) CLD 533 (Lahore High Court).

⁹ Climate change cases considering human rights include Asghar Leghari v Federation of Pakistan WP 25501 of 2015 (Lahore High Court, 4 September 2015); Juliana v United States 217 F Supp 3d 1224 (D Or, 2016); The State of the Netherlands v Urgenda Foundation (ECLI:NL:GHDHA: 2018:2610) (The Hague Court of Appeal, 9 October 2018); (ECLI:NL:HR:2019:2007) (Supreme Court of the Netherlands, 20 December 2019) and Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors [2020] QLC 33; (No 6) [2022] QLC 21.

¹⁰ For environmental rights cases, see Brian J Preston, 'The Evolving Role of Environmental Rights in Climate Change Litigation' (2018) 2 *Chinese Journal of Environmental Law* 131; Pau de Vilchez and Annalisa Savaresi, 'The Right to a Healthy Environment and Climate Litigation: A Game Changer?' (2021) 32(1) *Yearbook of International Environmental Law* 3; Brian J Preston, 'The right to a clean, healthy and sustainable environment: how to make it operational and effective' (2023) *Journal of Energy* & *Natural Resources Law* (forthcoming, available online at

Increasing litigation in corporations law, such as concerning corporations' duties to disclose and manage climate-related risks and the related directors' duties of care, is adding legal content to what are the duties of corporations and their directors in the climate change context.¹¹

Even climate litigation that is unsuccessful can provide instruction on the relevant concepts and rules of law in the body of substantive law that was the subject of the litigation. Climate litigation in tort in the United States,¹² and recently in Australia¹³ and New Zealand,¹⁴ has elucidated the meaning and scope of the tort invoked and its constituent elements. Such judicial decisions can be instructive in the teaching of a course on the relevant body of substantive law.

Turning next to academic literature that could be included in course readings, academic literature critiquing judicial decisions in climate litigation can assist not only students in understanding the concepts and rules of law involved and how they should be interpreted and applied in practice, but also judicial decision-makers in the adjudication of similar cases in the future. Such academic literature on caselaw

https://doi.org/10.1080/02646811.2023.2165310); Ceri Warnock and Brian J Preston, 'Climate Change, Fundamental Rights, and Statutory Interpretation' (2023) 35(1) *Journal of Environmental Law* 47 and Brian J Preston and Nicola Silbert, 'Trends in Human Rights-Based Climate Litigation: Pathways for Litigation In Australia' (2023) 49(1) *Monash University Law Review* (forthcoming). For a comparative analysis of judicial application of constitutional environmental provisions in European climate cases, see Agnes Hellner and Yaffa Epstein, 'Allocation of Institutional Responsibility for Climate Change Mitigation: Judicial Application of Constitutional Environmental Provisions in the European Climate Cases Arctic Oil, Neubauer, and l'Affaire du siècle' (2023) 35(2) *Journal of Environmental Law* 207.

¹¹ Cases involving corporations' duties include *People of the State of New York by James v Exxon Mobil Corporation* 65 Misc. 3d 1233(A) (NY Sup Ct 2019) and *Milieudefensie et al v Royal Dutch Shell plc* (ECLI:NL:RBDHA:2021:5337)(The Hague District Court, 26 May 2021) (case is on appeal to The Hague Court of Appeal). For a further discussion of corporations' duties and cases elsewhere, see Noel Hutley SC and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties' (Memorandum of Opinion, Centre for Policy Development and Business Council, 7 October 2016); Noel Hutley SC and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties: Supplementary Memorandum' (Supplementary Memorandum of Opinion, Centre for Policy Development, 26 March 2019); Brian J Preston, 'Mapping Climate Change Litigation' (2018) 92 *Australian Law Journal* 774, 780-781 and Brian J Preston, 'The Influence of the Paris Agreement on Climate Litigation: Causation, Corporate Governance and Catalyst (Part II)' (2021) 33 *Journal of Environmental Law* 227, 239-247.

¹² See, for example, *State of Connecticut et al v American Electric Power Company et al* 406 F.Supp.2d 265 (S.D.N.Y, 2005), overturned in 582 F.3d 309 (2nd Cir, 2009) and again in *American Electric Power Company et al v Connecticut et al* 564 U.S. 410 (2011). See further cases discussed in Brian J Preston, 'Mapping Climate Change Litigation' (2018) 92 *Australian Law Journal* 774, 774-777.

¹³ Sharma v Minister for the Environment (2021) 248 LGERA 330 (Federal Court of Australia), overturned in Minister for the Environment v Sharma (2022) 291 FCR 311 (Full Federal Court of Australia).

¹⁴ Smith v Fonterra Co-Operative Group Limited [2020] 2 NZLR 394 (NZHC); [2022] 2 NZLR 284 (NZCA); [2022] NZSC 35 (leave granted to appeal to NZSC).

involves practical legal scholarship. Both judges and some academics have called for increased practical legal scholarship, scholarship that is of use to its intended audience of lawyers and judges engaged in the practice of law.¹⁵ Where the intended audience is judges, practical legal scholarship is that which "can directly help a judge in deciding a case."¹⁶ Stapleton describes this style of scholarship as 'reflexive':¹⁷

"This is because not only is it capable of smoothly absorbing legal developments signalled by courts but it can also help prompt them by, for example, influencing courts to confront tensions in judicial reasoning and doctrinal outcomes, to re-structure precedents and reassess terminology. The adjective 'reflexive' signals this two-way conversation between legal academics and the Bench, and indirectly indicates why this type of scholarship is addressed primarily to Bench and Bar, and not other academics".

Edwards suggested that practical legal scholarship has several defining features:18

"It is *prescriptive*: it analyzes the law and the legal system with an aim to instruct attorneys in their consideration of legal problems; to guide judges and other decision makers in their resolution of legal disputes; and to advise legislators and other policymakers on law reform. It is also *doctrinal:* it attends to the various sources of law (precedents, statutes, constitutions) that constrain or otherwise guide the practitioner, decisionmaker, and policymaker".

The selection for course readings of practical legal scholarship analysing the concepts and rules of law adjudicated in climate change litigation will not only instruct students on those concepts and rules but also will raise their consciousness of how these concepts and rules are and should be applied in legal practice having regard to climate change considerations.

As for explanatory materials, there is a surfeit of material available, from both public and private sources, which could be selected for inclusion in course readings. The criteria for selection of course readings should relate to the quality and capacity of the material to explain a relevant concept or rule of law and to engage the student. Where

¹⁵ See, for example, David Feldman, 'The Nature of Legal Scholarship' (1989) 52(4) *Modern Law Review* 498; Harry T Edwards, 'The Growing Disjunction Between Legal Education and the Legal Profession' (1992) 91(1) *Michigan Law Review* 34; Andrew Burrows, 'Challenges for Private Law in the Twenty-First Century' in Kit Barker et al (eds), *Private law in the* 21st *Century* (Hart Publishing, 2017), 29-46; Lord Burrows, 'Judges and Academics, and the Endless Road to Unattainable Perfection' (The Lionel Cohen Lecture 2021, 25 October 2021) and Jane Stapleton, 'Taking the Judges Seriously versus Grand Theories' in Jane Stapleton (ed), *Three Essays on Torts* (Oxford University Press, 2021) Chp 1. ¹⁶ Burrows (n 15) 5.

¹⁷ Stapleton (n 15) 2.

¹⁸ Edwards (n 15) 42-43.

competing explanatory materials are of comparable quality and capacity, and equally engaging, there is no reason to prefer explanatory materials in a non-climate change context rather than those in a climate change context.

Some climate change explanatory materials may meet the selection criteria better than non-climate change explanatory materials. An example in the area of corporations law is the legal advices of leading Australian barristers, Noel Hutley SC and Sebastian Hartford-Davis, on the duties of corporations and their directors to identify, disclose and manage climate-related risks.¹⁹ The duties of corporations and their directors in the climate change context is topical and will be of great interest to students. Reference to such legal advices will engage the students and make real how these rules of law apply in practice.

The upshot is that good pedagogy of substantive law courses allows the selection of relevant judicial decisions, academic literature and explanatory materials dealing with climate change just as readily as the selection of judicial decisions, academic literature and explanatory materials in a non-climate change context. The legal education of the students on the body of substantive law will not suffer by doing so. Indeed, their legal education will be enhanced. They will become more climate conscious, better understanding climate change and its consequences and their implications for the law and the practice of law.

Reform of adjective law teaching

The term 'adjective law' is one coined by Karl Llewellyn.²⁰ Adjective law concerns the "regulation of the work of the courts". It is the "business procedure" by which courts go about their business of resolving disputes "to ends already indicated by the substance of the law".²¹ Courses on court practice and procedure and on evidence concern adjective law. Llewellyn also includes in the category of adjective law, the law on the

¹⁹ Hutley and Hartford-Davis (n 11).

²⁰ Karl Llewellyn, '*The Bramble Bush: On Our Law and Its Study*' (Oceana Publications, 1960) 7.

²¹ ibid.

remedies and relief that a court may grant for established breaches of substantive law.²² Courses on remedies therefore concern adjective law as well.

Llewellyn noted in the early to mid-20th century in the US that adjective law was seen by law schools to be inferior to substantive law and the teaching of adjective law suffered accordingly. I suggest that nothing has changed today, at least in law schools in Australia and New Zealand. Llewellyn described as artificial the division of substantive law and adjective law. He explained that the procedural regulations of adjective law "are the door, and the only door, to make real what is laid down by substantive law. Procedural regulations enter into and condition all substantive law's becoming actual when there is a dispute."²³

Llewellyn urged law schools to recognise in their teaching this integral relationship between substantive law and adjective law, although not by conflating courses:²⁴

"Again this is no reason for not marking off procedure and evidence and trial practice as fields for special and peculiar study apart from substantive law. They should be marked off. They should be marked off for the most intensive study. But they should be so marked off not because they are really separate, but they should be marked off because they are of such transcendent importance as to need special emphasis. They should be marked off not to be kept apart and distinct, but solely in order that they may be more firmly learned, more firmly ingrained into the student *as conditioning the existence of any substantive law at all.* Everything that you know of procedure you must carry into *every* substantive course. You must read each substantive law says should be means nothing except in terms of what procedure says that you can make real".

Climate litigation has exposed a rich vein of adjective law which can be used in the teaching of adjective law. Starting with procedural law, many climate litigations throughout the world have foundered on the shoals of procedural rules. Two rules in particular have proved problematic: standing to sue and justiciability. The US case of *Juliana v United States*,²⁵ the Australian case of *Sharma and others v Minister for the*

²² Karl Llewellyn, '*Jurisprudence: Realism in Theory and Practice*' (University of Chicago Press, 1962) 10.

²³ Llewellyn (n 20) 9.

²⁴ ibid.

²⁵ 947 F.3d 1159 (9th Cir. 2020).

*Environment*²⁶ and the New Zealand case of *Smith v Fonterra Co-operative Group Ltd*²⁷ illustrate the barriers these procedural rules raise.

Next, climate litigation is testing the rules of evidence. An example concerns evidence of causation. This might be causation between an administrative decision and an impact of climate change or mitigation of a climate change impact, such as was considered in *Massachusetts v Environmental Protection Agency*.²⁸ It might be causation between a proposed project and climate change, such as was considered in *Gloucester Resources Limited v Minister for Planning*²⁹ and in *Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors (No 6)*.³⁰ But more recently, it concerns causation between greenhouse gas-emitting activities or businesses and a specific event, such as a cyclone, extreme flooding or extensive bushfires, alleged to have been induced by climate change. Evidence of climate-attribution science is being adduced in court to seek to prove that the greenhouse gas-emitting activity or business contributed in a meaningful way to the occurrence of the event.³¹

Finally, climate change litigation is prompting innovation in the remedies and relief that the courts are granting. Responsive environmental adjudication not only can develop substantive law doctrine, but it can also develop doctrine on procedure and remedies. Courts have made orders in the nature of mandamus compelling governments to remake climate change legislation that is constitutionally invalid;³² to make climate change polices in accordance with a statutory duty;³³ and to take action to implement climate change legislation and policies.³⁴

²⁶ (2022) 291 FCR 311 (Full Federal Court of Australia).

²⁷ [2022] 2 NZLR 284 (NZCA) affirming [2020] 2 NZLR 394 (NZHC). The appeal to the Supreme Court of New Zealand was heard in August 2022 and judgment is reserved.

²⁸ 549 U.S. 497 (2007).
²⁹ (2019) 234 LGERA 257.

³⁰ [2022] QLC 21.

³¹ Petra Minnerop and Friederike Otto, 'Climate Change and Causation: Joining Law and Climate Science on the basis of Formal Logic' (2020) 27(1) *Buffalo Environmental Law Journal* 49 and Sophie Marjanac and Lindene Patton, 'Extreme Weather Attribution Science and Climate Change Litigation: An Essential Step in the Causal Chain?' (2018) 36(3) *Journal of Energy & Natural Resources Law* 265. ³² *Neubauer et al v Germany,* Bundesverfassungsgericht [German Constitutional Court], 1 BvR 2656/18, 24 March 2021.

 ³³ Bushfire Survivors for Climate Action Inc v Environment Protection Authority (2021) 250 LGERA 1.
 ³⁴ Asghar Leghari v Federation of Pakistan WP 25501 of 2015 (Lahore High Court, 4 September 2015).

Such topical climate change cases illustrate the law of procedure, evidence and remedies with a graphicness that other cases cannot match. They engage the students and stimulate climate consciousness.

Reform of legal practice teaching

The curriculum taught at law schools is increasingly evading courses on the practice of law. There may still be courses on adjective law, such as practice and procedure or evidence, which will be of assistance in the practice of law. But there often is very little else. A justification often advanced for this light touch in teaching the practice of law is that others will do this after the students graduate. There are colleges of law that conduct legal practice courses and law firms for whom the students may work who provide on-the-ground instruction in the practice of law. That may be accepted. But it does not remove the need for law schools to lay the foundations for the students' practice of law.

Llewellyn criticised the idea promulgated by law schools that "the essence of our craft lies in our knowledge of the law". Knowledge of the law is needed, but it is merely "the precondition of our work". Llewellyn noted that the idea "comes at a price":³⁵

"It comes at a price, for instance, of turning out of law school prospective lawyers who know nothing but the law, and have no simplest smattering of how to *lawyer*. It comes indeed at a price of blinding our own eyes to our own daily job, so that in the very process of counselling or of briefing a case we study chiefly *what* courts have decided, and forget *how* they go about deciding cases, and *how* they use the authorities *with* which they work, and how and why those authorities themselves came to existence."

Legal education, therefore, needs to go beyond teaching mere knowledge of the law to teach the "craft of doing and getting things done with the law".³⁶ This craft of "how to lawyer" is especially important for the practice of law in the climate change context. Advising and acting as a lawyer in relation to climate change problems calls for well-developed lawyering skills. The ever-changing law, adapting to ever-changing problems, makes knowledge of the law and judicial decisions of the past an inadequate base to advise and advocate as to what the law and judicial decisions

³⁵ Llewellyn (n 22) 318.

³⁶ ibid.

should be in the future. The ability to predict what the law and judicial decisions will be in the future requires training in the craft and skills of lawyering.

Fundamental to the craft of lawyering is thinking like a lawyer. I suggest there are six ways of thinking like a lawyer that need to be taught at law school. The first involves the forms and techniques of legal reasoning. Law is a distinct discipline of knowledge to other disciplines, with different concepts and rules. But what makes law distinctive is the forms and techniques of reasoning that are employed in applying these legal concepts and rules in practice. These forms and types of legal reasoning cannot be gleaned from the legal concepts and rules themselves; they must be taught. And the teaching of legal reasoning makes real the practice of law.

Legal reasoning is seldom, if ever, taught at law schools. Yet it is critical to thinking like a lawyer and, indeed, to the very practice of law. It is the linchpin of the adjudication of disputes by the courts. Fuller has pronounced that the hallmark of adjudication is its explicit rationality: rationality in both the presentation of reasoned arguments by the parties to the dispute and rationality in the determination of the dispute by the court giving reasons for its decision.³⁷ The parties' reasoned arguments and the courts' reasons for decision both involve legal reasoning.

Legal reasoning uses the four forms of logical argument of deduction, induction, abduction and analogy.³⁸ But legal reasoning deploys these forms of logical argument in distinctive ways, adapting them to the resolution of legal problems. This adaptation is even more needed for the adjudication of environmental problems. As I have observed, environmental problems, which include climate change problems, are 'hot' situations, being complex, polycentric, uncertain and changing. The distinct characteristics of environmental problems impact on the law and the adjudication of those problems. Responding to these challenges involves adapting the process of adjudication and developing legal doctrine (substantive law) and procedure and remedies (adjective law).³⁹ One adaptive response is in the application of the forms of

³⁷ Lon L Fuller, 'The Forms and Limits of Adjudication' (1978) 92 *Harvard Law Review* 353, 364, 367, 369 and Lon L Fuller, 'Adjudication and The Rule of Law' (1960) 54 *American Society of International Law Proceedings* 1, 1-3, 5.

³⁸ See, for example, Scott Brewer 'First Among Equals: Abduction in Legal Argument from a Logocratic Point of View' in Mark McBride and James Penner (eds), *New Essays on the Nature of Legal Reasoning* (Hart Publishing, 2022) 281-339.

³⁹ Čeri Warnock, *Environmental Courts and Tribunals: Powers, Integrity and the Search for Legitimacy* (Hart Publishing, 2020) 5.

logical argument to adjudicate the environmental problem in dispute.⁴⁰ These forms of logical argument and how they should be adapted to fit the specific situation need to be taught. Law school is a necessary starting place.

The second way of thinking like a lawyer that needs to be taught is imaginative legal thinking. Legal imagination, Fisher explains, is inherent in the discipline of law, just as all disciplines of knowledge are underpinned by imagination.⁴¹ Fisher defines legal imagination as follows:

"It is the collective mental constructs that lawyers and legal scholars use in thinking about law and how it applies. Imagination is necessary because the abstract language of legal concepts needs to be applied to specific circumstances. That is part of a process of inquiry, individual or collective, in which any particular interpretation or understanding of a law needs to be tested to see how appropriate it is."

Fisher explains that legal imagination "requires both an understanding of what law substantively is, and what it can be, both in terms of its limits but also in its creative possibilities".⁴²

Legal imagination is especially needed in thinking about what and how substantive law and adjective law applies to the ever-changing problems caused by climate change. Is the current law adequate and applicable to the situation at hand? Is the current law fit for purpose? Does it need to be developed? If so, in what way? Answering these questions, Fisher suggests, "requires thinking about both the purpose of the law and the specific situation. This is particularly in the context of adjudication in which law is being applied to a particular set of facts with regard to the overall integrity of the law."⁴³

Del Mar elaborates on the role of legal imagination in lawyers' arguments and judges' adjudications:⁴⁴

⁴⁰ See, for example, Brian Preston, '*Specialist environmental courts: their objective, integrity and legitimacy',* a forthcoming paper to be presented to AAL, AIJA and ALJ 'Enduring Courts in Changing Times' Conference, 8-10 September 2023, Sydney.

⁴¹ Elizabeth Fisher, 'EU Environmental Law and Legal Imagination' in Paul Craig and Gráinne de Búrca (eds), *The Evolution of EU Law* (Oxford University Press, 2021) 852.

⁴² Elizabeth Fisher, 'Legal Imagination and Teaching' in Lavanya Rajamani and Jacqueline Peel (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2nd ed, 2021) 235-236.

⁴³ Fisher (n 41) 852.

⁴⁴ Maksymilian Del Mar, 'Metaphor in International Law: Language, Imagination and Normative Inquiry' (2017) 86(2) *Nordic Journal of International Law* 170,174.

"Imagination plays an important and under-estimated role in legal reasoning by enabling and sustaining an inquiry into normative relevance, ie into what values and interests may be at stake in a particular case and in cases of that kind. Artefacts, like metaphors, hypothetical scenarios and figuration are valuable for individual lawyers and judges, for scenes of interaction in courtrooms and for the resourcefulness of legal language over time".

The third way of thinking like a lawyer is intra-disciplinary thinking. By intra-disciplinary thinking, I am referring to thinking across the boundaries of the bodies of substantive law that make up the discipline of law. As I mentioned in discussing reform of the teaching of substantive law, climate change raises challenges for many, if not most, bodies of substantive law. This is evidenced by climate litigation in the bodies of domestic law, of not only environmental law, but also administrative law, constitution law, human rights law, tort law, contract law, consumer law, corporations law and equity law as well as in the body of international law. Imaginative legal thinking involves grasping the legal concepts and rules of these bodies of substantive law and applying them in legal reasoning to solve the problem at hand. Students need to be taught to think intra-disciplinarily as a public law lawyer and a private law lawyer, a common law lawyer.

But the inter-disciplinarity of environmental problems demands inter-disciplinary thinking as well. This is the fourth way of thinking that needs to be taught. By interdisciplinary thinking, I am referring to thinking across the boundaries of different disciplines than law, such as the natural sciences, social sciences, political sciences and economics, to name but some disciplines of relevance to environmental problems. Students need to develop interactional expertise. Interactional expertise refers to the need to interact with other disciplines than law, and relates to how environmental problems are conceptualised. There is a need to develop sufficient linguistic expertise, a literacy, in these other disciplines.⁴⁵ Interactional expertise assists in understanding environmental problems and their resolution.

The fifth way of thinking is multi-jurisdictional thinking. Environmental problems are often transboundary problems. Responses to transboundary problems need to be transboundary as well. Increasingly, legal responses are transboundary. This is, of

⁴⁵ Elizabeth Fisher, 'The Rise of Transnational Environmental Law and the Expertise of Environmental Lawyers' (2012) 1 *Transnational Environmental Law* 43, 50.

course, evident with international law. But even domestic legal responses have a transboundary operation in practice. Fisher et al note that "legal and regulatory initiatives in one jurisdiction are often directly and indirectly related to legal and regulatory initiatives in another".⁴⁶ This jurisdictional plurality of law poses analytical challenges for lawyers: they need to learn how to think multi-jurisdictionally. Climate change is a quintessential transboundary problem. It provides fertile ground for teaching multi-jurisdictional thinking. Students can learn not only how the domestic law of one jurisdiction interacts with domestic law of other jurisdictions and with international law, but also how litigation in one jurisdiction influences litigation in other jurisdictions.⁴⁷

The sixth way of thinking like a lawyer that needs to be taught is how to think and act ethically. Climate change raises equity and ethical issues. Climate change affects different people differently. Issues of distributive justice, procedural justice and recognition justice arise. Lawyers need to be conscious of these equity issues.⁴⁸ They need to respond in their daily legal practice to these equity issues in an ethical manner. In short, they need to embrace climate conscious lawyering.⁴⁹

Lawyers can implement a climate conscious approach in their daily legal practice in at least five ways. First, lawyers should provide holistic legal advice to their clients that includes the climate change consequences of the recommended and any alternative courses of action. Lawyers have professional duties in providing appropriate legal advice to their clients, which may be impacted by the expanding scope of climate change risks. The UK Law Society, for example, has published an online guide on the impact of climate change on solicitors and their professional duties. The guide highlights the vast physical, transitional and liability risks arising from climate change, and the need for lawyers to consider these risks in all transactions and advice.⁵⁰

⁴⁶ Elizabeth Fisher et al, 'Maturity and Methodology: Starting a Debate About Environmental Law Scholarship' (2009) 21 *Journal of Environmental Law* 213, 239.

⁴⁷ See Brian J Preston, 'The Influence of the Paris Agreement on Climate Litigation: Causation, Corporate Governance and Catalyst (Part II)' (2021) 33 *Journal of Environmental Law* 227, 247-255; Brian J Preston, 'Changing climate law and governance: A multi-level perspective' *Global Policy* (2023) (forthcoming, available online at https://doi.org/10.1111/1758-5899.13196) and Natasha Affolder, 'Contagious Environmental Lawmaking' (2019) 31 *Journal of Environmental Law* 187, 187-212.
⁴⁸ Brian J Preston, 'What's equity got to do with the environment?' (2018) 92 *Australian Law Journal* 257.

 ⁴⁹ Brian J Preston, 'Climate Conscious Lawyering' (2021) 95 Australian Law Journal 51.
 ⁵⁰ 'The impact of climate change on solicitors', *The Law Society* (Web page, 19 April 2023) < https://www.lawsociety.org.uk/topics/climate-change/impact-of-climate-change-on-solicitors>

Second, in identifying, interpreting and applying legal rules in advising and acting for clients, lawyers should take into account the climate change consequences.

Third, in discharging their ethical obligations, lawyers should consider and integrate in their legal practice the ethical issues raised by climate change and its consequences. Lawyers have a professional duty to reflect on their responsibility for consequential environmental harms and engage in active client counselling.⁵¹ The decisions of lawyers regarding client and matter onboarding, as well as client deselection, should be one of "ordinary morality".⁵² The ethical obligations of the legal profession derive not just from the legal professional rules but also are defining characteristics of the profession of a lawyer. As Bathurst has identified:⁵³

"Ethical thinking does, and if not, then it should, pervade all aspects of legal practice, from the relatively mundane task of providing advice about a contract for the sale of land to the conduct of a defence to a murder charge. Indeed, if asked about the matter on the spot without time for reflection, I would have gone so far as to say that obedience to a comprehensive code of ethics was the defining characteristic of the profession of a lawyer."

Fourth, lawyers should engage in 'responsible lawyering' which 'focuses on the lawyer's role as officer of the court and guardian of the legal system'.⁵⁴ Lawyers should advise and act in legal practice in ways that discharge their duties to the legal system and uphold and advance the fundamental values and integrity of the legal system, including climate change justice. Conversely, climate conscious lawyers should not use loopholes, procedural rules or arguments without legal prospects of success to frustrate the substance and spirit of the law and the legal system. This includes advising clients against bringing unmeritorious Strategic Litigation Against Public Participation (SLAPP suits).

Fifth, at a personal level, lawyers need to integrate ethical thinking and ethical action into their day-to-day legal practice. Baron and Corbin adopt Aristotle's warning that

⁵¹ Steven Vaughan, 'Existential Ethics: Thinking Hard About Lawyer Responsibility for Clients' Environmental Harms' (2023) 2 *Current Legal Problems* 1, 6-27.

⁵² ibid 28-32.

⁵³ The Hon T F Bathurst AC, 'Ethical Legal Practice and Professional Conduct' (Speech delivered at the book launch of Francisco Esparraga, 'Ethical Legal Practice and Professional Conduct', 27 June 2019).

⁵⁴ Christine Parker, 'A Critical Morality for Lawyers: Four Approaches to Lawyers' Ethics' (2004) 30(1) *Monash University Law Reviews* 49, 61.

"one's actions reflect on who one is as a person".⁵⁵ They advise that "lawyers ought to integrate their personalities into their lawyering role". Lawyers' "personalities" include their personal ethical approach. ⁵⁶ Hutchinson advocates that acting ethically is "about the development of a moral way of living and lawyering that encompasses an organic set of attitudes, dispositions and values, and that can be incorporated into each lawyer's daily routines and regimen."⁵⁷

Through these five ways, not only can lawyers reform their own legal practice by adopting a climate conscious approach, but also the legal profession as a whole can adapt to better address climate change and its consequences.

Education about the first two ways can be delivered by implementing the reforms I have suggested in the teaching of substantive law, adjective law and the practice of law. The last three ways, however, need to be separately taught. This could be in a separate course on ethics in the practice of law, or the ethical duties of lawyers could be integrated at appropriate places in other courses, or both could be done. The point is that lawyers need to learn these ethical dimensions of legal practice, and the place to start is at law school.

Edwards identified law schools' failure "to enhance the teaching of ethics" as a cause of the growing disjunction between legal education and the legal profession.⁵⁸ Edwards exhorted:

"Law students need concrete ethical training. They need to know why *pro bono* work is so important. They need to understand their duties as 'officers of the court'. They need to learn that cases and statutes are normative texts, appropriately interpreted from a public-regarding point of view, and not mere missiles to be hurled at opposing counsel. They need to have great ethical teachers, and to have *every* teacher address ethical problems where such problems arise."

Edwards observed that law schools' failure to teach ethics is occurring at a time when that training has become more important:

"In the past, new lawyers might have learned law 'on the job'. But as law firms have become increasingly materialistic – as *pro bono* work has been displaced

⁵⁵ Paula Baron and Lilian Corbin, *Ethics and Legal Professionalism in Australia* (Oxford University Press, 2nd ed, 2017) 52.

⁵⁶ ibid.

⁵⁷ Allan C Hutchinson, *Legal Ethics and Professional Responsibility* (Irwin Law, 1999) 48.

⁵⁸ Edwards (n 15) 38.

by profit-maximization, and the 'officers of the court' by the 'hired guns' – we can no longer count on the law firms to be 'law schools'. New lawyers need to know, before they enter full-time employment, what ethical practice means. Otherwise, their only model of the practicing lawyer may well be crudely materialistic".

I have so far dwelt on how to think like a lawyer and suggested six ways of thinking that need to be taught to educate students in the practice of law. But thoughts need to be communicated. Communication can be oral and in writing. Oral communication can involve business counselling of clients; negotiating on behalf of clients; and advocacy in courts. Oral communication skills for the practice of law are not taught in law school. Relatively few students participate in mooting, which does develop advocacy skills. Most students, however, leave law school ill-prepared with the oral communication skills they will need in practice.

The same deficiency applies to teaching the written communication skills that are needed to practise law. The assessments for all law courses will overwhelmingly be in writing, whether in the form of a research essay, problem assessment or an exam paper. But these written forms of assessment are artificial in the sense that they do not reflect the forms of written communication that will be needed in the practice of law. These include the letters or memoranda of advice of lawyers to their clients and the pleadings and written submissions of advocates to the court. These written communications in legal practice need to embody legal thinking, including legal reasoning. Drafting these written communications is a skill. Llewellyn considered there to be "no art more difficult".⁵⁹ Drafting is a skill that needs not only to be taught at law school but needs to be practised there as well. Just as education in the art of thinking like a lawyer is needed to address climate change raises, so too education in the art of writing like a lawyer is needed to address climate change problems.

Conclusion

Fisher has sagely observed that the teaching of law: 60

"is fundamental to the future of law and the legal profession. This is particularly so when, as a form of expertise, law is a socialised form of expertise – it

⁵⁹ Llewellyn (n 20) 112.

⁶⁰ Fisher (n 42) 148-149.

depends not just on a single person – but the way in which the legal community interacts and operates. The acquisition of expertise is a 'social process – a process of socialization into the practices of an expert group', and, as a result individuals gain expertise by 'social immersions' in groups who possess an expertise".

This process of social immersion begins when the student enters the classroom, physically or virtually, of each law course. By integrating climate change considerations in each course, wherever relevant, the law school is teaching not only the concepts and rules of law that are fundamental to the bodies of substantive law or adjective law being taught, and the skills to use those concepts and rules, but also the social processes of interaction. In so doing, the law school will teach legal substance and procedure in theory, but importantly, it will also teach the lived reality of the law.⁶¹

This is especially needed to equip law students to deal with the confronting reality of the climate change crisis. Through their legal education, students need to become conscious of both the reality of the climate change crisis and the dire consequences for people and the planet, and the reality of the law's mostly inadequate response to the climate change crisis. But consciousness of these twin realities, although necessary, is insufficient. Students need to be taught how they can deal with both of these realities in their daily legal practice. Law schools can, and should, play a critical role in educating students about these matters.