

Provoking students into thinking

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In this article, Dr Fiona Patterson discusses how the technique of argument mapping, which involves the visual representation of reasoning, can be used to enhance students' understanding of Legal Studies content while increasing their critical thinking skills. The contentious partial defence of provocation, which has been abolished, is used to illustrate argument mapping. Argument maps provided in this article were created with Rationale, a software program developed by Austhink. Colour versions are provided in a *Compak* supplement together with a list of references on the abolition of the provocation defence.



Go to ComNET <www.vcta.asn.au> and download a set of argument maps and a list of references on the removal of the defence of provocation from *Compak* Supplements 2007.

Introduction

Teaching students the extensive Legal Studies curriculum within our limited time frame is challenging. There are (at least) two challenges that face the teacher: (1) teaching the content for the Legal Studies curriculum and (2) teaching the skills to think critically about legal issues. These challenges are often considered as separate outcomes, with the belief that one is taught at the expense of the other. This article will suggest that the two challenges are closely interwoven and that learning critical thinking skills will enhance the ability of students to learn and understand content.

What is critical thinking?

Critical thinking is the art of being right! It involves systematic reasoning in order to make good judgements. As such, it involves five main stages:

- 1 *research* to gather good information from reputable sources
- 2 *structure* of information to ensure that the relationships between ideas are disclosed
- 3 *analysis* to ascertain if the ideas are logically structured and to reveal any hidden assumptions
- 4 *evaluation* of the reasoning to ascertain whether a claim is true or false and whether the contention should be accepted or rejected

- 5 *communication* of the reasoning and evaluation thereof into a clear and structured format.

Critical thinking and argument maps

The typical format for the presentation of ideas is prose, such as newspapers, books and Internet resources. The problem that we face with this format is that identifying the contention and the reasons is often difficult because the prose is not well structured nor sufficiently clear. Likewise, our students' essays often indicate this problem. The distinction between a good student and an average one is the degree to which they can reason and communicate in a clear and systematic manner. The challenge for the teacher is to impart the required knowledge, but to do so in such a manner that it scaffolds the students' ability to identify the reasoning, understand its

structure, evaluate the claims and then formulate a well-argued essay.

An argument is a set of claims with a structured relationship that seeks to support or refute a given position or contention. An argument map is a visual representation of an argument that immediately identifies claims as the position or contention, reasons and objections (see Figure 1). Moreover, it reveals the structure between various claims; that is, an argument map illustrates whether a reason supports another reason or whether it directly supports the position or contention. Viewing an argument in such a manner enables us to visually follow a line of reasoning. We are then in a position to undertake an evaluation process to identify which claims are true and whether they support the reason or objection they are intended to support or refute (see Figure 2).

FIGURE 1: BASIC ARGUMENT MAP MODEL

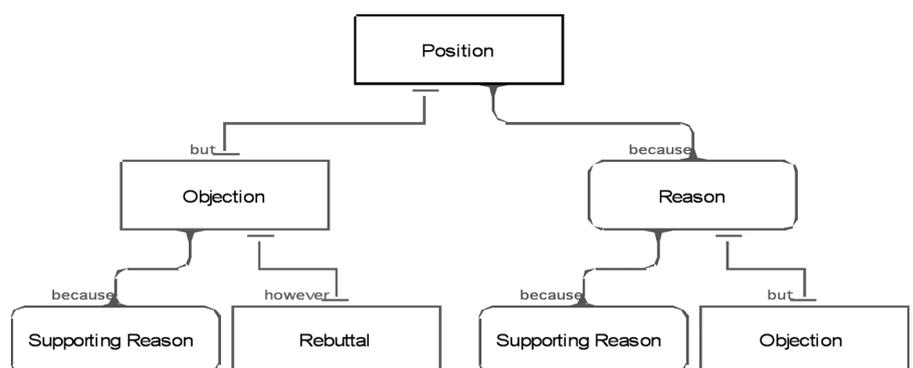
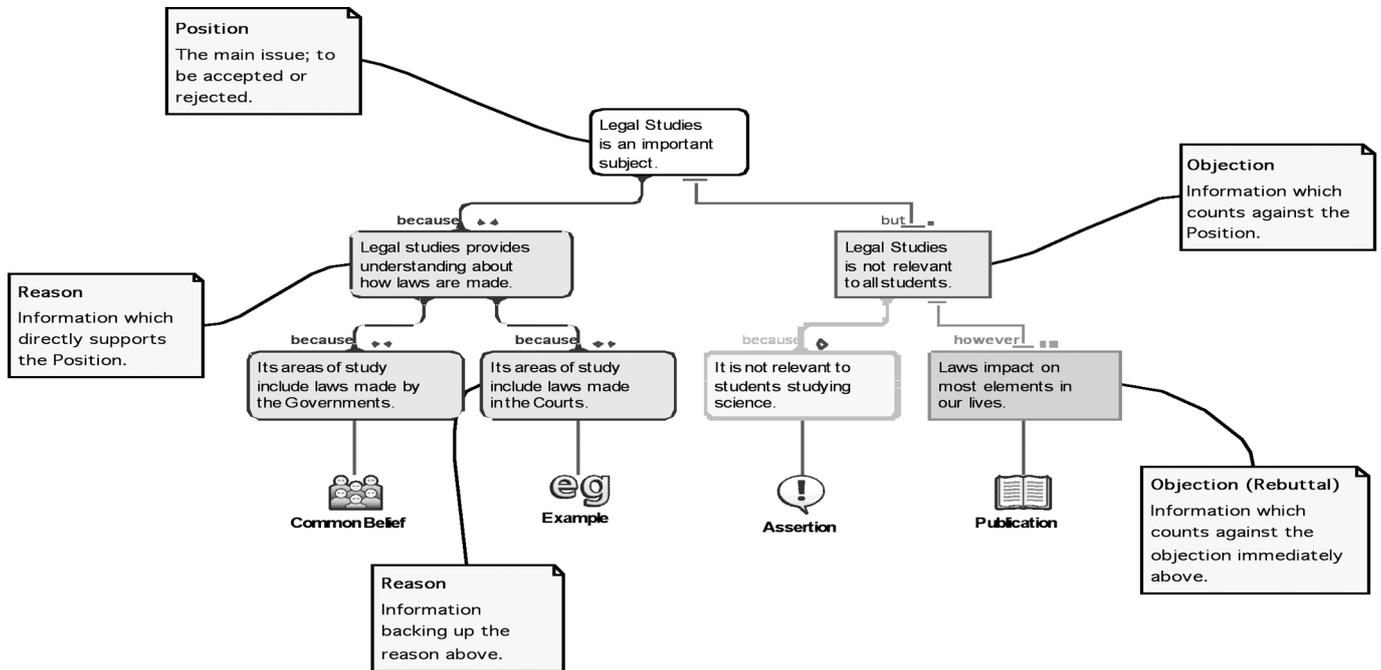


FIGURE 2: STRUCTURE OF AN ARGUMENT MAP



An argument is a set of claims with a structured relationship that seeks to support or refute a given position or contention, for example the above map shows reasons and objections bearing upon the contention that 'Legal Studies is an important subject'.

The benefits of argument mapping

Using an argument mapping approach to teach critical thinking enhances critical thinking skills more than four times standard university tuition.¹ Such gains are not limited to learners with a visual-spatial intelligence. The mapping format takes advantage of our cognitive capacities for visual apprehension. It assimilates complex arguments in a format that reduces our cognitive burden. This enables our students to visualise their thinking process and to see different viewpoints and evaluation with ease.

Argument maps and Legal Studies: the provocation defence

The provocation defence and the recent changes in the law in Victoria represent a great learning opportunity and focus for Unit 1 (Outcomes 1 and 2); Unit 2 (Outcome 3); Unit 3 (Outcomes 1 and 3) and Unit 4 (Outcome 2). The issue is a complex one and can be presented in a map format to enable students to clearly see the arguments that are central to the change in the law.² This provides the structure for deeper understanding of the issue together with a means of

evaluating and communicating this legal issue.

The argument map in Figure 3 considers the contention that the provocation defence should have been removed. It illustrates three main reasons: (1) that the provocation defence was gender biased, (2) that the provocation defence produced unjust outcomes, and (3) that the provocation defence 'belonged to a bygone era when community values were different'. Each of these reasons (coloured green in *Compak* supplement) are given further support by reasons positioned underneath. The shaded box on the left of the map (red box in coloured version in *Compak* supplement), which states 'Women have been more successful than men in using the provocation defence', is an objection that seeks to refute the claim above it. The icons indicate the type of evidence or source for the information to which it is attached, such as 'expert opinion', 'case studies' and 'data'.

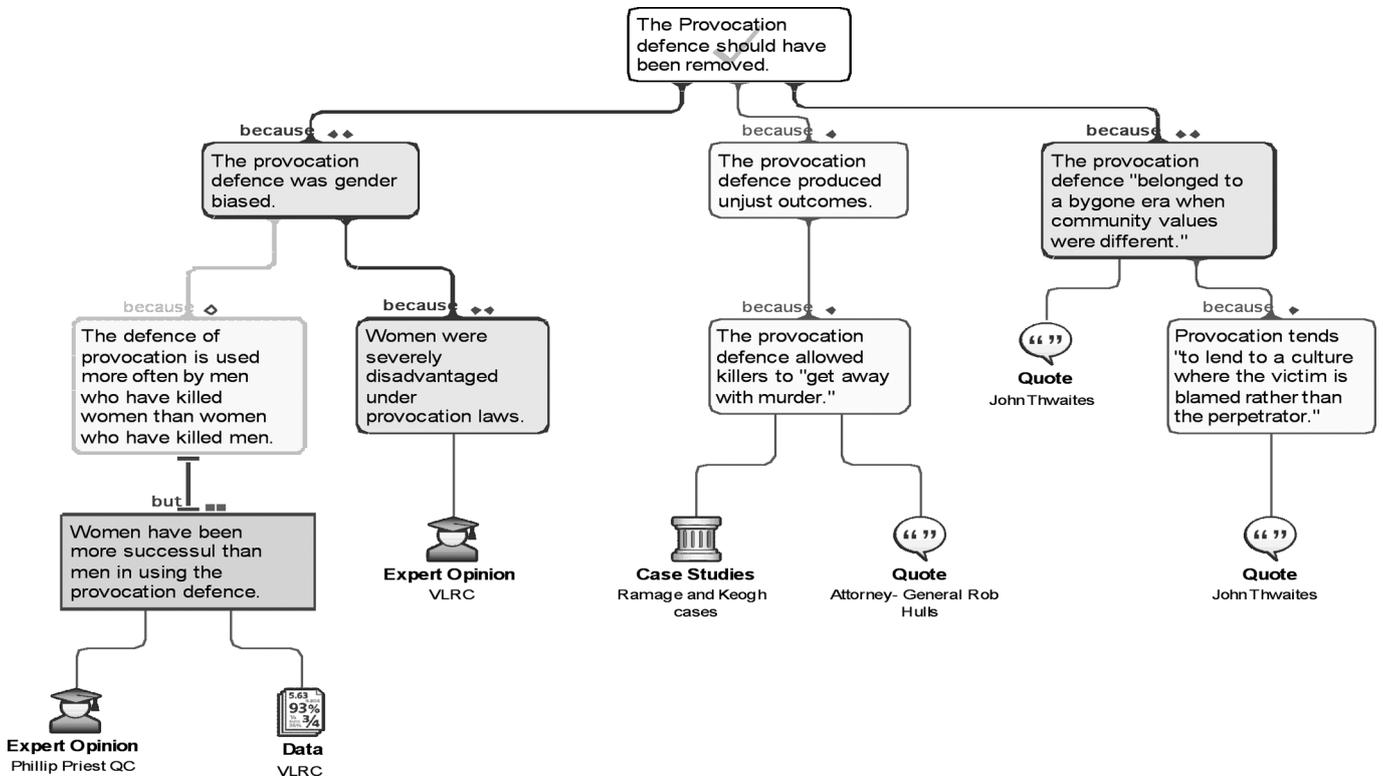
Having assembled the various claims and provided a structure for the reasoning, we are now able to evaluate the argument—to determine which claims are true and if so,

whether they provide support for another claim. The map utilises colour (see *Compak* supplement), shape and icons to indicate where a claim is true and provides good reason to support another claim. The benefit of these visual cues is to immediately identify good reasons from bad ones while showing at a glance whether the contention is accepted or rejected.

Activities with argument mapping: argument chess

There are various activities that can be integrated in your Legal Studies classroom to practice critical-thinking skills.³ One such activity is 'argument chess' where a conventional chessboard is replaced with the construction of an argument map, either on a projected computer screen or manually on a whiteboard. For each class, or group of students where class numbers are high, a topic is chosen and a supporting and opposing team established. Possible topics include: individuals cannot significantly influence the law; law-making power should reside solely with parliament; going to court should be avoided; the jury system should be abolished; the

FIGURE 3: AN ARGUMENT MAP RELATING TO THE DEFENCE OF PROVOCATION



This argument map considers the contention that the defence of provocation should have been removed.

adversary system of trial ensures a fair trial; or that the legal system will always be a problem.

The aim is to create the strongest argument, which means providing the best reasons to support a position and providing counter arguments to the opposing position. The game proceeds by one person from each team making one move at a time, that is, adding one reason or one objection to the argument map to build and strengthen their case (see Figure 4).

This process is similar to acting as the prosecution and defence in a court case, where the opposing side can challenge a reason by raising an objection or rebuttal. This requires knowledge of content and reasoning skills and encourages the students to strategically select the best reasons and/or objections to provide a strong case.

Evaluating an argument map

The evaluation or assessment of an argument map can be undertaken by the teacher who models the evaluation

process, determining which reasons are well supported and which ones are inadequate. For instance, the teacher starts by looking at the first top-level reason and the reasons that support, and/or the objections that refute, this claim. Having read down this branch or line of reasoning, an evaluation is made in the first instance for the foundation claims. The question to be asked is, ‘Is this a good reason to support the claim above?’ Having ascertained if the reason provides ‘strong’, ‘weak’ or ‘nil’ support, then a decision is made upon the higher level reason. Again, we ask, ‘Given the level of support provided by the reasons below, is this claim a good reason for the claim above?’ (This could be another higher level reason or the contention.)

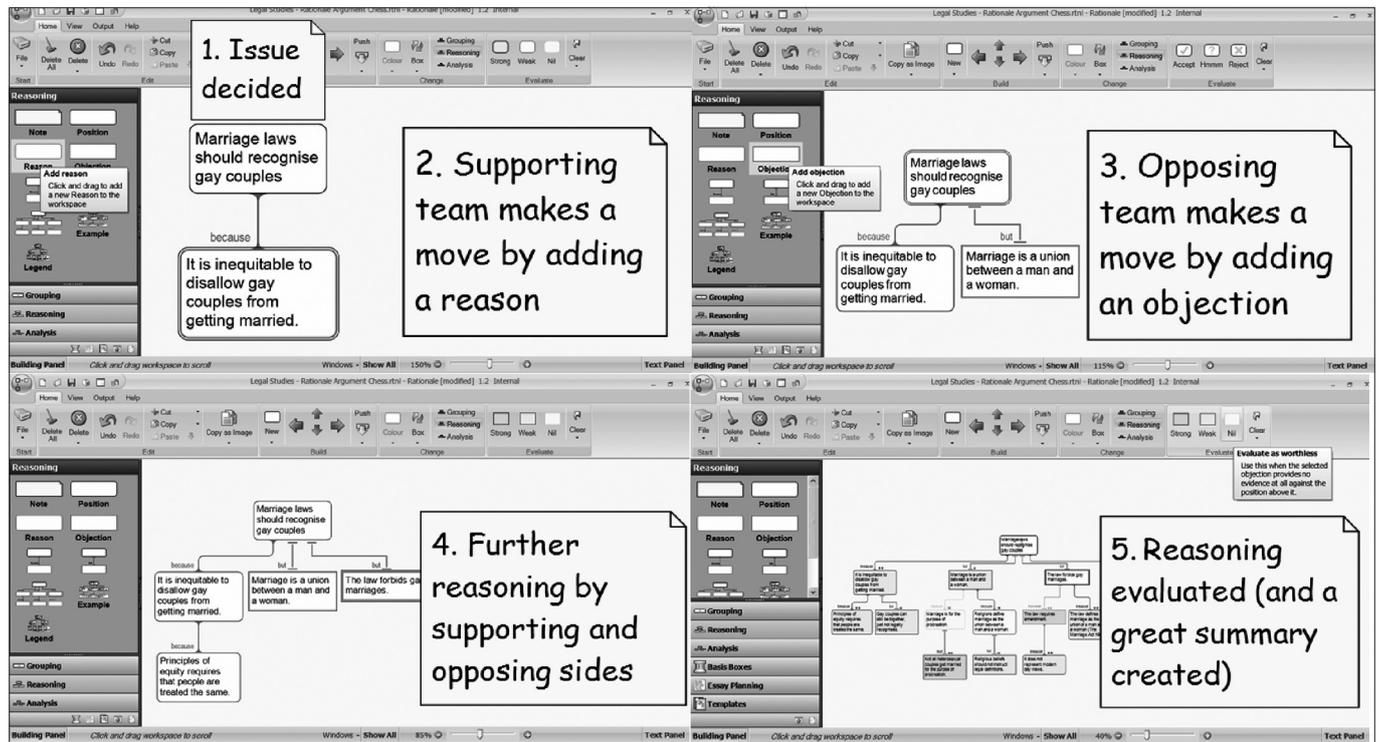
This process continues for each line of reasoning until all top-level reasons and objections are evaluated. Finally, we can ask, ‘Given the strength of these primary reasons and objections, will we accept or reject the contention?’ This decision involves

balancing the strength of reasons versus the strength of the objections. Such a process ensures that all claims are considered in relation to other claims and that a balanced, systematic evaluation of the main contention is undertaken.

My experience

Argument chess is a popular and fun peer-learning activity. If an engaging topic is chosen, or one that has some amusement value (such as ‘All laws should be changed’), then students become highly motivated and enjoy the challenge of the activity. From a teacher’s perspective, the development of reasoning, evaluation skills and review of content understanding is the success of argument chess. The students must compile reasons for a given case while structuring them in a coherent and logical manner. Moreover, they must consider the main reasons their opponents will use, and think about how they may object or rebut these reasons/objections.

FIGURE 4: AN EXAMPLE OF THE USE OF ARGUMENT CHESS



An example of the use of argument chess, based on the contention, 'Marriage laws should recognise gay couples'.

Due to the limited time and therefore moves that are available to be made, the students must also learn to be selective, deciding when they need to provide further support or when they have sufficiently objected to a claim. This skill of considered selection is vital. Good arguments do not offer unlimited reasons but rather, they utilise the best reasons that provide strong support for the contention. Argument chess teaches students to be selective and strategic in the reasons they are choosing while considering the role they play within the argument as a whole. This is an invaluable skill that is transferred to good essay writing, where rambling and disjointed ideas are replaced with logical and well-supported considerations.

Reflection

Legal Studies is not a mere set of facts to be learnt. It incorporates thinking critically, which means understanding the relationships between things—whether that be between the law and society or understanding

the relationship between reasons and a contention. Practising argument mapping facilitates the understanding of legal knowledge while demonstrating the relationships between the ideas. Thinking is indeed part of the Legal Studies curriculum!

Notes

- 1 The quantifiable success of argument-mapping software is demonstrated by five years of research conducted at the University of Melbourne utilising the California Critical Thinking Skills Test (CCTST). The CCTST is an international assessment standard designed to measure reasoning and critical-thinking skills. The statistical gains of critical-thinking skills for an undergraduate university student is typically a 0.2 effect size over their three-year degree, as compared to the argument-mapping method which has consistently achieved a 0.8 effect size over a 12-week semester course. This is crudely equivalent to a gain of 12 IQ points over the 12-week semester course. Refer to Charles R Twardy, 'Argument maps improve

critical thinking', in *Teaching Philosophy*, June 2004; also at <www.csse.monash.edu.au/~ctwardy/lab.shtml#critical>.

- 2 A detailed reference list is available on in a *Compak* supplement on the VCTA website <www.vcta.asn.au>.
- 3 I have detailed more activities in the *Educators' Guide to Rationale* and the *Secondary Education Supplement*. These are available at no charge from <www.austhink.com/education>.

Dr Fiona Patterson teaches Critical Thinking at the University of Melbourne and facilitates workshops for teachers and students. She is working with Austhink <www.austhink.com> to design argument mapping software and develop critical thinking resources for teachers to integrate into their curriculum. The argument maps used in this article were created with Rationale. For queries or comments, email Fiona Patterson at <fjp@austhink.com> or <fjp@unimelb.edu.au> or phone (03) 9017 4972, extension 105.