LOGICAL, CRITICAL AND CREATIVE:
TEACHING ‘THINKING SKILLS’ TO LAW STUDENTS

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The Australian Learning and Teaching Council’s Bachelor of Laws Learning and Teaching Academic Standards Statement sets out six Threshold Learning Outcomes (TLOs) for the Bachelor of Laws degree. These six TLOs represent what a Bachelor of Laws graduate is expected ‘to know, understand and be able to do as a result of learning’. TLO3 relates to ‘thinking skills’, comprised of legal reasoning, critical thinking and creative thinking skills. This article seeks to assist those law schools and legal academics concerned about being called upon to demonstrate the ways in which TLO3 is developed by their students. It does so by summarising, analysing and synthesising the relevant academic literature, and identifying helpful examples of the conceptualisation of, justification for and teaching of thinking skills in the context of legal education.

I INTRODUCTION

In December 2010 the Australian Learning and Teaching Council (ALTC) published the Bachelor of Laws Learning and Teaching Academic Standards Statement (the LLB LTAS Statement). The LLB LTAS Statement was the outcome of the Learning and Teaching Academic Standards Project in Law administered by Professors Sally Kift and Mark Israel as Discipline Scholars. It sets out six Threshold Learning Outcomes (TLOs) for the Bachelor of Laws degree. These six TLOs represent what a Bachelor of Laws graduate is expected ‘to know, understand and be able to do as a result of learning’. They cover knowledge (TLO1), ethics and professional responsibility (TLO2), thinking skills (TLO3), research skills (TLO4), communication and collaboration (TLO5), and self management (TLO6).

The principles informing the drafting of the TLOs required that they be ‘not too general; not too prescriptive; ordered correctly; [able to] be implemented; [able to] be assessed and measured; and consistent with the range of professional contexts for law graduates,’ and an effort was made to strike a balance between a ‘minimalist’ and a ‘detailed’ approach. Following a process of consultation with members of the judiciary, admitting authorities, members of the legal profession,

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2 Ibid.
3 Ibid, citing the Australian Qualifications Framework.
regulators, academics, students and recent graduates, the TLOs were endorsed by the Council of Australian Law Deans in November 2010.

The TLOs for the discipline of law were developed as part of a larger ALTC project that sought to develop Learning and Teaching Academic Standards for all academic disciplines. Law was one of eight broad discipline groups that participated in the ALTC project in 2010, the others being architecture and building; arts, social sciences and humanities; business, management and economics; creative and performing arts; engineering and ICT; health, medicine and veterinary science; and science.

The TLOs are likely to form an important component in the Australian Government’s Higher Education Quality and Regulatory Framework. The new regulator, the Tertiary Education Quality and Standards Agency (TEQSA), was established in 2011. TEQSA’s role includes the evaluation of teaching and learning within Australian universities against academic standards, and while (as at the date of writing) TEQSA has not yet issued an authoritative statement about what those standards will be, it seems likely that TEQSA will make use of the various TLOs developed by the ALTC.

Universities, schools and individual academics, with awareness that at some point in the near future they will be called upon to demonstrate the ways in which and the extent to which they facilitate these learning outcomes, are likely to be increasingly interested in clarifying the meaning of each of the TLOs and ascertaining how they can best be taught. The LLB LTAS Statement itself explicitly ‘makes no prescription about the suitability of any learning and teaching activities for developing and supporting students to achieve the Bachelor of Laws academic standards.’ However, the academic literature contains a wealth of relevant insights, suggestions and examples, and this article seeks to assist law schools and legal academics interested in or concerned about the TLOs for Law by reviewing this literature and offering some examples of best practice in Australia and internationally. The focus of the article is upon TLO3, ‘thinking skills’.

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5 Ibid 1, 5-7. See also Mark Israel, Sally Kift and Rachael Field, ‘Drafting Standards for the Bachelor of Laws’ (2010) (218) Ethos 14.
6 Kift, Israel and Field, above n 1, 6-7.
7 Ibid, 3.
9 TEQSA released a discussion paper, Developing a framework for teaching and learning standards in Australian higher education and the role of TEQSA, in June 2011.
11 Kift, Israel and Field, above n 1, 5.
12 This paper expands upon the work done by the author in writing the ‘Good Practice Guide’ for TLO3: see Nick James, Good Practice Guide (Bachelor of Laws) – Thinking Skills (Threshold Learning Outcome 3) (Australian Learning and Teaching Council, 2011).
The following is TLO3 in full:

**TLO3: Thinking skills**

Graduates of the Bachelor of Laws will be able to:

(a) identify and articulate legal issues,

(b) apply legal reasoning and research to generate appropriate responses to legal issues,

(c) engage in critical analysis and make a reasoned choice amongst alternatives, and

(d) think creatively in approaching legal issues and generating appropriate responses.\(^{13}\)

As explained in the LLB LTAS Statement, a ‘threshold’ learning outcome is a minimum standard of performance, achievement or attainment.\(^{14}\) It is a ‘foundational competency’,\(^{15}\) a standard with which all graduating law students are expected to be able to comply rather than a standard that is merely desirable or aspirational.

The identification of ‘thinking skills’ as a minimum outcome of legal education is unlikely to be seen as contentious or controversial.\(^{16}\) The ability to ‘think like a lawyer’\(^{17}\) is frequently identified as one of the most important outcomes of the study of law.\(^{18}\) (The term ‘think like a lawyer’ is accorded a wide range of possible meanings,\(^{19}\) although it is usually equated with ‘legal reasoning’).

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\(^{13}\) Kift, Israel and Field, above n 1.

\(^{14}\) Ibid, 9.


\(^{16}\) On the other hand, the specific content of TLO3 has been the subject of criticism. One academic had this to say about TLO3: ‘This is perhaps the most meaningless of all the threshold learning outcomes. With no indicators as to the level of such skills, it adds little to the sort of very general graduate outcomes that universities like to assert. And I have met few law graduates or even law academics who are creative (whatever that means in this context). But of course, in the modern world of academic excellence, buzzwords such as creative thinking must be bandied about.’ Joachim Dietrich, ‘Law Threshold Lowers the Bar’, *The Australian* 30 March 2011 <www.theaustralian.com.au/higher-education/opinion/law-threshold-lowers-the-bar/story-e6frgecko-1226030258554>.

\(^{17}\) This is a phrase often attributed to the fictional Harvard law professor Charles W Kingsfield Jr, who in the 1973 film *The Paper Chase* tells his class of first year law students: ‘You teach yourselves the law. I train your minds. You come in here with a skull full of mush, and if you survive, you’ll leave thinking like a lawyer.’ Twentieth Century Fox Film corporation.

\(^{18}\) Lee S Shulman, ‘Signature Pedagogies in the Professions’ (2005) 134(3) *Daedalus* 52.

\(^{19}\) Sanson surveyed the literature and identified various ‘narrow’ and ‘broad’ interpretations of the term ‘thinking like a lawyer’. The narrow interpretations include ‘spotting legal issues from a complicated fact setting’; ‘pondering a given set of facts so as to perceive their connection’; ‘the ability to analyze critically and to convey that analysis cogently’; ‘interpreting and using legal materials to serve clients’ interests’; asking ‘is there a law, has it been violated, and what will be done about it’; ‘thinking analytically’; ‘research (“thorough”), reasoning (“air tight”), [w]riting (“crystal clear”), reading (“careful”), and rhetoric (“facile”)’;
‘Thinking skills’, ‘reasoning skills’, ‘critical judgement’ and the like are frequently included in lists of desirable graduate attributes for law students. For example, the School of Law at University of Queensland has identified five ‘graduate outcomes’ for students completing their Bachelor of Laws program, the fourth of which is ‘critical judgement’. Students completing the program are expected to:

a) be able to identify, analyse, and define legal problems;

b) possess skills in legal research that will enable the graduate to apply relevant legal materials;

c) be able to apply critical reasoning to legal issues through independent thought and judgment informed by an understanding of legal principles and the concepts, principles, policies, and values that underpin and permeate the law; and

d) be able to evaluate opinions, make decisions, and reflect critically on the justifications for decisions in the light of legal principles.

Graduates of the University of New South Wales Law School are expected to have ‘transferable intellectual skills’, defined as ‘excellent intellectual skills of analysis, synthesis, critical judgment, reflection and evaluation’ and incorporating the ability to:

- collect and sort facts;
- identify and analyse legal issues;
- interpret legal texts;
- apply the law to real legal problems;
- invoke theory and inter-disciplinary knowledge to develop new and creative solutions to legal problems;
- critique law and policy to develop new ideas about the law and law reform;
- participate effectively in debates about the law.

and ‘the use of inductive and deductive reasoning to construct a valid logical legal argument’. The broad interpretations include ‘ignoring common sense and focusing on manipulating words to serve one’s own and one’s client’s interest’ and ‘understanding that “it depends” … appreciating all the complexities and possibilities to even seemingly simple legal concepts and questions’. Michelle Sanson, ‘Thinking Like a Lawyer’ (2006) International Bar Association Conference Newsletter.

21 TC Beirne School of Law, Teaching Handbook (University of Queensland, 2011).
22 University of New South Wales, Faculty of Law Homepage (2011) <www.law.unsw.edu.au>.
In 2009 the Council of Australian Law Deans (CALD) published its *Standards for Australian Law Schools*. Section 2.3 relates to the content of the LLB curriculum, and states that the curriculum must seek to develop, *inter alia*, ‘the intellectual and practical skills needed to research and analyse the law from primary sources, and to apply the findings of such work to the solution of legal problems.’

TLO3 is accompanied in the LLB LTAS Statement by a set of explanatory Notes intended to ‘offer non-prescriptive guidance on how to interpret the TLOs’.

Under the subheading ‘Background’, the Notes state that TLO3 was drafted to align with the *Australian Qualifications Framework* Level 7 (Bachelor Degree), the United Kingdom *QAA Subject Benchmark Statement for Law*, the United Kingdom *Joint Statement of the Law Society and the General Council of the Bar*, the United States *MacCrate Report*, the recommendations of the Task Force on the Canadian Common Law Degree, and the *Scottish Accreditation Guidelines*. These and other such statements about the expected learning outcomes of the Bachelor of Laws confirm that the identification of ‘thinking
skills’ as one such expected learning outcome is consistent with views within the academic and professional legal communities in Australia and internationally. To date, however, it is unlikely that Australian law schools have been called upon to demonstrate in a substantial way the extent to which they ensure that this learning outcome is in fact achieved. Australian admission authorities have traditionally been more concerned with ensuring that law schools include in the curriculum coverage of the areas of knowledge considered essential for the practice of law (the ‘Priestley 11’).32 The (likely) adoption of the TLOs by TEQSA is liable to provoke law schools into paying much closer attention to demonstrating how they develop legal skills, including the particular skills of which TLO3 is comprised: legal reasoning skills, critical thinking skills and creative thinking skills.

III TLO3a AND TLO3b - LEGAL REASONING

TLO3a is the ability to ‘identify and articulate legal issues’. According to the Notes in the LLB LTAS Statement:

Law graduates should be able to examine a text and/or a scenario (for example, a set of facts, a legal document, a legal narrative, a statute, a case report, or a law reform report), find the key issues (for example, unresolved disputes, ambiguities, or uncertainties), and articulate those issues clearly as a necessary precursor to analysing and generating appropriate responses to the issues. This skill includes the ability to discriminate between legal and non-legal issues, and between relevant and irrelevant issues. Graduates should know that not every issue is a legal issue, and that not every legal issue warrants a legal response.33

TLO3b is the ability to ‘apply legal reasoning and research to generate appropriate responses to legal issues’. According to the Notes:

‘Legal reasoning’ is typically understood to be the practice of identifying the legal rules and processes of relevance to a particular legal issue and applying those rules and processes in order to reach a reasonable conclusion about, or to generate an appropriate response to, the issue. Students are often introduced to the practice of legal reasoning by being taught the ‘IRAC’ or ‘ILAC’ method: issue, rule/law, application, conclusion. … The reference to ‘appropriate’ responses to legal issues acknowledges that not every legal issue requires a legalistic or adversarial response. Graduates should have an understanding of the full spectrum of available and appropriate responses to legal issues (for example, conciliatory, non-adversarial options, as well as adversarial, court-oriented options; and commercial as well as legal options) and be able to choose amongst them.34

TLO3a and TLO3b are considered together in this article because the identification of issues and the application of the law to generate responses to

32 Contract law, tort law, real and personal property law, equity (including trusts), criminal law and procedure, civil procedure, evidence, professional conduct (including basic trust accounting), administrative law, federal and state constitutional law, and company law - Consultative Committee of State and Territorial Law Admitting Authorities, Uniform Admission Requirements: Discussion Paper and Recommendations (1992).
33 Kift, Israel and Field, above n 1, 17-18.
34 Ibid, 18.
those issues are typically considered together in the literature and taught together under the broad heading of ‘legal reasoning’.

Legal reasoning is taught implicitly and constantly throughout a law student’s legal studies in the sense that they are called upon to engage in legal problem solving in almost all of their law subjects. All law students also receive explicit instruction in formal legal reasoning, usually in the first year of their legal studies as a component of an introductory law subject. At ANU College of Law, for example, legal reasoning is a component of the first year subject Foundations of Australian Law; at Bond University it is a module in Legal Skills (a subject taught in connection with other relevant substantive law subjects over a number of semesters during the degree); at Charles Darwin University it is taught in the first year subjects Introduction to Legal Studies and Legal Interpretation; at University of Queensland it is taught in the first year subjects Legal Method and Law in Society; and so on.

In the following description, analysis, and synthesis of the relevant academic literature, the focus is upon explicit rather than implicit instruction in legal reasoning. However many of the points about the scope of legal reasoning and the form that instructions to students might take will be of relevance and of interest to any law teacher who calls upon students to engage in legal reasoning and solve problems.

\[ A \quad \text{Legal reasoning texts} \]

There is an abundance of academic literature concerned with the nature of legal reasoning and the teaching of reasoning and problem-solving skills to law students, including:

- texts addressed primarily to students that explain legal reasoning as an essential skill for both the study and the practice of law;
- texts addressed primarily to legal academics as teachers that offer techniques for teaching legal reasoning or argue in favour of extending the scope of ‘legal reasoning’ beyond the traditional emphasis upon formalistic reasoning; and
- texts addressed primarily to legal academics as scholars that are concerned with clarifying the precise nature of ‘legal reasoning’ by lawyers and judges, and determining the differences, if any, between legal reasoning and other forms of reasoning.

Many Australian introductory law textbooks include chapters on basic legal reasoning. Chapter 2 of the popular first year text, Connecting with Law by Sanson, Anthony and Worswick, is titled ‘Learning Law: How Can I Develop a Legal Mind?’ It identifies the principal characteristics of ‘thinking like a lawyer’ as non-assumptive thinking; facts over emotions; a tolerance of

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35 In the author’s opinion, it would therefore have been more appropriate for the first two parts of TLO3 to be drafted as a single part.
36 Michelle Sanson, Thalia Anthony and David Worswick, Connecting with Law (Oxford University Press, 2nd ed, 2010).
ambiguity; an ability to make connections between facts, documents and laws; verbal mapping and ordering; and automatic devil’s advocacy. The chapter also sets out brief explanations of inductive and deductive reasoning, critical thinking, and the IRAC (issue – rule – application – conclusion) approach to legal problem solving. Other introductory law texts that include coverage of legal reasoning include Head and Mann’s Law in Perspective and Hinchy’s The Australian Legal System: History, Institutions and Method.

A good example of an Australian student text that focuses upon legal reasoning is Keyzer’s Legal Problem Solving – A Guide for Law Students. Keyzer explains in detail the traditional method of legal problem solving - identifying the issues; stating relevant legal authorities; applying the law; arguing the facts; and reaching a conclusion - and demonstrates how the method can be applied in the solution of examination questions. Sample answers prepared by students are analysed and discussed, a feature of the text of considerable practical use to both law students and law teachers.

Schauer’s Thinking Like a Lawyer: A New Introduction to Legal Reasoning is a student text from the US. Schauer’s text is described as a primer on legal reasoning written for law students. Many of the chapters in the book are concerned with the traditional first year topics - the nature of law and of common law, statutory interpretation, judicial reasoning, the doctrine of precedent and the like - and the US focus makes these Chapters largely unhelpful for Australian students. Chapters 3, 5 and 7, however, are more useful: Chapter 3 is about the nature of authority, and the differences between legitimate and illegitimate authorities when engaging in legal reasoning; Chapter 5 explains the relevance of analogies to legal reasoning; and Chapter 7 presents the legal realist challenge to traditional understandings of legal and judicial reasoning, as well as a brief overview of the contribution made by the Critical Legal Studies movement to the debate.

Another helpful US text for students is Romantz and Vinson’s Legal Analysis: The Fundamental Skill. Romantz and Vinson provide an overview of the foundations of legal reasoning and of the different types of critical thinking necessary to conduct a sophisticated analysis of legal problems. Their approach to legal analysis is captured by the acronym ‘CREAC’: conclusion – rule – explanation of the rule – application of the rule – conclusion. They insist that legal analysis should begin with the conclusion because in legal practice that is likely to be what the person the lawyer is advising is most interested in and wants to see first. They offer a number of practical tips for engaging in effective legal decision making.

37 Michael Head and Scott Mann, Law in Perspective: Ethics, Society and Critical Thinking (UNSW Press, 2005) – Chapter 2, ‘Legal reasoning’, is part of a broader analysis of the relationships between logic, science and law in the first section of the book.
40 Frederick Schauer, Thinking Like a Lawyer: A New Introduction to Legal Reasoning (Harvard University Press, 2009).
analysis, including justifying the conclusion with a clear, logical analysis; weaving the law and the facts together; explaining the law before applying the law; understanding the law before applying the law; analysing one issue at a time; analysing the opponent’s argument; being concise; and remembering the alternative arguments. The authors also emphasise the importance of applying the law rather than mechanically memorising the law or relying too heavily on formulaic analysis.

An example of a text intended to assist legal academics teaching legal reasoning rather than law students learning legal reasoning is the recent article Deepening the Discourse Using the Legal Mind’s Eye by Hillary Burgess. Burgess presents research that demonstrates how incorporating visual aids and exercises into learning environments can help students to develop higher-order cognitive skills such as ‘thinking like a lawyer’. Burgess begins by explaining what higher order cognitive skills are and by mapping the various steps in legal reasoning onto Bloom’s taxonomy of learning objectives (level 1 – remembering, level – understanding, level 3 – applying, level 4 – analysing, level 5 – evaluating, and level 6 – creating). Burgess argues that the legal curriculum traditionally teaches the lowest four levels of learning but tests the highest four levels of learning. To help law teachers to teach all six levels of learning, Burgess offers a neuroscience and cognitive psychology perspective on how students learn legal reasoning. She reviews research that indicates that students learn more, learn at deeper levels, and retain information longer when they engage in ‘multimodal’ learning, especially learning involving visual aids and visual exercises, and provides concrete guidelines for law teachers interested in incorporating visual aids and visual exercises effectively when teaching legal reasoning.

In Effects of Conceptual Knowledge and Availability of Information Sources on Law Students’ Legal Reasoning, Nievelstein et al emphasise the importance of conceptual knowledge when learning how to engage in legal reasoning. For newcomers to law school, legal reasoning is a difficult skill to learn because they have not yet acquired the conceptual knowledge needed to distil the relevant information from cases, determine applicable rules, and search for rules and exceptions in external information sources such as textbooks. The authors discuss the implications of their finding that in the absence of basic conceptual knowledge about law, access to textbooks and the like does not assist law students to learn legal reasoning skills.

Other texts offering assistance to those teaching legal reasoning include articles by Hammond, Wolff, and Martin.

43 Ibid.
45 Ibid.
46 Celia Hammond, ‘Teaching Practical Legal Problem Solving Skills: Preparing Law Students for the Realities of Legal Life’ (1999) 10(2) *Legal Education Review* 191 – A description of the development and teaching of the subject Legal Problem Solving at Notre Dame University,
One example of the many texts about legal reasoning addressed to legal academics as scholars rather than as teachers is Alexander’s *Demystifying Legal Reasoning*. Alexander takes the view that there is no distinct form of ‘legal’ reasoning. Rather, lawyers engage in ordinary forms of reasoning that are familiar to most advisors and decision makers: deduction from authoritative rules, empirical reasoning and open-ended moral reasoning.

Other recent examples of legal reasoning texts that take a more abstract, theoretical approach to the topic include works by Scharffs, Brozek and Stelmach, and Posner.

### B Formalistic approaches

Legal reasoning is often taught to first year law students as a formalistic series of steps labelled with an acronym such as:

- **IRAC** (issue – law – application – conclusion),
- **HIRAC** (heading – issue – rule – application – conclusion),

and how the subject was structured as closely as possible to simulate the real life world of private legal practice.

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51 Brett G Scharffs, ‘The Character of Legal Reasoning’ (2004) 61(2) *Washington and Lee Law Review* 733. According to Scharffs, legal reasoning is composed of three ideas or concepts, each of which lies at the heart of Aristotle’s practical philosophy: (1) _isprónesis_, or practical wisdom, (2) _techne_, or craft, and (3) _rhetorica_, or rhetoric. Only in combination do practical wisdom, craft, and rhetoric create a balanced, complete, and compelling account of legal reasoning.

52 Bartosz Brozek and Jerzy Stelmach, *Methods of Legal Reasoning* (Law and Philosophy Library, 2006). Brozek and Stelmach describe and criticize four methods used in legal practice, legal dogmatics and legal theory – logic, analysis, argumentation and hermeneutics – and question the assumptions standing behind these methods, the limits of using them and their usefulness in the practice and theory of law.

53 Richard Posner, *How Judges Think* (Harvard University Press, 2008). Posner focuses upon legal reasoning by judges, and argues that when judges can ascertain the true facts of a case and apply clear pre-existing legal rules to them, they do so straightforwardly, but in non-routine cases, judges draw upon their experience, emotions, and often unconscious beliefs. In doing so, they take on a legislative role, though one that is confined by professional ethics, opinions of colleagues, and limitations imposed by other branches of government.

• IREAC (issue – rule – explanation of rule – application – conclusion);56
• MIRAT (material facts – issues – rules – arguments – tentative conclusion),57 or
• CREAC (conclusion – rule – explanation of rule – application of rule – conclusion).58

Students are taught how, when presented with a set of facts in the form of a tutorial problem or an exam question, they should identify the legal issues and, considering each issue carefully and logically, apply the relevant legal rules to the facts in order to reach a rational and convincing conclusion about the legal consequences of the particular situation.

Some writers praise such approaches to legal reasoning. According to Metzler, for example, IRAC is much more than an organisational tool, it is an important mental exercise that forces a lawyer to a deeper understanding of the legal issues at stake, and an understanding of IRAC is the key to success on law school exams and a successful career in law.59 Other writers, however, are more critical of such approaches. Taylor, for example, argues that step-by-step approaches emphasise form over content and lead to a false picture of the nature of legal problem solving.60 Other criticisms of formalistic approaches to legal reasoning are set out below.61

The prevailing view in Australia appears to be that formalistic techniques such as IRAC are useful for students new to the study of law, but as they progress through their legal studies the ‘scaffolding’ offered by the step by step techniques should recede into the background in favour of a greater emphasis upon ‘flow’ in the student’s reasoning and consequent improvements in subtlety and persuasiveness.62

C Legal reasoning and logic

When judges and legal theorists synthesise numerous legal decisions into a general legal principle they engage in inductive reasoning. When lawyers and
judges apply a general legal principle to a particular legal problem they engage in deductive reasoning. When lawyers argue about whether or not a particular precedent should be followed they engage in reasoning by analogy. An understanding of the principles and standards of logic that support and legitimate these various forms of reasoning and argument is an extremely useful tool for any lawyer seeking to construct their own arguments or to understand, or undermine, the arguments of others.

Law students therefore benefit from at least some training in basic logical reasoning. US scholars such as Scott as long ago as 1968 called for a greater emphasis upon explicit logic training in the law school curriculum. More recently, Crowe has advocated the teaching of logical reasoning to law students. And as we saw earlier, first year textbooks such as that by Sanson et al include some of the basic principles of logical reasoning in their explanation of legal reasoning.

In Logic for Law Students: How to Think Like a Lawyer, Aldisert, Clowney and Peterson argue that ‘thinking like a lawyer’ essentially means employing logic to construct arguments. They make a case for teaching all law students the fundamentals of deductive reasoning, the principles of inductive generalisation, and the process of reasoning by analogy. They also make the important point that legal reasoning is not entirely logical: even if premises are true and logical statements constructed properly, it is important to recognise that judges are motivated by more than the mandates of logic.

D Legal reasoning and policy

Strict legal formalism as a model of legal reasoning has been criticised by numerous legal theorists. According to the critics of formalism, the use of formalistic techniques such as IRAC does not produce ‘correct’ or even realistic answers to legal problems. At best it assists in the identification of the range of possible legal responses. Other considerations come into play when judges and other legal decision makers have to choose between these possible responses. Often these other considerations are policy considerations, and a number of writers have emphasised the importance of law students learning to engage in a

63 Michael F C Scott, ‘A Plea for the Study of Logic’ (1968) 21(2) Journal of Legal Education 206;
66 Sanson et al, above n 35; Chapter 2. Head and Mann address logical thinking in considerable depth: Head and Mann, above n 37.
68 See also Posner, above n 53, 348.
form of legal reasoning that takes into account not only the relevant legal rules but also the various policies underlying those rules.

One such text is Vandevelde’s *Thinking Like a Lawyer: An Introduction to Legal Reasoning*. Vandevelde’s text is one of the more comprehensive yet accessible studies of legal reasoning available. Although it is a US text, it is an enormously useful resource for those looking to teach legal reasoning in a way that emphasises understanding and use not only of legal rules but also the policies underlying those rules. In that regard the text is consistent with the sentiments expressed in the Notes accompanying TLO3 (above).

Vandevelde posits that the goal of legal reasoning or ‘thinking like a lawyer’ is to identify the rights and duties of particular individuals in particular circumstances. This involves five steps:

1. identifying the applicable sources of law, usually statutes and judicial decisions;
2. analysing these sources of law to determine the applicable rules of law and the policies underlying those rules;
3. synthesising the applicable rules of law into a coherent structure in which the more specific rules are grouped under the more general ones;
4. researching the available facts; and
5. applying the structure of rules to the facts to ascertain the rights or duties created by the facts, using the policies underlying the rules to resolve difficult cases.

Legal reasoning is essentially a process of attempting to predict or, in the event of litigation, influence the decision of a court. It is structured as if based on logic but in reality is impossible without reference to the underlying policies. These policies are rarely consistent and frequently in conflict, and so legal reasoning involves having to decide which of the underlying policies is to prevail. Since legal reasoning can rarely predict an outcome or result with perfect accuracy, it often involves identifying the range of possible outcomes and the relatively likelihood of each.

Midson also writes about the importance of policy considerations in her article *Teaching Causation in Criminal Law: Learning to Think Like Policy Analysts*. Like Vandevelde, for Midson the challenge for legal education is to teach legal reasoning so that students are better able to identify and apply unarticulated policy reasons. It is essential to draw students' attention to the fact that 'invisible factors'

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72 Ibid.
73 Ibid.
operate in legal decision-making, and to encourage students to look beyond the legal principles or rules in a case to identify what those invisible factors are and how to utilise them in problem-solving.

E   Expanding the scope of legal reasoning

Recent legal reasoning scholarship has been critical of the traditional emphasis upon logic and rationality when teaching students how to ‘think like lawyers’, and called for greater emphasis to be placed on other factors such as the recognition of commercial considerations, non-adversarial responses, concern for social justice issues and empathy for others.

Formalistic methods such as IRAC are frequently inconsistent with commercial considerations and the realities of legal practice. In law school, students are presented with legal problems and instructed to resolve them in the manner of a judge, considering both sides of the argument and identifying the best or most likely conclusion. In practice, lawyers are often instructed to begin with a particular position – one consistent with the desires of the client – and then work ‘backwards’ to construct legal arguments that support that position.\(^75\) This suggests that law teachers should give some thought to the ways in which legal problems are phrased, and what law students are instructed to do.\(^76\)

According to the Notes to TLO3 in the LLB LTAS Statement, the range of possible legal responses identified as an outcome of legal reasoning should include not only adversarial responses (eg, X can sue Y for breach of contract), but also non-adversarial responses (eg, X should be encouraged to approach Y and suggest mediation as means of resolving the dispute). This is a point affirmed by, and expanded upon, in articles by Gutman,\(^77\) King,\(^78\) Finlay et al,\(^79\) Kraemer and Singer,\(^80\) and others.\(^81\) It is not the case that law students can only be encouraged to consider such non-adversarial possibilities when being taught legal reasoning for the first time. Non-adversarial solutions to legal problems can and should be explored as part of the content of the various doctrinal law subjects. King, for example, argues that the law school curriculum should include ‘therapeutic jurisprudence, restorative justice and other non-adversarial modalities not as components of separate units but as key components integrated

\(^75\) Regarding the ways in which the professional context impacts upon lawyers’ reasoning see Miller and Charles, above n 70, 203.
\(^76\) The use by lawyers and law students of legal and policy arguments for the purposes of advocacy is addressed extensively throughout Vandeveld, above n 71.
into the teaching of core legal subjects’. In her paper Facing Down the Gladiators: Addressing Law School’s Hidden Adversarial Curriculum, Molly Townes O’Brien critiques the traditional emphasis upon adversarialism in Australian legal education, and calls upon law schools to better prepare students for the wide variety of roles they will play as lawyers by incorporating more non-adversarial processes and materials into the curriculum.

Other writers insist that the teaching of legal reasoning should include references to social justice issues. In Thinking Like a Public Interest Lawyer: Theory, Practice and Pedagogy, Agarwal and Simonson argue that legal education should foster in students the critical faculty to not only think logically but also to ask and answer questions about what is ‘good, right and just’. Similarly Aiken, in her article Provocateurs for Justice, calls upon law teachers to inspire their students to commit to justice.

In Thinking Like Non-Lawyers: Why Empathy is a Core Lawyering Skill and Why Legal Education Should Change to Reflect Its Importance, Gallacher recommends that law teachers change the way they teach legal reasoning, especially to first year law students, in order to make them more empathetically aware of the circumstances by which the court opinions they study arose and the effects those opinions will have on others. He argues that such changes will not only make lawyers better people, they will make them better lawyers. He examines the dangers inherent in an overemphasis on the ‘logical’ form of analysis taught in law schools, and explores real-life examples of logical thinking that failed to persuade non-lawyers in the form of a jury. He also looks at a successful example of empathetic lawyering to show how it can be more effective, and offers specific proposals to help law schools ameliorate the dangers of an over-emphasis on ‘thinking like a lawyer’.

These and similar texts make the point that the teaching of legal reasoning should emphasise not only formalistic problem solving and logical reasoning but also policy considerations, commercial realities, non-adversarial solutions and a concern for social justice and the wellbeing of others. Treating these matters as somehow separate from ‘legal reasoning’ may be tempting, but may not be appropriate. It would send an inconsistent and troublesome message to law students if they were told in some law subjects to strive to be logical, rational and unemotional and in other subjects to aspire to be good, do good and care for others. It would be better if these ideals could be reconciled in a more nuanced approach to the development of legal reasoning skills from their very first class.

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82 King, above n 78, 1124.
87 Ibid.
TLO3c is the ability to ‘engage in critical analysis and make a reasoned choice amongst alternatives.’ According to the Notes in the LLB LTAS Statement:

‘Critical analysis’ is the practice of examining a text, claim or argument and identifying the hidden structures: for example, legal and non-legal issues; premises and hypothesis; factual, theoretical and ideological assumptions; undisclosed biases and prejudices; and so on. The word ‘critical’ emphasises that analysis is a high-level, conceptually analytical activity; it does not mean simply being confrontational or negative – the outcome of critical analysis can be agreement with the text, claim or argument.

Making a ‘reasoned choice among alternatives’ involves critical evaluation of a text, claim, argument or response to a legal issue. It requires identification of the strengths and weaknesses, advantages and disadvantages, accuracies and flaws in a text, claim, argument or response (usually by comparing the text, claim, argument or response with one or more criteria such as truth value, doctrinal correctness, practicality, or consistency with an ideological standard such as the rule of law or social justice).

The use of the word ‘reasoned’ emphasises that the choice must be justified, supported by evidence, and consistent with the critical analysis. Graduates must be able to explain the basis for adopting a particular point of view.

TLO3c is the ability to engage in critical analysis and evaluation. Analysis and evaluation are two of the key skills associated with the ability to engage in ‘critical thinking’, and it is therefore appropriate to refer to the critical thinking literature when determining what it means to teach law students how to analyse and evaluate, and why it is so important that they learn to do so.

An excellent starting point is the American Philosophical Association report, Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction (the APA Report). In 1990, under the sponsorship of the American Philosophical Association, a cross-disciplinary panel of 46 experts representing scholarly disciplines in the humanities, sciences, social sciences, and education completed a two-year project which resulted in the following conceptualisation of critical thinking as an outcome of university level education:

We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based. Critical thinking is essential as a tool of inquiry. As such, critical thinking is a liberating force in education and a powerful resource in one's personal and civic life. While not synonymous with good thinking, critical thinking is a pervasive and self-rectifying human phenomenon. The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit.

88 Kift, Israel and Field, above n 1.
Thus, educating good critical thinkers means working toward this ideal. It combines developing critical thinking skills with nurturing those dispositions which consistently yield useful insights and which are the basis of a rational and democratic society.  

The six critical thinking skills identified and described in the APA Report are interpretation, analysis, evaluation, inference, explanation and self-regulation. The skills of direct relevance to TLO3 are the first four. The other two skills relate to other Threshold Learning Outcomes: ‘explanation’ relates to TLO5 Communication and collaboration, and ‘self-regulation’ relates to TLO6 Self management.

This conceptualisation of critical thinking skills reveals how critical thinking and legal reasoning are not mutually exclusive. Instead, legal reasoning can be seen as a specific application of critical thinking skills. When a lawyer identifies a legal issue, they are exercising their interpretation skills to understand the facts with which they are presented, and their analysis skills to separate the material facts from the irrelevant facts and identify the underlying legal issue. When they identify the relevant legal rules, they are exercising their interpretation skills and analysis skills to recognise which legal principles are relevant. When they apply the rules to the facts of the problem, they are exercising their evaluation skills by assessing the facts in light of the rules. And when they reach a conclusion, they are exercising their inference skills to draw a conclusion from the earlier exercise of their other skills, their explanation skills to present a clear and well argued conclusion, and their self-regulation skills to double check their reasoning.

The APA Report is not alone in its emphasis upon the importance of critical thinking. Critical thinking is widely seen as a form of higher order thinking, and is frequently referred to in lists of assessment criteria and standards across a range of disciplines including law. However, unlike legal reasoning, critical thinking is rarely taught to law students explicitly, and it is usually something left for the students to work out for themselves or is assumed to be something already understood by the students by the time they arrive at law school. This is not a phenomenon unique to the law school. Haas and Keeley question why so many academics in a variety of disciplines are resistant to the teaching of critical thinking, and posit that many academics have not experienced the critical thinking approach as part of their own education, have not been specifically trained in

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critical thinking, and are too busy providing information and helping students understand models to worry about whether students can think critically.91

There are many accessible sources of information about critical thinking and how it can be taught, including:

- texts about critical thinking written for students and for anyone seeking to develop their own critical thinking skills; and
- texts written for teachers about how best to teach others how to think critically.

A good example of the first type of text is Cottrell’s *Critical Thinking Skills - Developing Effective Analysis and Argument*, a guide to developing critical thinking skills with an emphasis upon argument and logical reasoning.92 Another excellent resource for anyone interested in learning more about critical thinking is Facione’s engaging (and periodically updated) online essay *Critical Thinking: What It Is and Why It Counts*.93

There is a relatively small number of critical thinking texts written explicitly for law teachers. In *Embedding Graduate Attributes within Subjects: Critical Thinking*, the author explains the meaning and importance of critical thinking within the context of legal education and legal practice, and describes how the graduate attribute of ‘the ability to engage in critical thinking about law’ can be developed within a law subject by being embedded within the learning objectives, the learning activities and the assessment activities for the subject.94

Another, more practical, example of a critical thinking article written for law teachers is Macduff’s *Deep Learning, Critical Thinking, and Teaching for Law Reform*.95 Macduff describes how the learning activities in an undergraduate family law subject were designed to promote critical thinking and a deep approach to learning.96

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91 Paul F Haas and Stuart M Keeley, ‘Coping with Faculty Resistance to Teaching Critical Thinking’ (1998) 46(2) College Teaching 63.
92 Stella Cottrell, *Critical Thinking Skills - Developing Effective Analysis and Argument* (Palgrave Macmillan, 2005). This is just one of dozens of critical thinking handbooks, manuals and articles that are available.
94 James, above n 90.
96 One of the learning goals for the subject was that the students should be able to use theory to generate critical insight into their own thinking about marriage law reform. In the first class the students were instructed to identify their views on same sex marriage and write a page of supporting arguments. The following classes presented information covering the different theoretical approaches to family law and the substantive law surrounding marriage formation and divorce. The students were then asked to refer back to the statement they had made in the first class and (1) analyse their arguments for any similarities with other theoretical positions that had been covered, (2) with the knowledge they had gained from discussing the theoretical frameworks, identify the discourse that would respond critically to their initial position and
Other critical thinking texts of direct relevance to law teachers include those by Fulcher,97 Nagarajan and Parashar,98 and James et al.99

Most of the critical thinking literature identifies critical thinking as a combination of certain skills (including analysis and evaluation) and a certain attitude or disposition, and argues that students benefit from critical thinking being taught explicitly rather than the ability to engage in critical thinking being assumed or left to the students to teach themselves. At the very least explicit training in critical thinking clarifies for students the meaning of terms such as ‘interpret’, ‘analyse’ and ‘evaluate’ that they are likely to encounter throughout their studies.

V TLO3D - CREATIVE THINKING

TLO3d is the ability to ‘think creatively in approaching legal issues and generating appropriate responses.’ According to the Notes in the LLB LTAS Statement:

‘Think creatively’ in this context builds on a graduate’s ability to diagnose the specific requirements of a particular legal issue on its facts and determine the most appropriate response from the spectrum of available responses. It requires a capacity to think laterally and engage in transferable problem-solving; for example, conceiving new responses to old problems using accepted legal reasoning techniques. It includes an understanding of inductive and deductive reasoning. This element of the TLO, therefore, requires graduates to be familiar with a range of alternative dispute resolution processes, such as negotiation and mediation. Graduates should be able to appreciate the benefits of alternative and non-adversarial approaches, as well as formal adversarial approaches, and be able to use that appreciation to generate tailored responses to a legal issue.100

This explanation repeats the earlier emphasis upon adversarial versus non-adversarial outcomes. The reference to ‘inductive and deductive reasoning’ affirms the points made earlier about the importance of logical reasoning. The key skill in TLO3d is creativity; it is the ability to approach legal issues and generate responses to those issues ‘creatively’, that is, with an awareness of the full range of possible responses – legalistic and non-legalistic, adversarial and non-adversarial - and with an ability and willingness to consider responses that explain why, and (3) either develop counter arguments to the critique, or accept the critique and modify their position. The activity did not attempt to persuade the students of a particular outcome of law reform. Rather, the activities were structured so that students used their critical thinking skills and recently acquired legal and theoretical knowledge to engage with their own perspectives on issues relating to law reform and social change.

100 Kift, Israel and Field, above n 1.
are innovative, unorthodox, or unexpected. Like critical thinking, creative thinking is closely related to legal reasoning: a lawyer uses their creative skills, for example, when they construct an innovative yet persuasive legal argument, or when they identify an unorthodox yet valid solution to a legal problem.

The importance of creativity has been acknowledged beyond the discipline of law: in 2001 Bloom’s taxonomy of education objectives was revised to situate ‘create’ as the highest of higher-order learning skills.\(^{101}\)

The ability to think creatively is clearly of relevance and use to lawyers, whether they are drafting a contract, negotiating a deal or arguing a case in court. According to Weinstein and Morton, creative thinking is an essential component of legal problem solving.\(^{102}\) From the perspective of law practice, critical thinking is useful when lawyers are engaged in traditional legal problem solving in the adversarial context, particularly in litigation, but lawyers use creative thinking when they, for example, help clients consider what alternatives might exist for solving their problems. Weinstein and Morton call upon law teachers to do a better job of incorporating and supporting creative thinking in legal education.\(^{103}\)

Creativity is not something that is usually taught explicitly at law school. Legal education has traditionally focused upon developing the ability to engage in structured, logical and constrained forms of thinking, and creativity by law students has not been encouraged.

According to Magone and Friedland, on the one hand law is a science based on a finite body of decisions, statutes and other raw materials that can be studied and from which new disputes can be resolved, but on the other hand, law is also an art form ‘infused with imagination and creativity’ with rarely only a single conclusion or only a single path to that conclusion, and it is difficult to reconcile law as science and law as art in the context of legal education.\(^{104}\) While in practice legal reasoning often utilises a considerable degree of creativity, it is usually taught to law students in a way that emphasises technical proficiency and structural similarity over innovation and exploration, and the effort by law teachers to develop analytical rigour in their students often leads to a minimisation of creative talents and creative thinking.\(^{105}\)

The traditional distrust of creativity is reflected in the reassurance in the Notes to TLO3 that:

> The term ‘think creatively’ does not mean that it is appropriate to ignore precedent and practice, and just ‘make things up’. Instead, it should be interpreted in the

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\(^{101}\) Lorin Anderson and David Krathwohl (eds), A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom’s Taxonomy of Education Objectives (Longman, 2001).


\(^{103}\) Ibid. See also Robin Yeamans, ‘Creativity and Legal Education’ (1971) 23(3) Journal of Legal Education 381. Not everyone agrees, however, that creativity in the context of legal education is important or even meaningful - see Dietrich, above n 16.


\(^{105}\) Ibid.
context of the Bachelor of Laws degree as relating to the development of ‘responses to legal issues’. 106

In order for law students to learn to think creatively in the manner envisaged by TLO3, the curriculum must include the study of forms of alternative dispute resolution and non-adversarial approaches to legal problem solving. Should it also include instruction in creative thinking? In recent years a number of scholars – from both within and beyond the discipline of law – have called for creativity to be encouraged, and even explicitly taught, at university, and there is a small but growing number of scholarly resources available to law teachers to assist them in this endeavour.

Robinson argues that students can be taught generic skills of creative thinking, just in the way they can be taught to read, write, and do math. 107 According to Robinson, creativity can be taught to students by encouraging them to experiment and to innovate, and by not giving them all the answers but giving them the tools they need to find out what the answers might be. 108

In Stuck in a Rut: The Role of Creative Thinking in Problem Solving and Legal Education, Weinstein and Morton examine the mental process of creative thinking. They discuss what it is, why lawyers have difficulty engaging in it, and how law teachers can overcome this difficulty through specific techniques and a more conducive environment. 109

In Aha? Is Creativity Possible in Legal Problem Solving and Teachable in Legal Negotiation?, Carrie Menkel-Meadow explains the relevance of creativity to legal problem-solving, and draws upon social science studies and literature on creativity to explain how creative problem solving can be taught to students when teaching them about negotiation and litigation. 110

In The Paradox of Creative Legal Analysis: Venturing into the Wilderness, Magone and Friedland describe how they introduced creative thinking as a tool to promote analytical thinking in a law subject. They experimented by using student creativity in their classes in combination with, and as a supplement to, traditional case analysis. 111 The use of the creative arts – such as painting, photography and filmmaking – was incorporated as an optional part of student assignments and examinations. The authors found that having students use creative arts in their legal education promoted reasoning abilities and engaged them ‘actively, frequently and happily’ in the learning process. It also emphasised and illuminated an important aspect of the analytical enterprise, deliberation in

106 Kift, Israel and Field, above n 1.
108 Ibid.
111 Magone and Friedland, above n 104.

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thinking, because the students and teacher had more time to think about the particular case or legal principle.  

In *Exceeding the Boundaries of Formulaic Assessment: Innovation and Creativity in the Law School*, Phillips et al describe how in their Land Law subject at University of Greenwich the students were required to create a web page. The topic of the assignment was ‘What is land?’ The students were instructed to take, or find, a photograph of an object or structure which may or may not form part of the land, and to present an argument as to whether or not their chosen object does or does not form part of the land. The assessment task was intended to bring out the creative side of the students and to engage them in the subject.

Blythe and Sweet in *Why Creativity? Why Now?* focus upon two important aspects of teaching creativity – the creative environment and the creative process. Establishing a creative environment requires an open atmosphere where students are free to take risks, bad guesses are not pounced on, every answer is not necessarily right or wrong, and students are free to look at things in ways without fear of punishment, condescension, or a bad grade. Teaching the creative process involves facilitating the development of certain skills by the students, such as goal orientation (creativity often emerges when working towards a goal), brainstorming, piggy-backing (building upon an existing idea), perception shifting (looking at something from a different angle), synthesis, and meta-cognition.

While it is unlikely to be feasible for stand-alone subjects on creative legal thinking to be made part of the law curriculum, it does appear possible for law teachers to create more opportunities within existing subjects for creativity to flourish, and for assessment tasks to recognise and reward creative thinking by students.

VI CONCLUSION

This article has sought to assist those law schools and legal academics concerned about being called upon to demonstrate the ways in which the Threshold Learning Outcome ‘thinking skills’ is developed by their students. It has done so by summarising, analysing and synthesising the relevant academic literature. Consistent with the explanation of the TLO in the LLB LTAS Statement, ‘thinking skills’ have been conceptualised as a combination of legal reasoning, critical thinking and creative thinking skills.

The emphasis in this article has been upon identifying a variety of explanations of the nature and importance of each of these skills as well as, to a lesser extent, the ways they can be taught to law students. Relatively little has been said, however,
about how these skills can and should be *assessed*. This is a topic for subsequent exploration.

There are many other important questions that are suitable topics for further consideration. Are ‘thinking skills’ something best taught as a discrete topic in a discrete subject, or should they always be taught in the context of a particular doctrinal area? Can the ability to identify issues be taught explicitly, and if so how? When teaching legal problem solving, how much emphasis should be placed upon developing the ability to identify and resolve (a) policy issues and (b) factual issues? Should all law students be obliged to complete subjects/modules on logic and critical thinking? When teaching legal reasoning, what is the most appropriate balance between teaching students to be amoral and objective, and encouraging them to be ethical and empathetic? Should creativity be taught explicitly to law students, and if so, how?

The TLOs were not intended to be so prescriptive that they dictate the content of particular law subjects or the use of particular methods of assessment, or lead to inappropriate and unnecessary consistency across Australian law schools. There is nevertheless a pressing need for further academic conversation about what kinds of ‘thinking skills’ are appropriate for law students in the 21st century, how they can be taught, and how the effectiveness of our teaching efforts can be demonstrated to the relevant regulatory bodies.

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118 Kift, Israel and Field, above n 1, 5-6.