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# Measuring the Critical Thinking Skills of Law Students Using a Whole-of-Curriculum Approach

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## MEASURING THE CRITICAL THINKING SKILLS OF LAW STUDENTS USING A WHOLE-OF-CURRICULUM APPROACH

## NICK JAMES\* AND KELLEY BURTON\*\*

## I INTRODUCTION

An ability to think critically is highly valued in legal education and in higher education generally. The Australian Qualifications Framework, for example, requires Bachelor degree graduates to be able to think creatively and critically 'in identifying and solving problems with intellectual independence' and to have the 'cognitive skills to critically review, analyse, consolidate and synthesise knowledge'.<sup>1</sup> Within the *Bachelor of Laws Learning and Teaching Academic Standards Statement*, Threshold Learning Outcome (TLO) 3 is concerned with legal reasoning, critical thinking and creative thinking skills, and makes explicit reference to 'critical analysis'.<sup>2</sup>

The development of critical thinking skills by law students has the potential to result in a range of benefits for the law students, for their future employers, and for the wider community. An ability to think critically can, for example, facilitate a more thorough and sophisticated understanding of legal doctrine. Rather than accepting doctrine at face value, the law student is able to discern the doctrine's internal structure and its external context, identify the doctrine's benefits and its flaws, develop their own individual and informed views about the doctrine, and take action to utilise or reform the doctrine. An ability to think critically can also empower a law student to distinguish between high and low quality information, assisting

and Innovation in Legal Education (LexisNexis, 2011) 69.

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<sup>&</sup>lt;sup>1</sup> Australian Qualifications Framework Council, 'Australian Qualifications Framework' (Framework Document, Australian Qualifications Framework Council, 1 January 2013)

<sup>&</sup>lt;sup>2</sup> Sally Kift, Mark Israel and Rachael Field, Bachelor of Laws Learning and Teaching Academic Standards Statement (Australian Learning and Teaching Council, 2010) <http://www.cald.asn.au/assets/lists/ALSSC%20Resources/KiftetalLTASStandards Statement2010.pdf>. See also Nickolas James, Clair Hughes and Clare Cappa, 'Conceptualising, Developing and Assessing Critical Thinking in Law' (2010) 15 Teaching in Higher Education 285; Nickolas James, 'Embedding Graduate Attributes within Subjects: Critical Thinking' in Sally Kift et al (eds), Excellence

them to deal with the enormous flood of daily information and effectively navigate virtual information environments.

Critical thinking is an important practical skill for solving legal problems, particularly once the law student moves beyond the simple formalism that they are taught in the early part of their legal studies. When presented with the details of a problem, the student is able to interpret the information given; analyse it to identify any missing information, unspoken assumptions and implicit biases; evaluate its accuracy and reliability; and synthesise the results of their interpretation, analysis and evaluation to determine whether there is a need for more detail or information from another source, and to identify the most appropriate legal rules to be used to prepare the advice. After conducting the requisite legal research the student is able to apply their critical thinking skills to interpret the legal rules and doctrines that they locate; analyse the information to determine its underlying structure; evaluate it for relevance and reliability; and synthesise the results in reaching an informed and persuasive conclusion about the legal problem and preparing appropriate advice for the client.

An awareness of the social consequences of a legal rule or decision and an ability to discern the flaws in the current legal system also facilitate a law student becoming part of the process of legal and social reform. This is consistent with calls for a greater emphasis upon social justice in legal education,<sup>3</sup> and for law schools to 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'.<sup>4</sup>

These potential benefits of an ability to engage in critical thinking are more likely to be realised if the teaching and assessment of critical thinking is effectively embedded within and across the law school curriculum.<sup>5</sup> The effective assessment of critical thinking skills is particularly important: it is, after all, assessment that engages, motivates and drives students.<sup>6</sup> The alignment of assessment, teaching

<sup>5</sup> Philip C Abrami et al, 'Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis' (2008) 78 *Review of Educational Research* 1102.

<sup>&</sup>lt;sup>3</sup> See, eg, Les A McCrimmon, 'Mandating a Culture of Service: Pro Bono in the Law School Curriculum' (2003) 14(1) Legal Education Review 53; Tamara Walsh, 'Putting Justice Back into Legal Education' (2007) 17 Legal Education Review 119; Jeff Giddings, Promoting Justice Through Clinical Legal Education (Justice Press, 2013).

<sup>&</sup>lt;sup>4</sup> Nisha Agarwal and Jocelyn Simonson, 'Thinking Like a Public Interest Lawyer: Theory, Practice, and Pedagogy' (2010) 34 New York University Review of Law & Social Change 455; see also Jane H Aiken, 'Provocateurs for Justice' (2001) 7 Clinical Law Review 287.

<sup>&</sup>lt;sup>6</sup> Howard R Sacks, 'Student Fieldwork as a Technique in Educating Law Students in Professional Responsibility' (1968) 20 Journal of Legal Education 291, 294; Paul Ramsden, Learning to Teach in Higher Education (Routledge, 1992) 67; Caroline Hart et al, 'The Real Deal: Using Authentic Assessment to Promote Student Engagement in the First and Second Years of a Regional Law Program' (2011) 21 Legal Education Review 97, 99; Anne Hewitt, 'A Critique of the Assessment of Professional Skills' (2007) 17 Legal Education Review 143, 148; Nicolette Rogers, 'Improving the Quality of Learning in Law Schools by Improving Student Assessment' (1993) 4 Legal Education Review 113, 115.

practices and learning outcomes is an important element of high quality teaching,<sup>7</sup> and it follows that not only should critical thinking be included in the learning outcomes for a law program and explicitly taught, it should also be explicitly assessed.

The intent of this article is to offer some practical guidance about measuring the ability of law students to engage in critical thinking at different stages in the curriculum. Part II of the article offers a conception of critical thinking in law that emphasises a disciplined, staged approach to critique, and presents some detailed criteria for use in measuring the ability of law students to engage in critical thinking. Part III presents a specific model for measuring critical thinking skills using criterion-referenced assessment and a whole-of-curriculum approach, including a detailed, scaffolded marking rubric. Part II will primarily be of benefit to those readers unfamiliar with the critical thinking literature. Readers already familiar with this literature may choose to proceed immediately to Part III.

## II DEFINING AND MEASURING CRITICAL THINKING IN LAW

There are many textbooks, handbooks and guidebooks that laud the benefits of critical thinking and claim to assist readers to develop their critical thinking skills, and many academic books and papers that examine the nature and importance of critical thinking generally<sup>8</sup> and in the context of particular disciplines and professions.<sup>9</sup>

Critical thinking has been defined variously as 'the propensity and skill to engage in an activity with reflective scepticism';<sup>10</sup> 'purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual

<sup>&</sup>lt;sup>7</sup> Roy Stuckey et al, *Best Practices for Legal Education: A Vision and A Road Map* (Clinical Legal Education Association, 2007) 235.

<sup>&</sup>lt;sup>8</sup> See, eg, Richard Paul and Linda Elder, Critical Thinking: Tools for Taking Charge of Your Learning and Your Life (Pearson, 3<sup>rd</sup> ed, 2012); Larry Wright, Critical Thinking: An Introduction to Analytical Reading and Reasoning (Oxford University Press, 2<sup>nd</sup> ed, 2012); Malcolm Murray and Nebojsa Kujundzic, Critical Reflection: A Textbook for Critical Thinking (McGill-Queen's University Press, 2005); Diane F Halpern, Thought and Knowledge: An Introduction to Critical Thinking (Taylor and Francis, 2002).

<sup>&</sup>lt;sup>9</sup> See, eg, Elsie L Bandman and Bertram Bandman, Critical Thinking in Nursing (Appleton & Lange, 2<sup>nd</sup> ed, 1995) (nursing); John E McPeck, Critical Thinking and Education (Routledge, 2016) (education); Tim van Gelder, 'Teaching Critical Thinking: Some Lessons from Cognitive Science' (2005) 53 College Teaching 41 (cognitive science); Eileen Gambrill, Critical Thinking in Clinical Practice: Improving the Quality of Judgments and Decisions (John Wiley & Sons, 2<sup>nd</sup> ed, 2006) (medicine and psychology). In the context of law, see, eg, Anne Macduff, 'Deep Learning, Critical Thinking and Teaching for Law Reform' (2005) 15 Legal Education Review 125; Archana Parashar and Vijaya Nagarajan, 'An Empowering Experience: Repositioning Critical Thinking Skills in the Law Curriculum' (2006) 10 Southern Cross University Law Review 219.

<sup>&</sup>lt;sup>10</sup> McPeck, above n 9, 8.

considerations upon which that judgment is based'; <sup>11</sup> and 'a commitment to using reason in the formulation of our beliefs'.<sup>12</sup> In this article we define critical thinking in the context of legal education as careful and thoughtful questioning of a legal statement, claim, argument, decision, position or action according to an explicit set of criteria or standards. It is a form of thinking about legal phenomena that is characterised by an unwillingness on the part of the law student to accept the object of critique at face value. Instead, the student insists upon forming their own judgement and reaching their own conclusion through rigorous, open-minded and even-handed interpretation, analysis, and evaluation of the object of critique.

## A The Scope of Critical Thinking About Law

In December 2010, the Australian Learning and Teaching Council published the *Bachelor of Laws Learning and Teaching Academic Standards Statement* ('the LLB LTAS Statement').<sup>13</sup> The LLB LTAS Statement sets out six Threshold Learning Outcomes (TLOs) for the LLB. These six TLOs represent what an LLB graduate is expected 'to know, understand and be able to do as a result of learning'.<sup>14</sup> They cover knowledge (TLO1), ethics and professional responsibility (TLO2), thinking skills (TLO3), research skills (TLO4), communication and collaboration (TLO5), and self management (TLO6). TLO3 makes explicit reference to 'critical analysis':

Graduates of the LLB 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.<sup>15</sup>

The explicit emphasis upon critical analysis in TLO3 is evidence of the acceptance of critical thinking as an essential skill for law students. However, TLO3 does not capture the full scope and potential of critical thinking by law students. As explained below, analysis is only one element of the process of critical thinking. Further, the object of critique envisioned by TLO3 is limited to the result of legal

Peter A Facione, Critical Thinking: What It Is and Why It Counts (2015) Insight Assessment <a href="https://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Critical-Thinking-What-It-Is-and-Why-It-Counts-PDF/(language)/eng-US>">https://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Critical-Thinking-What-It-Is-and-Why-It-Counts-PDF/(language)/eng-US>">https://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Critical-Thinking-What-It-Is-and-Why-It-Counts-PDF/(language)/eng-US>">https://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Critical-Thinking-What-It-Is-and-Why-It-Counts-PDF/(language)/eng-US>">https://www.insightassessment.com/About-Us/Measured-Reasons/pdf-file/Critical-Thinking-What-It-Is-and-Why-It-Counts-PDF/(language)/</a> (Instance-PDF/(language)/</a> (Instance-PDF/(la

<sup>&</sup>lt;sup>12</sup> Jennifer Wilson Mulnix, 'Thinking Critically About Critical Thinking' (2012) 44 Educational Philosophy and Theory 464, 471.

<sup>&</sup>lt;sup>13</sup> 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: Kift, Israel and Field, above n 2.

<sup>&</sup>lt;sup>14</sup> Kift, Israel and Field, above n 2, 1, quoting Australian Qualifications Framework Council, above n 1, 11.

<sup>&</sup>lt;sup>15</sup> Kift, Israel and Field, above n 2, 10, 17.

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research and the range of possible responses to a legal issue. The scope of critical thinking about law is much broader than the scope of legal reasoning envisioned within the TLOs and what is traditionally understood by 'thinking like a lawyer'. In a legal context, critical thinking might be directed towards:

- a statement about the law, eg, a statement of legal doctrine;
- a legal claim, eg, a claim by one person that they are entitled to compensation by another person;
- a legal argument, eg, a series of statements in support of the proposition that a particular legal rule has been contravened;
- a legal decision, eg, the decision of a judge following a trial;
- a legal rule, eg, a particular legal rule in legislation; or
- a legal action, eg, the actions of a police officer in detaining a suspect.

The scope of critical thinking overlaps with that of the skill of *creative* thinking. Creative thinking is explicitly referenced in TLO3: 'thinking skills' for a law student include 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.<sup>16</sup>

The ability to think creatively is of relevance and use to lawyers, whether they are drafting a contract, negotiating a deal or arguing a case in court. Creative thinking is an essential component of legal problem solving.<sup>17</sup> Critical thinking is often seen as deconstructive, and creative thinking is often seen as constructive, but critical thought and creative thought are not mutually exclusive. Critical thinking can and should involve constructive synthesis, the creative and positive combining of the results of interpretation, analysis and evaluation into a new whole: a new conclusion, new advice, new possibilities, or new actions.

The scope of critical thinking also overlaps with that of *reflective* thinking. Reflective thinking is thinking about one's own views, beliefs, ideas and conclusions. TLO6 refers to reflective thinking when it states that a law student should be able to

<sup>&</sup>lt;sup>16</sup> Ibid, 19.

<sup>&</sup>lt;sup>17</sup> Janet Weinstein and Linda Morton, 'Stuck in a Rut: The Role of Creative Thinking in Problem Solving and Legal Education' (2003) 9 *Clinical Law Review* 835.

[r]eflect on and assess their own capabilities and performance, and make use of feedback as appropriate, to support personal and professional development.<sup>18</sup>

Better students tend to take the time to reflect upon their own learning and their own work to ensure that it is of the highest quality.<sup>19</sup> Self-reflection is enhanced by an ability to engage in critical thinking, and at the same time reflection is itself an element of critical thinking skills to their own process of reasoning, eg, when the student demonstrates the ability to identify their own personal assumptions about the object of critique.<sup>21</sup> (This is also known as 'metacognition').<sup>22</sup> This willingness to acknowledge the potential flaws in their own position leads to a degree of humility and empathy on the part of the law student, a point reflected in the marking rubric offered in the second half of this article.

## B Four Stages of Critical Thinking About Law

Critical thinking is not undisciplined and unstructured negativity. Any opposition to a position, claim or argument must be informed opposition rather than groundless attack or baseless criticism. The right to disagree must be earned by first conducting a thorough analysis and a balanced evaluation. In this article we favour the view that a critical thinker should progress through a series of stages of thinking about the object of critique. The four stages emphasised in our preferred conception of critical thinking are interpretation, analysis, evaluation and synthesis. This approach draws upon the multi-disciplinary conception of critical thinking proposed by the American Philosophical Association in 1990<sup>23</sup> (which itself draws upon Bloom's Taxonomy), <sup>24</sup> and upon skills-based approaches to teaching and assessing critical thinking advocated by critical thinking

<sup>&</sup>lt;sup>18</sup> Kift, Israel and Field, above n 2, 10, 22.

<sup>&</sup>lt;sup>19</sup> Rachael Field, James Duffy and Anna Huggins, *Lawyering and Positive Professional Identities* (LexisNexis, 2014) 111; Stuckey et al, above n 7, 48-9.

<sup>&</sup>lt;sup>20</sup> 'Reflection' or 'self-reflection' is included as an element of critical thinking in much of the literature. See, eg, Peter A Facione, Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction (California Academic Press, 1990); Richard Paul, Critical Thinking: What Every Person Needs To Survive In A Rapidly Changing World (Center for Critical Thinking and Moral Critique, 1990) 205-6.

<sup>&</sup>lt;sup>21</sup> Judith Marychurch, Good Practice Guide (Bachelor of Laws) – Self-management (Threshold Learning Outcome 6) (Australian Learning and Teaching Council, 2011) 15.

<sup>&</sup>lt;sup>22</sup> Field, Duffy and Huggins, above n 19, 134.

<sup>&</sup>lt;sup>23</sup> In 1990, under the sponsorship of the American Philosophical Association, a crossdisciplinary panel (including forty-six men and women representing many different scholarly disciplines in the humanities, sciences, social sciences, and education) completed a two-year project that yielded a conceptualisation of critical thinking as an outcome of university level education: Facione, above n 20.

<sup>&</sup>lt;sup>24</sup> Benjamin S Bloom (ed), Taxonomy of Educational Objectives: The Classification of Educational Goals - Handbook I: The Cognitive Domain (David McKay, 1956).

scholars such as Facione, <sup>25</sup> Allegretti and Frederick, <sup>26</sup> Tsui, <sup>27</sup> Athanassiou, McNett and Harvey, <sup>28</sup> and Abrami et al.<sup>29</sup>

The first stage when engaging in critical thinking in a legal context is *interpretation* of the object of critique. The law student discerns the intended or explicit meaning of the legal statement, claim, argument, decision, rule or action. The student remains neutral about, if not actually supportive of, the object of critique. The judgement phase has not yet begun, and the student is in this first phase merely seeking to ensure that they correctly understand the object of critique. This stage is not typically considered to be critical thinking per se. It is, however, an important precursor to the exercise of critical thinking. The law student should not engage in criticism without first ensuring they understand what it is they are about to critique.

While mere understanding is not usually associated with critical thinking per se, it is appropriate to measure the accuracy and detail of the student's understanding of the object of critique before proceeding to measure their ability to analyse, evaluate and synthesise. While most objects of critique are able to be interpreted in a variety of ways, some interpretations are better than others and so when assessing a student's interpretation, it is appropriate to consider its *accuracy*, ie the extent to which the interpretation corresponds with the correct or best interpretation. Since the interpretation forms the foundation of the student's subsequent analysis and evaluation, the interpretation should be careful and meticulous; it is therefore appropriate to also consider the level of *detail*.

The second stage of critical thinking is *analysis* of the object of critique. The law student remains broadly accepting of the statement, claim, argument, decision, rule or action but is now going beneath the surface to discern the implicit or hidden aspects of the object of critique: the organising principles and structure, the explicit and implicit assumptions being made, and the unspoken biases. The overall position is not yet being challenged, but the student is attempting to uncover what the author of the statement, claim, etc being critiqued might prefer to remain hidden or what they may not have themselves considered or acknowledged.

Analysis deepens the student's understanding of the object of critique, and sets the stage for evaluation. The structures, assumptions and biases identified by the student may not be obvious, and may even be deliberately obscured by the author of the object of critique. It is appropriate, then, to assess the student's analysis of the object of critique in terms of both *perceptiveness* and *thoroughness*.

<sup>&</sup>lt;sup>25</sup> Facione, above n 11.

<sup>&</sup>lt;sup>26</sup> Christine L Allegretti and J Norris Frederick, 'A Model for Thinking Critically About Ethical Issues' (1995) 22 *Teaching of Psychology* 46.

<sup>&</sup>lt;sup>27</sup> Lisa Tsui, 'Fostering Critical Thinking Through Effective Pedagogy: Evidence from Four Institutional Case Studies' (2002) 73 *Journal of Higher Education* 740.

<sup>&</sup>lt;sup>28</sup> Nicholas Athanassiou, Jeanne M McNett and Carol Harvey, 'Critical Thinking in the Management Classroom: Bloom's Taxonomy as a Learning Tool' (2003) 27 *Journal of Management Education* 533.

<sup>&</sup>lt;sup>29</sup> Abrami et al, above n 5.

The third stage of critical thinking is *evaluation* of the object of critique. This is the stage of critical thinking that is most commonly associated with the practice of critical thinking. The law student moves beyond accepting the statement, claim, argument, decision, rule or action at face value, and begins to question it. They judge the object of critique by evaluating it in terms of clearly articulated criteria. Examples of possible criteria when evaluating a legal statement, claim, argument, decision, rule or action include the following:

- Accuracy Is this statement accurate? Is this true? Did this really happen? Is it a precise description? Are the terms and concepts used in the statement appropriate?
- Legality Is this claim consistent with the relevant law? Is this proposed course of action legal?
- Reasonableness Is this claim logical? Is this argument based on valid assumptions? Is this action reasonable?
- Persuasiveness Is this argument convincing? Is this claim objective or biased?
- Theoretical or ideological soundness Is this argument consistent with particular theoretical notions, eg, the rule of law or the separation of powers? Is this claim consistent with particular ideological criteria, eg, Christian values?
- Fairness Does this legal rule have an equitable impact upon all members of the community? Is this legal decision just?<sup>30</sup>

The critical thinking law student is willing to consider a range of perspectives on the relevant issue, including arguments against and arguments in support of the position being critiqued. In conducting an appropriately even-handed and balanced evaluation, it is possible that the student will eventually reach a conclusion that is in fact consistent with the position being critiqued. It is therefore not the case that critical thinking always involves disagreement and the taking of a contrary position. Sometimes the critical thinker ends up agreeing with what they are critiquing.

If evaluation is the assessment of the object of critique according to clearly articulated criteria, it is important that those criteria be appropriate. For example, in some circumstances it might be appropriate to evaluate a judicial decision according to consistency with precedent and legal doctrine, and inappropriate to evaluate it according to the community's perception of justice; in other circumstances the opposite might be the case. This, then, is the first recommended criterion when measuring the student's ability to evaluate: the *appropriateness of the criteria* used by the student when evaluating the object of critique. The second recommended criterion is

<sup>&</sup>lt;sup>30</sup> Many critical thinking scholars insist that there is a social and a political aspect to critical thinking. According to critical education theorist Henry A Giroux, for example, '[c]ritical thinking cannot be viewed simply as a form of progressive reasoning; it must be seen as a fundamental, political act': Henry A Giroux, *Ideology, Culture and the Process of Schooling* (Falmer Press, 1981) quoted in Harvey Siegel, 'Rationality and Ideology' (1987) 37 *Educational Theory* 153.

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*rigour*: the student's evaluation of the object of critique must be thorough both in terms of the range of criteria and in terms of the engagement with each of the criteria selected by the student. The third recommended criterion is *balance*: the student considers a range of views regarding the object of critique, as far as possible approaching the object of critique from a neutral, unbiased and disinterested perspective, and favouring neither a positive nor a negative conclusion about the object of critique until all of the relevant evidence has been considered.

The fourth stage of critical thinking is *synthesis*. At this stage, the law student moves towards an outcome of their critical thinking efforts. The student takes the results of their interpretation, analysis and evaluation, and combines them creatively into their own original conclusion about the object of critique, or a course of action, or advice to a client, and so on. 'Original' here means the result of the student's own effort, rather than novel or unprecedented. The student may reach an original conclusion that is consistent with orthodoxy, accepted truth or common sense, or they may extrapolate from what is known and produce something genuinely innovative.

The first criterion to be applied in measuring an ability to synthesise is *originality*: is the synthesis the result of the student's own effort rather than the unthinking mimicking of another's reasoning? The synthesis should also be a convincing continuation and outcome of the interpretation, analysis and evaluation, and so the second recommended criterion is persuasiveness: has the student demonstrated that their conclusion is consistent with an accurate and detailed interpretation, a perceptive and thorough analysis and an appropriate, rigorous and balanced evaluation? Finally, synthesis is potentially a creative act, so the third recommended criterion when measuring a student's ability to synthesise is *ingenuity*, being the student's demonstration of inventiveness, cleverness and originality. This third criterion will not be relevant in all circumstances: if the critical thinking being measured is that of an undergraduate student solving a simple legal problem, genuine ingenuity is unlikely to possible, or even desirable. On the other hand, if the critical thinking being measured is that of a postgraduate student writing a research paper about a potential legal solution to a challenging social problem, ingenuity will be relevant.

All of the above leads to a comprehensive definition of critical thinking in a legal education context: critical thinking is *disciplined* reasoning about a legal statement, claim, argument, decision, rule or action, beginning with an accurate and detailed interpretation, progressing through a perceptive and thorough analysis and an appropriate, rigorous and balanced evaluation, and concluding with an original, persuasive, and ingenious synthesis.

This definition provides a useful template for measuring critical thinking by law students, a point expanded upon in the second half of the article.

## III HOW TO MEASURE CRITICAL THINKING BY LAW STUDENTS

An ability to effectively measure and assess critical thinking is important because, as we have seen, an ability to think critically is valued as an outcome of legal education, 'assessment influences student perceptions of the curriculum'<sup>31</sup> and drives what and how law students learn,<sup>32</sup> and aligning assessment with teaching and learning outcomes is considered 'best practice'.<sup>33</sup> In this section we present an explanation of how critical thinking can be measured progressively across the law program. The marking rubric described in this section acknowledges the importance of criterion-referenced assessment;<sup>34</sup> the need for a 'structured and integrated, whole-of-curriculum approach'<sup>35</sup> to assessment; and a 'contextualised, sequential and incremental'<sup>36</sup> approach to assessment.

A wide range of assessment tasks are used in the discipline of law.<sup>37</sup> Examples of assessment tasks that have been used to measure critical thinking skills include short answer quizzes, online quizzes, tutorial participation, group presentations, critical exercises, essays, short research papers and reflective journals.<sup>38</sup> We do not advocate in this article for any particular method for assessing critical thinking, although we do note that some of these examples of assessment tasks are more 'authentic' than others, <sup>39</sup> in the sense that they represent what a legal practitioner does in the real world, and that the

<sup>&</sup>lt;sup>31</sup> David Boud and Nancy Falchikov, 'Aligning Assessment with Long-Term Learning' (2007) 31 Assessment and Evaluation in Higher Education 399, 405.

<sup>&</sup>lt;sup>32</sup> Stuckey et al, above n 7, 175.

<sup>&</sup>lt;sup>33</sup> Ibid 235.

<sup>&</sup>lt;sup>34</sup> Ibid 278.

<sup>&</sup>lt;sup>35</sup> Kift, Israel and Field, above n 2, 9.

<sup>&</sup>lt;sup>36</sup> Richard Johnstone, 'Whole-of-Curriculum Design in Law' in Sally Kift et al (eds), *Excellence and Innovation in Legal Education* (LexisNexis, 2011) 1, 15.

<sup>&</sup>lt;sup>37</sup> These include legal citation exercises, library exercises, book reviews, issues papers, press files (where students monitor the media for specific legal issues), contributions to an online discussion forum, peer assessment, multiple-choice questions, short answer quizzes, case notes, take-home examinations, research essays, problem-based assignments, group assignments, poster presentations, moots, vivas, tutorial participation, oral presentations, group presentations, advocacy exercises, drafting exercises, reflective journals, reflective court reports, letters from a solicitor to a client, advice from a barrister, submission to a law reform commission, community brochures and community-based assessment: Kelley Burton, 'Changing Assessment Tasks in Legal Education in Turbulent Times: Authentic or Traditional?' (Paper presented at Australasian Law Teachers Association Conference, Gold Coast, 12 July 2014) 5.

<sup>&</sup>lt;sup>38</sup> Gabrielle Appleby, Peter Burdon and Alexander Reilly, 'Critical Thinking in Legal Education: Our Journey' (2013) 23 *Legal Education Review* 345; Nickolas James, Clair Hughes and Clare Cappa, 'Conceptualising, Developing and Assessing Critical Thinking in Law' (2010) 15 *Teaching in Higher Education* 285, 290-1. One possible criticism of some attempts to assess critical thinking is that they actually assess reflective thinking rather than critical thinking, but, as explained above, reflective practice is an aspect of critical thinking.

<sup>&</sup>lt;sup>39</sup> Kevin Ashford-Rowe, Janice Herrington and Christine Brown, 'Establishing the Critical Elements that Determine Authentic Assessment' (2014) 39 Assessment and Evaluation in Higher Education 205.

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authenticity of assessment has been a popular theme in legal education in recent years.  $^{\rm 40}$ 

### A Criterion-referenced Assessment

Criterion-referenced assessment measures student performance on an assessment task against pre-determined criteria. 41 It can be contrasted with norm-referenced assessment, which distributes assessment task marks along a pre-determined bell-curve.<sup>42</sup> Normreferenced assessment is not completely disparate from criterionreferenced assessment, as the marker must have some hidden structure in mind to rank student work onto a bell-curve. Norm-referenced assessment is unfair to students because marks reflect how students sit in relation to their cohort rather than an objective evaluation of the work.<sup>43</sup> Further, norm-referenced assessment has been criticised as creating competitive rather than collaborative students,<sup>44</sup> something that is particularly poignant for law students given that 'collaboration' is one of the six TLOs for Law. Anecdotally, norm-referenced assessment has a 'negative effect on student motivation and learning'.<sup>45</sup> Given these criticisms of norm-referenced assessment, the recent uptake of criterion-referenced assessment in Australian law schools was inevitable.

The cornerstone of criterion-referenced assessment is a list of criteria. A more comprehensive approach requires the development of a marking rubric. A marking rubric is a grid or table on which the criteria and performance standards (or performance descriptors) for an assessment task are detailed.<sup>46</sup>

<sup>&</sup>lt;sup>40</sup> Sally Kift, '21st Century Climate for Change: Curriculum Design for Quality Learning Engagement in Law' (2008) 18 *Legal Education Review* 1, 23; Kelley Burton, 'A Framework for Determining the Authenticity of Assessment Tasks: Applied to an Example in Law' (2011) 4(2) *Journal of Learning Design* 20.

<sup>&</sup>lt;sup>41</sup> M L Brun and R Johnstone, *The Quiet (R)evolution: Improving Student Learning in Law* (Law Book Company, 1994) 185.

<sup>&</sup>lt;sup>42</sup> Lee Dunn et al, *The Student Assessment Handbook* (Routledge, 2004) 22. Historically, norm-referenced assessment has been more prevalent because it is administratively easier.

<sup>&</sup>lt;sup>43</sup> Kelley Burton, 'Designing Criterion-Referenced Assessment' (2006) 1(2) *Journal of Learning Design* 73, 76. The unfairness to students is exacerbated when student cohorts vary in ability over time.

<sup>&</sup>lt;sup>44</sup> Ibid, 78.

<sup>&</sup>lt;sup>45</sup> Stuckey et al, above n 7, 243.

<sup>&</sup>lt;sup>46</sup> Regarding the use of criteria and standards, see D Royce Sadler, 'Specifying and Promulgating Achievement Standards' (1987) 13 Oxford Review of Education 191, 194. On the issue of criteria and standards being 'hotspots' and needing to be revisited, see Kift, above n 40, 23. A criterion usually echoes a threshold learning outcome or graduate attribute, and a performance standard usually describes different levels of performance of the threshold learning outcome or graduate attribute. Generally speaking, there is usually one performance standard for each grade; for example, high distinction, distinction, credit, pass or fail. The greater number of performance standards, the more challenging it is to delineate the boundaries between the performance standards.

The benefits of criterion-referenced assessment rubrics are multifarious and well documented in higher education literature.<sup>47</sup> The administrative benefits of criterion-referenced assessment rubrics include enhancing the validity of the assessment task by constructively aligning the assessment task criteria with the unit learning outcomes: offering a framework for consistent marking instructions and review processes; and increasing the reliability of student-centred benefits of criterion-referenced marking. The assessment rubrics include improving transparency by explaining expectations to the students up front; offering a framework for valuable feedback; and engaging students in self-assessment, peer assessment, reflective practice and independent learning. <sup>48</sup> These administrative and student-centred benefits justify criterion-referenced assessment being advocated as best practice for measuring skills in legal education.49

According to a review conducted by the authors in 2015, criterionreferenced assessment was recognised and accepted at all 37 Australian universities that support a law school.<sup>50</sup> Seven of the 37 university assessment policies explicitly referred to the development of 'rubrics'.<sup>51</sup>

Developing, continuously improving and refining marking rubrics is an iterative process. Some practical strategies for refining marking rubrics include articulating the scope of the performance standards more definitively so that student work more readily sits within one performance standard; determining an approach to dealing with student work that spans two performance standards; changing the weighting attached to the criteria and/or performance standards; and changing the criteria assessed. A contemporary approach to developing criterion-referenced assessment rubrics is a 'whole-ofcurriculum' approach.

## B A 'Whole-of-Curriculum' Approach

In their explanation of the TLOs for Law, Kift, Israel and Field provide a valuable insight into the importance of a 'whole-of-

<sup>&</sup>lt;sup>47</sup> Kelley Burton and Judith McNamara, 'Assessing Reflection Skills in Law Using Criterion-referenced Assessment' (2009) 19 *Legal Education Review* 171; Burton, above n 43; Kelley Burton and Natalie Cuffe, 'The Design and Implementation of Criterion-referenced Assessment in a First Year Undergraduate Core Law Unit' (2005) 15 *Legal Education Review* 159.

<sup>&</sup>lt;sup>48</sup> Independent learning is an important component of ALTC TLO6: Selfmanagement: Kift, Israel and Field, above n 2, 22.

<sup>&</sup>lt;sup>49</sup> Stuckey et al, above n 7, 278. Stuckey also suggests that implementing formative assessment before summative assessment and multiple assessment methods is best practice in legal education.

<sup>&</sup>lt;sup>50</sup> The information about the university assessment policies contained in this journal article was gleaned from the university websites on 10 March 2015. Regarding the proliferation of law schools, see David Barker, 'An Avalanche of Law Schools: 1989–2013' (2013) 6 Journal of the Australasian Law Teachers Association 177.

<sup>&</sup>lt;sup>51</sup> See, eg, the university assessment policies for the Australian National University, Edith Cowan University, Griffith University, James Cook University, University of Notre Dame, University of Sydney and University of the Sunshine Coast.

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curriculum' approach.<sup>52</sup> They appreciate the potential overlap of the TLOs and the sub-paragraphs of the TLOs, and envisage that 'the TLOs will most likely be facilitated in a structured and integrated, whole-of-curriculum approach through learning, teaching and assessment'. <sup>53</sup> This recognition of the value and importance of a whole-of-curriculum approach in legal education contributes to the 'climate for change'<sup>54</sup> that is the context for the following argument in favour of an intentional and incremental approach to measuring and assessing critical thinking by law students.<sup>55</sup>

Huggins advocates for a 'whole-of-curriculum approach'<sup>56</sup> and an 'outcomes-focussed education paradigm'.<sup>57</sup> In essence, these involve identifying the learning outcomes for a law program; situating those learning outcomes into units across the law program; mapping assessment tasks against those learning outcomes; and finally developing strategies for intentionally teaching the learning outcomes. <sup>58</sup> Similarly, Johnstone supports the 'integrated, contextualised, sequential and incremental' development of the TLOs across a law program. <sup>59</sup> From a law teacher's perspective, this approach is synonymous with the colloquial term 'starting with the end in mind'.

A marking rubric with a single set of standards to measure critical thinking in the same way across a whole law program would not be consistent with a 'whole-of-curriculum' approach. Even though preparing a single marking rubric would be more efficient for law schools and enable a law student over the duration of their law program to self-report whether they have in fact increased their ability to engage in critical thinking, it would not encourage a law student who receives a high distinction for critical thinking in the first year of the law program to grow over the following years in their law program. A 'whole-of-curriculum' approach to assessing critical thinking requires more than a single set of marking standards.

Critical thinking should be assessed across the entire law program rather than assessed at only one point in the program. In the context of developing graduate attributes, Johnstone foreshadows that law students are likely to forget what they learn in a first year unit if it is not revisited later in the law program, and are less likely to appreciate

<sup>59</sup> Johnstone, above n 36, 15.

<sup>&</sup>lt;sup>52</sup> Kift, Israel and Field, above n 2, 9.

<sup>53</sup> Ibid.

<sup>&</sup>lt;sup>54</sup> Kift, above n 40, 12; Deborah Southwell et al, *Strategies For Effective Dissemination of Project Outcomes* (University of Queensland and Flinders University, 2005).

<sup>&</sup>lt;sup>55</sup> Regarding the assessment of critical knowledge in a manner similar to discipline knowledge, and the assessment of critical disposition using reflective practice, see James, 'Embedding Graduate Attributes in Subjects: Critical Thinking', above n 2, 94.

<sup>&</sup>lt;sup>56</sup> Kift, Israel and Field, above n 2, 9; Johnstone, above n 36, 6-11.

<sup>&</sup>lt;sup>57</sup> Anna Huggins, 'Incremental and Inevitable: Contextualising the Threshold Learning Outcomes for Law' (2015) 38 University of New South Wales Law Journal 264, 283.

<sup>&</sup>lt;sup>58</sup> Ibid, 283-4.

the importance of what they learn if it is simply 'tacked on' to a unit at the end of a law program.<sup>60</sup> Critical thinking should be assessed in foundation, middle and capstone units in law, and the conception of a 'vertical transfer' offers an insight into how to achieve this goal.

Nathanson endorsed the notion of incrementally developing skills throughout a degree more than 20 years before the TLOs with his notion of a vertical transfer. <sup>61</sup> 'Vertical transfer' refers to the incremental development of skills from a low level to a complex level.<sup>62</sup> Christensen and Kift argued in favour of a vertical transfer of skills at three different levels in their 2000 article, <sup>63</sup> and today it continues to provide a framework within which to develop and renew law curricula.

In essence, the first level of the vertical transfer corresponds with the first year of a law program. The key elements at the first level include instructing the law student about the theoretical framework underpinning the skill, instructing the law student about how to apply the skill in a general manner, practising the skill under the guidance of the teaching staff, assessing a critique of how the skill was practised, and providing feedback.<sup>64</sup> The first level of the vertical transfer is typically labelled as 'basic', 'introduced'<sup>65</sup> or 'novice'.<sup>66</sup>

The second level of the vertical transfer corresponds with the second and third year levels of a four year law program. At the second level of a vertical transfer, teaching staff provide additional instructions on how to apply the skill in a more advanced manner, and continue to provide feedback to the students about their progress in applying the skill. At the second level a law student is expected to demonstrate a greater level of independence and the ability to engage in collaboration, to assimilate a range of skills in a basic legal problem, to apply the skill to a real world legal scenario and to engage in reflective practice. <sup>67</sup> The second level has been labelled as 'intermediate' or 'practised'.

The third and final level in a vertical transfer corresponds to the final year and capstone experience in a law degree. At this level law students are expected to build upon what they have learned and demonstrated in the earlier years of their law program. In particular, law students are expected to apply the skill to multifarious contexts without the guidance of the teaching staff, use creativity in applying the skill in context, engage in reflective practice in applying the skill, engage in collaboration or work independently, and assimilate a range

<sup>&</sup>lt;sup>60</sup> Johnstone, above n 36, 21.

 <sup>&</sup>lt;sup>61</sup> Stephen Nathanson, 'Putting Skills and Transactions Together in Professional Legal Training' (1987) 5 Journal of Professional Legal Education 187, 191.
<sup>62</sup> Ibid

<sup>&</sup>lt;sup>62</sup> Ibid.

 <sup>&</sup>lt;sup>63</sup> Sharon Christensen and Sally Kift, 'Graduate Attributes and Legal Skills: Integration or Disintegration?' (2000) 11 Legal Education Review 207, 217.
<sup>64</sup> Ibid.

<sup>&</sup>lt;sup>65</sup> Johnsto

<sup>&</sup>lt;sup>65</sup> Johnstone, above n 36, 15.

<sup>&</sup>lt;sup>66</sup> Kift, above n 40, 12. Roy Stuckey recommends that student performance be graded according to proficiency, for example, 'limited proficiency, basic competence, intermediate competence, and advance proficiency': Stuckey et al, above n 7, 278.

<sup>&</sup>lt;sup>67</sup> Christensen and Kift, above n 63, 219.

of skills in a complex legal problem for a 'knowledgeable and critical audience'. <sup>68</sup> The third level in a vertical transfer is typically categorised as 'advanced' or 'mastered'.<sup>69</sup>

Collaboration and reflective practice are emphasised in the second and third levels of a vertical transfer. However, collaboration and reflective practice should not be construed as the salient features for distinguishing the three levels. Instead, collaboration and reflective practice deserve to be an integral part of each of the three levels in a vertical transfer and should be incrementally developed throughout the law program. They fall within the scope of TLO5 and TLO6, respectively, and there is an expectation that the TLOs for Law will be 'facilitated in a structured and integrated, whole-of-curriculum approach'. <sup>70</sup> This view is consistent with Stuckey's suggested approach to the three years of instruction in law.<sup>71</sup>

A vertical transfer approach has consequences for scaffolding, authentic assessment, and reflective practice.

*Scaffolding* is an approach to teaching that sees the support and structure provided to students in the early parts of their program gradually removed in order to encourage greater levels of student autonomy and independent learning. <sup>72</sup> Scaffolding should not be removed entirely, and should be available at all three levels of the vertical transfer to contextualise and support student learning.

The second consequence of vertical transfer is for the *authenticity of assessment*. Stuckey's recommended approach to the three levels of instruction in a law program accentuates an increasingly authentic approach to teaching and assessment.<sup>73</sup> The first year places emphasis on instruction in the classroom; the second and third years focus on clinical legal education and externships; and in the final year, law students work in 'simulated law firms'.<sup>74</sup> Such an authentic approach will undoubtedly appeal to some Australian law schools; as observed above, authentic assessment is a major theme in legal education in the 21<sup>st</sup> century.

The third consequence of vertical transfer is for the teaching of *reflective practice*. A key feature of Stuckey's third level of instruction is that law students are advised about how ready they are for their first day in legal practice, counselled on any weaknesses in their skills, and given a plan for addressing the weaknesses.<sup>75</sup> This process manifests reflective practice and reinforces its significant value in the final year of instruction in law. As explained above,

<sup>68</sup> Ibid.

<sup>&</sup>lt;sup>69</sup> Johnstone, above n 36, 15.

<sup>&</sup>lt;sup>70</sup> Kift, Israel and Field, above n 2, 9.

<sup>&</sup>lt;sup>71</sup> Stuckey et al, above n 7, 276-81.

<sup>&</sup>lt;sup>72</sup> See, eg, Nick James, 'Logical, Critical and Creative: Teaching "Thinking Skills" to Law Students' (2012) 12(1) *Queensland University of Technology Law and Justice Journal* 66, 76.

<sup>&</sup>lt;sup>73</sup> Stuckey et al, above n 7, 280.

<sup>&</sup>lt;sup>74</sup> Ibid. Stuckey's three years of instruction correlates with the three years of a law degree in America.

<sup>&</sup>lt;sup>75</sup> Ibid.

reflective practice is emphasised in the second and third levels of a vertical transfer. Reflective practice should be incrementally developed and assessed across a law program and not simply 'boltedon' at the end of a law program, and a vertical transfer and four years of instruction in law support the inclusion of reflective practice in the second and third levels of a law program. Accordingly, the marking rubric presented below incorporates reflective practice in the second and third levels of the law program.<sup>76</sup>

The key message elicited from the conception of vertical transfer is the need for a student to progress across three levels in a law program. The application of this conceptualisation of vertical transfer to the criterion-referenced assessment of critical thinking requires critical thinking to be deconstructed into three levels of progression.<sup>77</sup> The marking rubric presented in this article therefore measures critical thinking at three levels: introductory, intermediate and advanced.

## C A Progressive Marking Rubric

In this article, a conception of critical thinking has been presented that involves four stages: interpretation, analysis, evaluation and synthesis. <sup>78</sup> Students should undertake these stages in a linear fashion. <sup>79</sup> They should understand the intended and unintended meanings of the object of critique before they judge and ultimately form a conclusion about the object of critique. It is essential that all four stages be undertaken, and it is therefore appropriate that all four stages be assessed when evaluating a student's ability to engage in critical thinking. The marking rubric in Table 1 therefore covers all four stages.

<sup>&</sup>lt;sup>76</sup> Two examples of a criterion-referenced assessment rubric on reflective practice are presented in Judith McNamara, Tina Cockburn and Catherine Campbell, *Good Practice Guide (Bachelor of Laws) – Reflective Practice (Threshold Learning Outcome 6(b))* (Australian Learning and Teaching Council, 2013) 21-2. These two examples do not demonstrate how reflective practice can be incrementally developed and assessed across a law program.

<sup>&</sup>lt;sup>77</sup> Stuckey et al, above n 7, 280.

<sup>78</sup> The Association of American Colleges and Universities (AACU) developed a criterion-referenced assessment rubric on critical thinking that contains a performance standard at four levels, that is, benchmark, two milestones and capstone: AACU, Critical Thinking VALUE Rubric <https://www.aacu.org/value/rubrics/critical-thinking>. This rubric does not provide a performance standard for each grade at these four levels. The AACU rubric contains five criteria, that is, 'explanation of issues', 'evidence', 'influence of context and assumptions', 'student's position (perspective, thesis/hypothesis)', and 'conclusions and related outcomes (implications and consequences)'. In contrast, the rubric presented in this article comprises four criteria, making marking judgements about a student's ability to engage in critical thinking less onerous, but yet retaining a comprehensive conception of critical thinking. Anecdotally, examples of criterion-referenced assessment rubrics on critical thinking are very scarce in law schools, and whilst a rubric may explicitly refer to 'critical thinking', it is unlikely to drill down into a conception of critical thinking.

<sup>&</sup>lt;sup>79</sup> Note that 'legal reasoning', another type of thinking skill, is also commonly taught and assessed in a linear fashion: Field, Duffy and Huggins, above n 19, 203-6.

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As a student progresses through their law program, it is appropriate that expectations increase regarding the student's capacity to engage in critical thinking, and that the standards used to assess their critical thinking change accordingly. The marking rubric in Table 1 reflects these changing standards across the program and therefore adopts a 'whole-of-curriculum' approach to the teaching and assessment of critical thinking using vertical transfer.

		Whole	Whole-of-Curriculum Approach to Critical Thinking	oach to Critical Thinki	BU		
Introductory level			High Distinction	Distinction	Credit	Pass	Fail
Intermediate level		High Distinction	Distinction	Credit	Pass	Fail	
Advanced level	High Distinction	Distinction	Credit	Pass	Fail		
Interpretation of the object of critique (accuracy and detail)	Provides accurate definitions of all key terms, demonstrates an accurate overall understanding of the object of critique, and includes detailed alternative interpretations of the object of critique	Provides accurate definitions of all key terms, demonstrates an accurate overall understanding of the object of critique, and acknowledges alternative interpretations of the object of critique	Provides accurate definitions of all key terms and demonstrates an accurate overall understanding of the object of critique	Provides accurate definitions of all key terms	Provides accurate definitions of most key terms but also provides inaccurate definitions of some key terms or fails to define some key terms	Demonstrates understanding of 'interpretation' but actual interpretation contains inaccuracies or omits to define many key terms	Does not interpret the object of critique
Analysis of the object of critique (perceptiveness and thoroughness)	Identifies the organising principles and structure of the object of critique, and numerous explicit and implicit assumptions and potential biases	Identifies the organising principles and structure of the object of critique, and explicit and implicit assumptions and potential biases	Identifies the organising principles and structure of the object of critique, and explicit and implicit assumptions	Identifies the organising principles and structure of the object of critique, and explicit assumptions	Identifies the organising principles and structure of the object of critique, but also includes some irrelevant or non-existent elements of the object of critique	Demonstrates understanding of 'analysis' but actual analysis emphasises irrelevant or non- existent elements of the object of critique	Does not analyse the object of critique

Introductory level			High Distinction	Distinction	Credit	Pass	Fail
Intermediate level		High Distinction	Distinction	Credit	Pass	Fail	
Advanced level	High Distinction	Distinction	Credit	Pass	Fail		
Evaluation of the object of critique (appropriateness of criteria, rigour and balance)	Uses appropriate criteria, includes ingorous evaluations of the full range of arguments in support of and opposed to the object of critique, and demostrates both a willingness to criticise and humility in respect of ones own views	Uses appropriate criteria, includes rigorous evaluations of arguments in support of and opposed to fine object of critique, and demonstrates either a willingness to critice or humility in respect of ones own views	Uses appropriate criteria, and includes rigorous evaluations of arguments in support of and opposed to the object of critique	Uses appropriate criteria and evaluation is adequately rigorous, but one-sided	Uses appropriate criteria but evaluation is too brief and one-sided	Demonstrates understanding of 'evaluation' but actual evaluation uses inappropriate criteria	Does not evaluate the object of critique and accepts it at face value
Synthesis of interpretation, analysis and evaluation (originality, persuasiveness and ingeniousness)	Synthesises the interpretation, analysis and evaluation into an original and highly persuasive conclusion about the object of demonstrates considerable inventiveness and cleverness	Synthesises the interpretation, analysis and evaluation into an original and highly persuasive conclusion about the object of critique, and demonstrates some inventiveness or cleverness	Synthesises the interpretation, analysis and evaluation into an original and highly persuasive conclusion about the object of critique	Synthesises the interpretation, analysis and evaluation into an original and persuasive conclusion about the object of critique	Synthesises the interpretation, analysis and evaluation into an original but non- persuasive conclusion about the object of critique	Demonstrates understanding of 'synthesis' but actual synthesis is not original, persuasive or ingenious	Does not synthesise the interpretation, analysis and evaluation

The marking rubric presented in Table 1 is offered as a starting point for law teachers wishing to teach and assess critical thinking. Law teachers are welcome to modify the marking rubric and adapt it to their own circumstances. Designing criterion-referenced marking rubrics is time-consuming for academics, and although 'this front-end investment in time may soon be offset by efficiencies in marking and the possibility of re-using [criterion-referenced assessments] ... with minor variations for subsequent assessment tasks', <sup>80</sup> having such a starting point will no doubt be helpful. This offered marking rubric focuses on the process and not the product, and as a result, has the potential to transcend the boundaries of the discipline of law, and be useful in other disciplines.

The rubric provides law teachers with a tool to improve outcomes for students and develop innovative learning and teaching resources. It can be used as a framework for developing teaching activities to instruct students in how to engage in critical thinking; for designing marking instructions to enhance the reliability and consistency of marking (this is especially important where there is more than one marker); and for enhancing the validity of summative assessment as it can be mapped back to learning outcomes for the unit and program. The marking rubric can also assist the students directly by providing them with a framework for conversations with their teacher about what is expected from them in completing a summative assessment task, thereby enhancing the transparency of the summative assessment; by giving them a clear structure for classroom debates and discussions; and by providing a clear basis for both personal and generic feedback about their critical thinking skills. The marking rubric provides a novel and practical framework for assessing critical thinking at all three levels of progression.

## IV CONCLUSION

This article offers a comprehensive, staged conception of critical thinking in a legal context: critical thinking is disciplined reasoning about a legal statement, claim, argument, decision, rule or action, beginning with an accurate and detailed interpretation, progressing through a perceptive and thorough analysis and an appropriate, rigorous and balanced evaluation, and concluding with an original, persuasive and ingenious synthesis.

The article also offers an exemplar marking rubric for use in the criterion-referenced assessment of law student critical thinking. The rubric is informed by a 'structured and integrated, whole-of-curriculum approach' <sup>81</sup> and a 'contextualised, sequential and incremental' <sup>82</sup> approach to assessment, and the notion of vertical

<sup>&</sup>lt;sup>80</sup> Anna Huggins, Sally Kift and Rachael Field, 'Implementing the Self-Management Threshold Learning Outcome for Law: Some Intentional Design Strategies from the Current Curriculum Toolbox' (2011) 21 Legal Education Review 183, 203.

<sup>&</sup>lt;sup>81</sup> Kift, Israel and Field, above n 2, 9.

<sup>&</sup>lt;sup>82</sup> Johnstone, above n 36, 15.

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transfer.<sup>83</sup> It blends three separate marking rubrics on critical thinking, one at each of the three levels of progression. These are the introductory, intermediate and advanced levels, which correspond with the first year, middle years and final year in a law program.

While the focus of this article is upon the teaching of law in Australian law schools, it is hoped that the theoretical insights and practical suggestions presented in this article will be of relevance to legal educators beyond Australia, and to those seeking to teach critical thinking to students in a variety of academic and professional disciplines.

<sup>&</sup>lt;sup>83</sup> Nathanson, above n 61, 191.