Legal Education Review

Volume 14	Article 5
Issue 1 2003	Alucie 5

1-1-2003

Teaching Legal Problem Solving: A Problem-based Learning Approach Combined with a Computerised Generic Problem

Fiona Martin *Queensland University of Technology*

Follow this and additional works at: https://epublications.bond.edu.au/ler Part of the Legal Education Commons

Recommended Citation

Martin, Fiona (2003) "Teaching Legal Problem Solving: A Problem-based Learning Approach Combined with a Computerised Generic Problem," *Legal Education Review*: Vol. 14 : Iss. 1, Article 5. Available at: https://epublications.bond.edu.au/ler/vol14/iss1/5

This Article is brought to you by the Faculty of Law at ePublications@bond. It has been accepted for inclusion in Legal Education Review by an authorized administrator of ePublications@bond. For more information, please contact Bond University's Repository Coordinator.

Teaching Legal Problem Solving: A Problem-based Learning Approach Combined with a Computerised Generic Problem

Fiona Martin*

Introduction

An important educational issue in legal higher education is the integration of skills into the undergraduate curriculum.¹ This raises a whole series of questions including: What are these skills? Which skills reach across disciplines? Which are discipline specific? How essential are they and how can they be taught?²

Integral to this issue is that students in the post modern 21st century are continuously challenged by unique situations which are ill-defined, for which they may have no previous experience and which do not necessarily have one clear solution. Such divergent problems are not quantifiable or verifiable and so do not lend themselves to a single, simple solution³ but require a self-directed response based on a creative analysis of the contextual factors involved. Problem-based learning (PBL), with its emphasis on autonomy and collaborative, active learning, appears to be one way to encourage students, particularly first years, to develop the skills needed to deal with the dynamic complexity⁴ with which they are increasingly confronted. In particular, the author argues in this article, it is an approach that is effective in teaching the skill of legal problem solving.

^{*} Senior Lecturer, Faculty of Law, Queensland University of Technology, Brisbane.

¹ W Twining, "Taking Skills Seriously" (1986) 4 J of Prof Legal Educ 1 at 1.

² S Kift, "Lawyering Skills: Finding their Place in Legal Education" (1997) 8 Legal Educ Rev 43.

³ P Pascale, Managing on the Edge (New York: Touchstone, 1990).

⁴ M Fullan, *Change Forces: Probing the Depths of Educational Reform* (London: The Falmer Press, 1993).

This article describes the process undertaken to develop a computer-based module designed to introduce law students, through the use of PBL, to legal problem solving and its potential relevance to their professional practice.

Further, the article discusses how the principles and processes of PBL as integrated into a computer-based education module (CBE) can be applied to legal problem solving. It describes the use of the module with first year offcampus students studying law at the Queensland University of Technology (QUT) as well as final year on-campus law students and demonstrates how the CBE module has been integrated into teaching legal problem solving skills for these students.

The Rationale for Choosing a Problem-based Learning Approach and How this Relates to Legal Problem Solving

As the name implies, PBL is a method or strategy in which the starting point for learning is a fact situation (the problem) that the learner needs to solve.⁵ The problem itself becomes the stimulus and reason for learning.⁶

Professor Charles Engel explains the process of PBL from the student's point of view as follows:

- analysis of the problems presented to them;
- identification of information required for their solutions;
- specification of the required information in the form of questions;
- study in order to formulate answers to the questions; and
- application of newly acquired knowledge to the initial problem.⁷

Law students are often introduced to the stages of legal problem solving through the use of an acronym, MIRAT, used by Wade⁸ in his article on legal problem solving. A comparison with Engel's PBL process indicates that the stages are very similar to those in legal problem solving.

⁵ D Boud, "Problem Based Learning in Perspective" in D Boud (ed), *Problem Based Learning in Education for the Professions* (Sydney: HERDSA, 1985), p 13.

⁶ C E Engel, "Problem Based Learning" in K R Cox and C E Ewan (eds), The Medical Teacher (Edinburgh: Churchill-Livingstone, 1982), pp 94-101; M Gordon and K Winsor, Report on Problem Based Learning and its Relevance to the Practical Legal Training Course (Sydney: The College of Law, 1989).

⁷ Engel, note 6, pp 94-101.

⁸ J Wade, "Meet MIRAT: Legal Reasoning Fragmented into Learnable Chunks" (1990-91) 2 Legal Educ Review 283.

The acronym, MIRAT, represents:

 \mathbf{M} – material facts, either present or absent. This equates to analysis of the problem and determination of whether or not sufficient information has been provided.

I – issues of law and "policy". This can be viewed as equivalent to identifying the information required for solution.

 \mathbf{R} – rules, research and resources. Law students need to ask themselves relevant questions in order to research the appropriate legal rules and resources and then study their research in order to come to some form of conclusion.

A – arguments or application. This is where law students apply the legal rules that they have researched and is equivalent in a PBL process to formulating answers.

T – tentative conclusion. This aspect of legal problem solving equates to Engel's final step of applying newly acquired knowledge to the problem.

Using such a PBL approach will contribute to the following educational objectives, which are all relevant for legal problem solving:

- (*i*) *The development of decision making skills.* Students need to become familiar with the complex skills used in making and implementing decisions.⁹ This is an essential aspect of professional practice¹⁰ if practitioners are to meet clients' (or patients') goals.
- (*ii*) *Problem solving contextualises learning*. Real-life problems become tools for learning through which students are exposed to the various stages of problem solving and practise their problem solving skills whilst they acquire substantive contextualised knowledge.
- (*iii*) *The development of student autonomy*. The ability to direct and evaluate one's own learning allows students to become aware of their personal learning needs and strategies; and to locate and effectively utilise appropriate information sources.¹¹ This enhances their present studies but also paves the way for continuous learning, an essential prerequisite for dealing with the constant changes of post-modern environments¹² in which "the shelf-life" of

⁹ For example, D W Johnson and F P Johnson, *Joining Together Group Theory and Group Skills* (Boston: Allyn and Bacon, 1984).

¹⁰ P Ramsden, *Learning to Teach in Higher Education* (London: Routledge, 1992), p 50.

¹¹ H S Barrows, "A Taxonomy of Problem-based Learning Methods" (1986) Medical Education 20.

¹² M Fullan, *Change Forces: Probing the Depths of Educational Reform* (London: The Falmer Press, 1993).

discipline knowledge is frequently considerably shorter than a graduate's period of professional practice. Students need, therefore, to develop their ability to learn quickly, effectively and independently as required rather than simply to assimilate current knowledge.¹³ Integral to this process of renewal is the need to foster reflective practice whereby students regularly look at their experiences and at the consequences of their decision making.¹⁴

This metacognitive analysis of processes is potentially a key to the transfer of learning and, Laurillard argues, a goal of academic teaching which "must address both the direct experience of the world, and the reflection on that experience that will produce the intended way of representing it".¹⁵

Development of collaborative learning skills. As well as being able to learn independently, there is an increasing demand for professionals, indeed all employees,¹⁶ to be team players able to communicate and work effectively with and learn from others. Isolation "imposes a ceiling affect on inquiry and learning" and limits solutions "to the experiences of the individual".¹⁷ Critical collaboration, on the other hand, helps provide richer perspectives and more creative outcomes but requires reflective and communication skills (such as active listening) which students need to develop:

The real world demands collaboration, the collective solving of problems ... Learning to get along, to function effectively in a group, is essential. Evidence and experience also strongly suggest that an individual's personal learning is enhanced by collaborative effort. The act of sharing ideas, of having to put one's own views clearly, of finding defensible compromises and conclusions, is in itself educative.¹⁸

¹³ HS Barrows, note 11.

¹⁴ D A Kolb, Experiential Learning: Experience as the Source of Learning and Development (Englewood Cliffs, New Jersey: Prentice Hall, 1984); D Boud and G Feletti, The Challenge of Problem Based Learning (London: Kogan Page, 1991), p 14.

¹⁵ D Laurillard, Rethinking University Teaching: A Framework for the Effective Use of Educational Technology (London: Routledge, 1993), p 29.

¹⁶ M McLaughlin, Employability Skills Profile: What Are Employers Looking For? (Ottawa: The Conference Board of Canada, 1992).

¹⁷ Fullan, note 4, p 34.

¹⁸ T Sizer, Horace's School: Redesigning the American High School (Boston: Houghton Mifflin, 1992), p 89.

PBL with its emphasis on the development of a community of learners lends itself to the development of such skills by actively engaging learners in group processes as well as requiring them to think and work independently.

(iv) Development of students' abilities to structure and integrate knowledge. Students decide the direction of their inquiries and acquire substantive knowledge through self-directed study rather than through more transmissive approaches such as the traditional lecture. Thus the ability to structure and analyse the knowledge acquired becomes essential.

One further reason for opting for PBL was the issue of student motivation. The use of "real life" problems relates the educational environment to future professional practice and thus helps bridge the theory/practice gap. Concepts are grounded in experience and practice, and this is deemed to enhance motivation and lead to a deeper approach to student learning.¹⁹

Computer-based Education as an Aid to Problembased Learning

Having decided that law students would benefit from a knowledge of, and skills in, problem-based learning; the next decision was how best to introduce PBL into existing programs organised along more traditional lines and with students and staff who had varied experience of such learning environments. There was also the consideration that students in their first year of a new discipline (even with a background of other university study) would need a considerable degree of academic support. The idea of an introductory module, which students could do within the tutorial structure, giving them the advantages of discussion and insight from tutors and other students, seemed an effective and adaptable way to begin the process.

The next step was to choose how best to support this introduction to PBL and encourage student independence and autonomy, particularly given the novice status of the students for whom it was to be designed. The CBE module was the product of a group of academics from Law, Education, Nursing and Interior Design who were interested in PBL and the advantages such a strategy would have for student learning. The group opted for computer-based education (CBE) for three main reasons:

¹⁹ Refer generally, Laurillard, note 15; Barrows, note 11; Ramsden, note 10.

- While a non-traditional method of instruction,²⁰ CBE offers learning opportunities which are compatible with existing practices and which supports other teaching strategies.²¹ The CBE module could be inserted quite easily into existing programs, providing a useful tool contributing to, but not designed to replace, staff/student interaction aimed at promoting critical thinking and reflective practice.
- Given the far-reaching changes occurring in universities throughout Australia, including fiscal constraints and increasing numbers of students in many courses, university lecturers need to be proactive in developing new strategies which will meet changing demands without conflicting with established academic values.²² The use of CBE challenged members of the group to expand their teaching repertoire into this new area and explore its potential. The availability of such programs also provides opportunities for students to extend their repertoire of learning strategies.
- The use of new technology should, of course, improve the quality of teaching and learning, not just open up access to new information and experiences.²³

A review of the literature revealed a number of potential advantages that the appropriate use of CBE could bring to current programs. These include the following:

- 1 CBE expands the learning environment beyond the facilitator and the traditional classroom.²⁴
- 2 CBE caters more for different learning styles than traditional classroom interaction.²⁵
- 3 CBE supports the application of principles of adult learning, such as self-direction.²⁶

22 Laurillard, note 15, p 29.

26 Simonson and Thompson, note 21.

²⁰ M Conrick, "The Development of Computer Based Learning Courseware for Teaching Clinical Decision Making" in *Nursing* (unpublished thesis, School of Medical Education, University of New South Wales, 1993).

²¹ Refer generally, P Cohen and L Dacanay, "A Meta-analysis of Computerbased Instruction in Nursing Education" 12 Computers in Nursing 89; T Smyth, "1987 Responses Evaluation in Computer Based Tutorials (1994) 3 Journal of Computer Assisted Learning 99; E Howard, "Use of a Computer Simulation for the Continuing Education of Registered Nurses (1987) 5 Computers in Nursing 208; M Simonson and A Thompson, Educational Computing Foundation (Columbus: Merrill, 1990).

²³ Laurillard, note 15, p 29.

²⁴ M Dreher and L Capputti, "The Integration of Theoretical Constructs into the Design of Computer Assisted Instruction" (1992) 10 *Computers in Nursing* 219.

²⁵ W Birch, "Towards a Model for Problem-based Learning" (1986) 11 Studies in Higher Education 73.

- 4 CBE provides flexible access with regard to student times and workloads.
- 5 By providing students with the ability to self-pace their learning, CBE recognises that differences in background and levels of experience with decision making will influence the time needed to complete the module.
- 6 The mobility of the medium benefits distance education and part-time students and staff.
- 7 CBE can foster computer literacy and a positive approach to new technology, thereby expanding a student's skills beyond the content of the programs.
- 8 By its interactive nature, CBE encourages active learning.²⁷
- 9 While a major advantage of CBE is the potential to individualise the learning process, the medium does not preclude the use of group work OC and collaborative learning.
- 10 Immediate feedback can be provided.
- 11 CBE provides students with a safe, private learning environment in which they can experiment with new skills.

There were, of course, a number of issues of concern. In embarking on the module, particularly in the light of a small budget and limited experience, there was some doubt as to whether the program could cater for the range of possible "solutions" available in most professional decision making, enhance creative problem solving, avoid linear, step-by-step approaches and foster reflection and critical thinking.

The major issues were to avoid students approaching the module using a linear or step-by-step approach as this would defeat the concept of professional problems being complex and requiring a range of approaches to solve, and to ensure that students engaged in reflection throughout the learning process. With this in mind we developed a module that had a number of design features with which we attempted to overcome these problems.

²⁷ Birch, note 25.

The Structure of the Computer-based Education Module

The module is built around a generic situation designed to introduce students from any discipline to the principles of PBL and consists of:

- a brief introduction to PBL;
- a scenario with which the students interact;
- points of reflection requiring students to consider the processes they are engaged in together with a notepad inbuilt into the computer on which students are required to write their comments and reflections; and
- a summary of possible solutions and their rationale with which students could compare their own responses.

The Generic Scenario

The module involves a scenario where "Robert", a university student who also works part-time to finance his university studies, comes to his friend for advice on a number of issues including university timetabling and work clashes.

This deliberate choice of a familiar situation was designed both to allow students to draw on their past experiences and to highlight their existing problem solving skills. It was anticipated that through this students would develop expertise with the process they were undertaking and gain confidence by building on their real world experiences.

Familiarity with the problem situation also means students can concentrate on the processes rather than expending a great deal of effort coming to terms with the content of the situation. This reflection on, and explicit articulation of, processes is intended to assist their subsequent transfer to disciplinespecific situations.

Creation of the scenario immediately raised the danger of stereotyping/simplification and also issues of gender, ethnicity and social equity. Robert and his work/study dilemma was chosen as a topic most students could empathise with, irrespective of their course of study, and because the use of a male client would reduce the potential power difference between client and professional and break down dependency stereotypes.

The Stages of the Module

The module is divided into three stages, which reflect the steps involved in PBL identified in the literature.²⁸ These are:

- (i) identifying facts and formulating an understanding of the problem;
- (ii) seeking information and synthesising the facts in light of the situation to identify possible options; and
- (iii) reassessing possible options through consideration of the tangible and personal aspects of the problem to achieve a best-fit.

Students are given some limited information from "Robert" but must also ask him further questions, clarifying with him that they have understood what he has told them, thus developing principles of active listening and finding out information from other sources. In this way the scenario is more realistic than the typical university problem where all the relevant information is neatly packaged for the student in the tutorial question.

To avoid students becoming lost in a maze of information and possible choices, the program operates on three levels with the students taking on two distinct roles: as both problem solvers and decision makers, they engage actively with the simulated problem. Then, at certain stages in the process, they draw back and reflect on what they have done and why they have made the choices they have, thus assuming the role of reflective learner. This change of role is signalled by a change in screen colour and layout.

The program thus serves as:

- A giver of directions on screen directions are provided on the use of the program and how, for example, to move information between screens. A number of icons are available to assist in this guidance function. The program can thus stand alone with students able to tackle it without any external advice or assistance.
- An interactive "client" simulation the program presents the scenario and provides the data needed for the students to make their decision. At this level, students are in their professional role of decision maker and are actually experiencing the process through their interaction with the information and choices provided on screen. They can also add to or move the information provided and store this in a notebook for subsequent analysis and discussion in the tutorial.

²⁸ Refer, eg, Engel, note 6; Birch, note 25.

 A mentor – at the end of each stage, students are asked to reflect upon and evaluate the decisions they have made and the information given. Separate screens are inserted to provide opportunities for this reflection and the recording of decisions. The students thus move from the decision maker to the learner role and receive advice and feedback from the "mentor", whose role is to ensure that they identify proper alternative courses of action and sufficiently analyse and evaluate options before eliminating them.²⁹

Design Issues

One of the major challenges faced in using CBE in conjunction with PBL was the need to provide guidance while avoiding the suggestion that the process is linear. Hyper media allows for considerable flexibility in this regard although cost is a major constraint. To help overcome the impression of a set procedure, loops were included to ensure that students could in fact make choices and move along paths that more experienced decision makers might deem inappropriate at a particular time (for example, offering options prior to gaining understanding of the issues involved). Feedback is then provided on the appropriateness of certain choices in light of the information available.³⁰

Important in the module's design is the graphic presentation of the hypothetical situation and the PBL process. It is critical to achieve optimal screen presentation in computer-based instruction³¹ as the screen is the primary interface between the user and the computer.³² Due to the potential for computer anxiety by inexperienced users,³³ it is important that attention is given to the novice and that the program is user friendly. One of the goals of the project became, indeed, to develop an interface which, in addition to exploring PBL, would encourage students in their use of computers as learning tools and enhance their understanding of the technology.

A number of strategies were used to ensure that students are active participants in the learning process. To reduce the danger of students being directed too much in making their choices, alternatives are depicted as jigsaw pieces in a selection of colours. The jigsaw metaphor is designed to neutralise the

²⁹ D W Johnson and F P Johnson, Joining Together Group Theory and Group Skills (Boston: Allyn & Bacon, 1994)

³⁰ Simonson and Thompson, note 21.

³¹ Simonson and Thompson, note 21.

³² Dreher and Capputti, note 24.

³³ Simonson and Thompson, note 21.

choices graphically and to suggest inter-relationships rather than a linear chain of decisions. Students are also required to categorise and prioritise information by collecting key data and also typing their own responses in a notebook embedded in the program. They may recall this information at any later stage in the process should they need to clarify particular points or reconsider their decisions in the light of subsequent information.

In order to enhance the students' interpersonal skills and to allow them to benefit from discussion of the processes involved in professional decision-making, it was decided that, where possible, they should work through the module with a partner or partners. The inclusion of the notebook also allows students to record and keep their own notes and selected information. Even where a student works through the module on his/her own, the notebook can be used in subsequent tutorials to address any queries or as a basis for wider discussion. Such personalisation of the program simplifies its inclusion into existing courses and makes it easier for staff and students to relate the input to their own area of study.

Furthermore, at certain points students are asked to reflect on the processes in which they have been engaged.

The Inclusion of Reflection in the Module

The module requires students to take stock and reflect on the processes they have undertaken. The computer requires them at various times throughout the module to stop and type notes reflecting on their actions and experiences in the notebook on the computer and to discuss these experiences in their small group.

The purpose of such feedback/reflection is not only to reduce frustration through lack of direction but also to challenge students to consider the role their own values play in the decision making process and to ensure that they take a broad view of the situation. In addition, the interpretation and categorisation of material is designed to foster deeper learning.³⁴

The opportunity for students to reflect on their learning experience is considered by many commentators to be an essential aspect of effective learning.³⁵

³⁴ Laurillard, note 20.

³⁵ See, eg, D A Schon, Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning in the Professions (San Fransisco: Jossey-Bass, 1987); D Boud, R Keogh and D Walker, "Introduction: What is Reflection in Learning" in Boud, Keogh and Walker (eds), Reflection: Turning Experience into Learning (London: Kogan Page, 1985).

Once students have reflected on the processes they have undertaken they should then be required to re-evaluate the conclusions they have reached. The purpose of re-evaluation is to relate the new knowledge to existing knowledge and integrate this knowledge into the learner's own personal way of thinking:

Re-evaluation involves re-examining experience in the light of the learner's intent, associating new knowledge with that which is already possessed, and integrating this new knowledge into the learner's conceptual framework. It leads to an appropriation of this knowledge into the learner's behaviour. This can involve a rehearsal in which the new learning is applied mentally to [validate] its authenticity and the planning of subsequent activity in which this learning is applied in one's life.³⁶

This last step can be done in a number of ways and in the module one of the approaches is through the modelling of various "solutions" to Robert's situation. Upon completion of the module, students can read and evaluate the solutions and explanations of three other people, compare them with their own response and discuss them amongst the group that worked with them on the module. This highlights to the students that there are often alternative and equally valid solutions to a problem.

The re-evaluation is also undertaken in the tutorial discussion subsequent to the module. In this part of the process the tutor and the students engage in a discussion in which the link between the processes undertaken, including reflection and the skill of legal problem solving is discussed and defined. The reflection is therefore facilitated by the tutor, who provides an example of productive and effective reflective discussion.³⁷ This process is discussed in detail below.

Bridging the Gap Between PBL and Legal Problem Solving for Law Students

The module has been used with two very different groups of QUT law students. First, it has been used with first year off-campus students; and secondly, with final year students undertaking Introduction to Taxation Law, an elective law unit.

³⁶ D Boud, R Keogh and D Walker, "Promoting Reflection in Learning: A Model" in Boud, Keogh and Walker (eds), note 35, p 30.

³⁷ G Gibbs, *Learning by Doing* (London: Further Education Curriculum and Development Unit (FEU), 1988), p 53.

The First Year Off-campus Students

QUT offers its law degree to off-campus as well as internal students. The off-campus students attend the university campus at certain times during the progress of their degree, although the majority of their learning experience takes place outside the university. The initial experience with QUT for first year off-campus students occurs prior to the official commencement of the University year when they attend QUT for a compulsory introductory attendance school. This attendance school takes place on campus over two days. At this stage the students have not received or read any materials relevant to their law degree. The aim of the attendance school is to introduce these students to the QUT campus, advise them on a variety of administrative procedures which they need to be aware of and initiate development of some of the skills which they will be required to learn over the course of the law degree. One of these skills is that of legal problem solving.

During the second day of the introductory attendance school or orientation program students are divided into groups of around 20. Group membership is worked out on the basis of residential addresses so that students are immediately introduced to others who are within possible geographical proximity. This is an important way of encouraging student peer networks for study and emotional support throughout the degree, as one of the major disadvantages of studying offcampus is student isolation. Each of the groups then takes part in a tutorial session facilitated by the author in which they work through the CBE module. The tutorial lasts approximately two hours and is held in a computer laboratory in the Law School. The students are encouraged to work through the module in groups of two to three so that they learn from each other's experiences and this also helps to develop student/student interaction on a social and peer-support level.

The last half hour of the session is taken up with a discussion of the processes that the students have undergone. Each student group will have saved information, that is, their own questions and responses to the module questions as well as their overall advice to their "client" Robert, to a notebook on the computer (part of the module), which they print out. This material then forms the basis of the discussion in which, led by the author, they communicate to each other the steps they took in working through the problem situation, what issues they reflected on as they did this and what conclusions they reached. The advantage of a generic problem for these students is that they can concentrate on using their own

experiences to assist them in working through the processes and strategies necessary for dealing with problems without the need to learn any "legal" content.³⁸

The discussion commences with the students advising the group of the steps that they undertook in order to assist Robert with his "problem". The students soon realise that they have essentially followed the PBL process in that they have:

- analysed Robert's problems as presented to them;
- identified further information that they need to know;
- asked both Robert and other people questions in order to ascertain further information;
- discussed the issues and information amongst themselves and sorted it into some form of groupings in order to deal with the issues and identify options; and
- applied the newly acquired knowledge to the initial problem.³⁹

The conclusion of this discussion is an analysis of legal problem solving and its similarities to problem-based learning and the process the students have gone through using the CBE module. Students are then introduced to the steps in legal problem solving which they will be studying in their first year unit Research and Legal Reasoning through the use of the acronym MIRAT, discussed earlier in this article.

These steps are related to the stages in the CBE module so that students become aware that they will be able to approach legal "problems" or "situations" by using the steps they have worked through and which they would be familiar with from their past experiences. By identifying material facts and issues of law and policy they are undertaking the first part of Engel's PBL process of "identifying facts and formulating an understanding of the problem". By researching and examining legal rules, they are "seeking information and synthesising the facts in light of the situation to identify possible options" and, by looking at all the arguments both for and against their client and coming to a tentative conclusion, they are "reassessing possible options through consideration of the tangible and personal aspects of the problem to achieve a best-fit" solution.⁴⁰

In order to develop an understanding of the process they have gone through, students are asked in the tutorial discussion to reflect on the stages of the CBE module and

³⁸ P C Candy, Self-Direction for Lifelong Learning: A Comprehensive Guide to Theory and Practice (San Fransisco: Jossey-Bass, 1991).

³⁹ Engel, note 6.

⁴⁰ Engel, note 6.

how they worked through them in order to come to suggested solutions for Robert. The tutor requires them to revisit the entire process, then to consider how they felt about the approaches that they took, and to reflect on and evaluate their approach in conjunction with the steps suggested for legal problem solving.

In addition, the module provides solutions and explanations of three other people, which students can read and evaluate and compare with their own response. This provides a further forum for self-evaluation and also serves to reinforce awareness that there are many ways of approaching and "solving" professional problems and that there is often no absolute solution.

The Final Year Students' Experiences

The module has also been used by final year law students who are undertaking the law elective Introduction to Taxation Law. Even though these students should be experienced in legal problem solving, which is taught to them in first year and then reinforced throughout the law degree, it had been observed that when these students were faced with the vast amount of complex information required to understand taxation law, they became confused and overwhelmed and would often concentrate on the legal content to the detriment of their problem solving techniques.

It was therefore decided to use the CBE module in the first two tutorials of the semester in a similar way to the approach described above for first year students. The idea was that this would consolidate their legal problem solving skills and reinforce the importance of the processes undertaken. Again, the module is undertaken in the Law School computer laboratory and students work through the module in groups of two or three. Because tutorials are timetabled on an hourly basis, the students work through the module in the first tutorial and the tutor-led discussion takes place in the second tutorial a week later. Students are required to bring their notes from the module with them to the second tutorial.

An important aspect of the module, which was new to these students, was the concept of reflection as part of their learning. Reflective stages are imposed in the module and the reflective steps are also undertaken in the tutorial discussion. In this way, the students are made aware of the importance of reflection as a means of enhancing and consolidating their learning.

A further important point for the students was the idea that professional legal problems don't always have one correct

solution. Through the use of three other suggested solutions to "Robert's" problem this is highlighted to the students.

The conclusion of the tutorial discussion requires the students to undertake a very simple taxation law problem and use the legal problem solving steps they have identified by doing the module. In this way they are practising a process that they have developed, building on their prior learning and using a process which is reinforced in subsequent tutorials.

Conclusion

Many advantages can be identified from the use of a generic problem through the medium of CBE to introduce law students to legal problem solving. The deliberate choice of a familiar situation is designed both to allow students to draw on their past experiences, which will be substantial and varied, and to increase students' confidence by highlighting their existing problem solving skills. Familiarity with the problem situation also means students concentrate on the processes rather than expending a great deal of effort coming to terms with unfamiliar legal content.

This reflection on and explicit articulation of processes is intended to assist students in their subsequent transfer to legal specific situations.

Using CBE also has advantages for both the off-campus and final year students of expanding their learning environment, catering for different learning styles and allowing them to be self-directed, although with support in the context of the tutorial. By providing students with the ability to self-pace their learning, CBE recognises that differences in background and levels of experience with decision making will influence the time needed to complete the module.

A particular advantage for the first year students, who are often mature students returning to study after a substantial break, is that the use of CBE provides them with a safe, private learning environment in which they can experiment with new skills.

For the final year students CBE provided them with a way of reinforcing and practising their existing legal problem solving skills without the students concentrating on, and being distracted by, any legal content. It also taught them the importance of reflection as part of the learning process and allowed them to develop their own processes, which they could apply to taxation law problems.